THE SPECTRUM SHOW
Magazine

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Forgotten RPG from Quicksilva

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EDITORIAL

Hello and welcome to issue 3 of The Spectrum Show Magazine. (might as well start calling them by the issue number rather than the actual number!)

Thanks for all the kind messages and feedback I have received on this publication, it's great to know you are enjoying it.

Many things have happened since the last issue, some good, some not so good. I could blast off with a flurry of bad comments on eBay snipers, but it probably wouldn't make a difference. It seems the last few items I had my eye on for the show were all sniped with just a few seconds to go, with some idiot putting in a bid 30p or 50p higher than mine. Grrrrrr!

Oh well, It just means I can't review them for the show - at least for the time being.

Anyway, onto the good things and my new game release, Kyd Cadet III. It was a long time in coming, but no sooner had it been released than I realised it was not right. The time between oxygen refills is far too long for one thing, and I did plan to release a fixed version. However other things got in the way, but it may still yet see the light of day.

This issue features a review of the DIVide, a modern, mass storage device for the Spectrum. You can watch my video review of this device on episode 23.

Its great to see new hardware being produced for our humble Spectrum, and there are a multitude of them to choose from.

There are interfaces that allow access to networks (local or internet), interfaces that emulate the Microdrive and interfaces that allow mice and PC keyboards to be used.

It's a pity I can't buy all of these, but hopefully I will be reviewing some of them in up and coming episodes of the show (funding permitting).

By the time you read this, the fourth series will be well underway, and my monthly ritual endlessly moving forward. This raised a question in my mind, at what point does the show end. I suppose it will be at the end of the Spectrum's commercial life, but that means about another four years work!

Other things may conspire or fate may smile on me, one way or another I am making no promises! I'll keep on plugging away while ever I am enjoying it,.

Thanks for watching and reading.

NEW TV SHOW

A brand new television show has been announced by Channel 4. The program, called *4 Computer Buffs* boasts several firsts for television, these include real-time bench testing of computers.

This will see the likes of the Amstrad CPC, BBC and the Sinclair QL, tested against each other doing similar tasks. This will all be live and viewers will be able to see the winners of each test as it happens.

CURRAH BOUGHT

Currah, the company producing hardware for the Spectrum, have been bought by DK'Tronics for what is said to be a 'substantial sum'.

DK'Tronics now own the exclusive marketing rights to the entire Currah range and are also manufacturing the units in their own factory.

Currah were having financial problems late last year and eventually had to call in the receivers.

RUBBERY UPGRADE

Sinclair have announced it will be offering an upgrade kit for existing rubber-keyed Spectrum owners. The kit will allow users to convert their machines into the new styled PLUS casing.

The upgrade can be done either by users or by sending off your machine to Sinclair. The DIY option will cost £30 – whereas the Sinclair route will cost £50.

TEST CARD SOFTWARE

For those old enough, the Test Card was a familiar site on British television, especially at night or early in the morning. If you do not remember these, they were static pictures, shown when the channel had nothing to broadcast, the iconic one of course, being the famous BBC girl, clown and blackboard.

Nowadays, we rarely see these as most channels broadcast 24 hours a day. However, back in 1985, Channel Four decided to use its test card for something different; to broadcast the loading signals for games.

This allowed users to record them and load them into their computers later.

The first broadcast will be on 12th February at 10am, and will be a game for the BBC computer. Other programs for other micros will soon follow.

POCKET TV SHORTAGE

It seems Sinclair are always having supply issues with their latest products, The Microdrive and QL all had problems, and now it seems, so does the Pocket TV.

The tiny, black and white device was supplied to large retailers including John Lewis and WH Smiths in the run up to Xmas, but not in the numbers required to satisfy the buying public.

John Lewis claims they only got 12 units per branch, which sold out within days, and the next batch was not due until the end of January.

Sinclair played down the story claiming all retailers knew the pre-Xmas models were in limited quantities.

RUBBER SPECCY RIP

At the same time as Sinclair announced their new upgrade, they reduced the price for the Plus machine to £129.95.

This move is part of Sinclair's on-going plans to dominate the UK computer market and with it comes the sad news that they are to discontinued the rubber-keyed version in the UK.

Once existing stocks are gone, that will be the end of an era in computing history.

Released in 1982, the Spectrum grabbed the public's attention and immediately was a hit, with demand far outstripping supply.

PRISM FOLD

Prism, the once main distributor of Sinclair products and provider of the popular VTX 5000 modem, have gone into receivership.

Sinclair has gradually reduced its reliance on Prism, giving them just 30% of the distribution work.

There is speculation that Sinclair recognised issues with Prism, which is why they slowly moved away from having them as their main distributor.

Prism were also the company involved in the Spectrum theft, as widely reported last year.

For existing owners of the VTX 5000 modem, there is some good news.

You can now connect to 300 baud bulletin boards with some new software released by Stephen Adams, so you are no longer fixed to just 1200/75 viewdata systems.

GAME AID

With the world looking at the famine in Ethiopia, the British software industry has decided to do something to help.

Rod Cousens, Managing Director of Quicksilva, has brought together a mass of software houses to release a compilation of games with proceeds going to aid the famine victims.

Called, Softaid, the collection will be released for both the Spectrum and Commodore 64, with the Spectrum version featuring games like Fred, Horace Goes Skiing, Ant Attack and 3D Tank Duel.

CART PRICE CUT
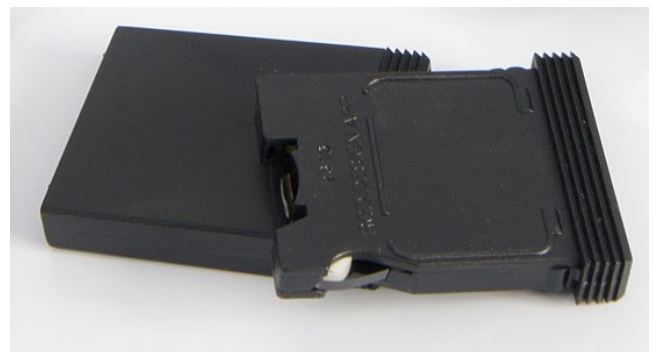
Sinclair has finally cut the prices of it Microdrive cartridges, something that the industry and users have been asking for since the products launch.

The reduction is better than most people thought, with Sinclair hoping it will boost sales of both the interface and Microdrive peripherals.

The retail prices comes down from £4.95 to just £1.99, with good discounts for bulk buyers such as distributers.

Quick-Byte

Quicksilva have announced that they have acquired the exclusive rights to 7 games from Bug-Byte Software, including Automan and Turmoill.

Quicksilva want to move into publishing and distribution of other company's products, and hope this is the first of many such deals..

Before the Internet

Can you remember a world when the internet, as we know it now, did not exist? A world where if you wanted to know something, you had to learn it, read about it in a book or ask someone?

Maybe you are not old enough. You had to go back before the 90's to find this weird world, but even in this none-connected time, people were communicating via their computers.

There was no super information high-way, no ISPs, no broadband and no World Wide Web. There was... the telephone line.

This thin band of copper from your home telephone could be used to connect computers together, if you had the right equipment, and in some cases the right computer.

Bulletin Board Systems (BBS for short) began to spring up all over the world as enthusiasts tapped into this new method of sharing data. It was exciting, it was new and it was expensive.

Many 8 bit home computers did not have the required serial port to allow a modem to be connected, the Spectrum included. This meant unless someone came up with an interface or piece of hardware, the world of BBSs would be closed.

Luckily both happened with Prism releasing their popular VTX 5000 modem and several other companies producing serial interfaces.

Making the most of your micro.

The Prism unit was by far the most popular and it just plugged into the edge connector, came with its own ROM and a lead to connect into the phone socket.

Once booted up, the Spectrum used the ROM to produce the required 40 x 25 text mode to allow it use the Viewdata protocol.

The main system was Prestel, and it's sibling, Micronet 800. This provided a mass of things to do including online chat, email, reviews, downloads, celebrity chat, teleshopping and even user created content.

Viewdata was a teletext like protocol that allowed data to be received at 1200 baud and sent back at 75. It allowed very basic graphics and a limited number of colours.

There were many BBSs that appeared, some popular to certain areas (my favourite local system was called Phantom BBS), others made it to national status like The Gnome At Home.

Wanting to get in on the act, I set about finding what I needed to set up my own system. Obviously I needed a modem, but also an interface One, several Microdrives and the all important software.

Software for the Spectrum was scarce, but I located one called Micron which allowed me to build my BBS and run it from two Microdrives.

The VTX 5000 did not have autoanswer, so I had to wait for calls to come in and manually switch the modem on. This was particularly tricky as I was using my parents phone line!

My BBS was called The Hole. I suspect no one reading this will have heard of it, let alone ever connected to it. Sadly my Microdrives containing all of the files were sold in the 90s, but I remember the content quite well.

It was a light hearted system, nothing too serious.

It was a light hearted system, nothing too serious, nothing aimed at particular computers, just good old fashioned fun.

There were jokes, rugby songs, silly poems and crazy anecdotes. Most of the material I got from magazines, books, comics, friends and family. It's amazing how these things come out once you start to tell people you collect them.

The Viewdata format was limiting and less popular with non-Spectrum owners,. It was widely used in the travel industry, but not for 'grown up' systems. For that you needed a scrolling bulletin board.

These systems were text only using data rates from 300/300 upwards. At that low speed it was great fun to watch the text appear on screen, almost as slow as someone typing.

With some additional software the VTX5000 could access these systems and whole new world opened up.
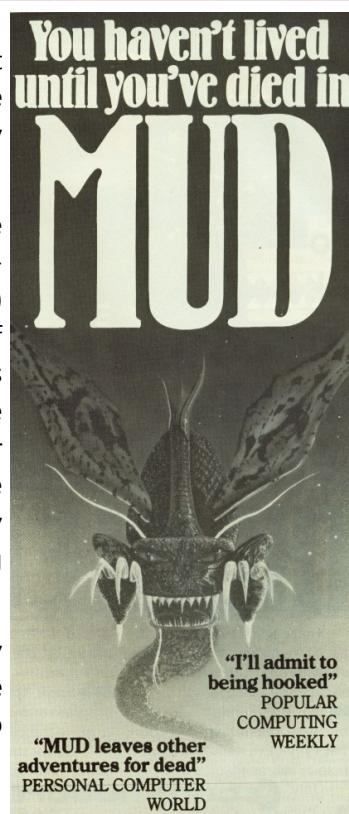
As speed increased I upgraded my VTX to a faster Voyager 7 modem from Modem House, this gave me up to 1200/1200 baud rate.

I eagerly wanted to connect the famous systems around the world, in particular one called Nautilus in America. I did get on once, but was scared of the phone bill so spent very little time there.

I spent most of my time playing Shades, a Multi-User Dungeon (MUD) game that was part of Micronet 800. Shades was a text adventure played by many other people at the same time, something very new and very exciting at that time.

I really wanted to play the real MUD, but the subscriptions were too much!

SHADES-THE ULTIMATE ADVENTURE MULTI-USER GAME

You haven't lived until you've died in MUD

"I'll admit to being hooked"
POPULAR COMPUTING WEEKLY

"MUD leaves other adventures for dead"
PERSONAL COMPUTER WORLD

Before The Internet

As things moved on I bought an Amiga 500..

As things moved on I bought an Amiga 500 and quickly set about finding some BBS software for it. Y2 Computing came to the rescue and it wasn't long before The Hole had transformed into Image Viewdata.

I kept the viewdata format as I preferred the graphics, and I think at the time my choice was limited.

My new modem was a Pace Linnet that had auto-answer. That meant I didn't have to be there every night.

Image Viewdata was online for about 3 years, from 1987 to late 1989. It maintained the fun aspect of communications and a lucky visit to a pub in the North East of England uncovered a huge amount of material.

The walls were covered in poems, sayings and jokes, and the landlord happily let me write them all down. I don't think he knew what I meant when I said they would be on my BBS, but he was happy as long as I gave the pub a free plug.

In 1988 Popular Computing Weekly magazine came calling and did an interview with me for their September 1988 issue. That gave the system a nice boost, and people still kept ringing my parents num-

ber long after I had left home and shut down the system. I think the last one was in 1995!

The full article is re-created on page 9.

At this point I also ran a Play-By-Mail game called Junk. This was a poor-mans MUD where players emailed their moves one at a time. In response, I emailed back their locations and the results of their actions. It was all very slow.

As technology moved on the internet became available, at least to those who knew how to get Winsock working (google it folks!) and the end of the BBS had started.

Slowly they all began to vanish, being replaced by websites, newsgroups and forums. Its not the same feeling looking at a website, and I still miss those days.

Scanning the lines

## Malcom Arnold looks into the workings of two bulletin boards

Last time around we talked about Bulletin Boards in general terms. Here's a more specific look at two BB sysops and their systems.

Paul Jenkinson operates the *Image* board from the comfortable inner sanctum of his house in Leeds. He started out in a small way, with a Sinclair Spectrum and Micron Software, but the limitations of this system - being both fairly slow to run and Spectrum specific - led him to dig deep in February of this year and buy his present set-up: an Amiga A500 with 1 meg upgrade and two drives, online through a Pace Linnet modem. Combined with Ruby-Tel software from Y2 - Paul reckons he's the only private sysop currently running this -the result is a professionally presented Viewdata board; but the hard and software are only part of the story. Anyone with the requisite bucks can get a system up and running; keeping it there - and keeping it interesting - demands personal commitment.

Dedication

Paul said that he got this far because of what he calls his 'passion' for running a board. He emphasised that to run a good board you need to spend time. The system will run unsupervised, but he told me, "I'm here in front of the screen most evenings, keeping it up-to-date, so in a sense the board is being constantly updated." Sadly, not all sysops see this kind of service as compulsory (logging on to some BB's is like accessing a time vault kept prisoner in the cupboard under someone's stairs); but what he calls "a balanced service," is how Paul sees *Image*.

The board self-evidently sets out to be fun, with jokes, puzzles and humorous articles; but it also has its serious side. Information on the board includes software and hardware reviews, and a SIG (Special Interest Group) for Amiga owners. Paul recognises the need
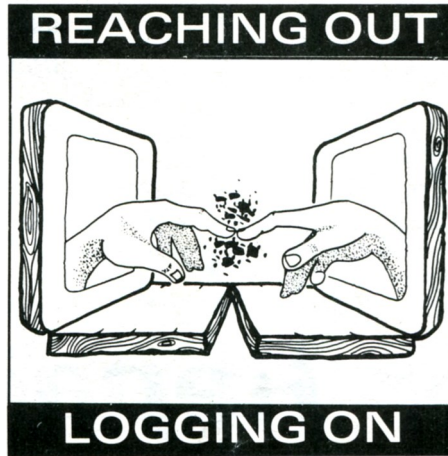
for coverage of other computers than the Amiga, and indeed there have been SIG's for others on Image, but presently he's looking for editors for those sections. Fancy the job, anyone?

But how does Paul get a return on his investment - after all, it cost him around £1,000 to set up. "Well," he replied, shaking his head sagely, "The only way to get a financial return is to charge a subscription for using the board, and there's no way I'm going to do that!" Why not? "I've seen what it's done to other boards. I'd rather have people using my system . . ." Job satisfaction is the return that keeps Paul going, and the biggest buzz he can get is when users take the time and trouble to let him know they value *Image*.

The same is surely true of Mike Fudge, sysop of *Winchester Remote,* a scrolling board which he currently runs on his Amstrad PC1512 with a 20 meg hard drive

and Single floppy, online through a Miracle WS4000 modem. Unlike *Image*, the Remote runs on a dedicated line which means it can operate 24 hours a day.

Mike became a sysop when he discovered that there were no BB's in the Winchester area, and also he "felt there should be a place where users could turn for help." He started the board (again in February of this year - was there something in the air that month?) on his CPC with an extra drive. Then the PC came up at a price he couldn't refuse: "My wife has only recently started talking to me again!" His software is Wildcat! from the U.S. which cost him £75 to register and get a user number.

Winchester Remote has a more technical bias than *Image*, but Mike is adamant that "this board is for humans! There are too many serious people in this business who surround themselves with secrecy about their work, who talk about nothing but the finer points of programming in C etc. . . . They can stay on Compulink or CoSy!"

His priorities for the future reveal his commitment to the development of the board and Comms in general. Apart from being determined to improve his spelling^), he intends to extend the available file base to cover Atari, BBC and Commodore users; to introduce E-Mail soon by using Blinkley-Term; to extend the CPM and MS-DOS Information Files and bulletins; to get his Local Authority to use the 'front end' of the board for more community specific announcements . . . "And mainly to get more and more people into using computers to communicate with."

Paul Jenkinson's Amiga rig.

VIXEN

Martech 1988
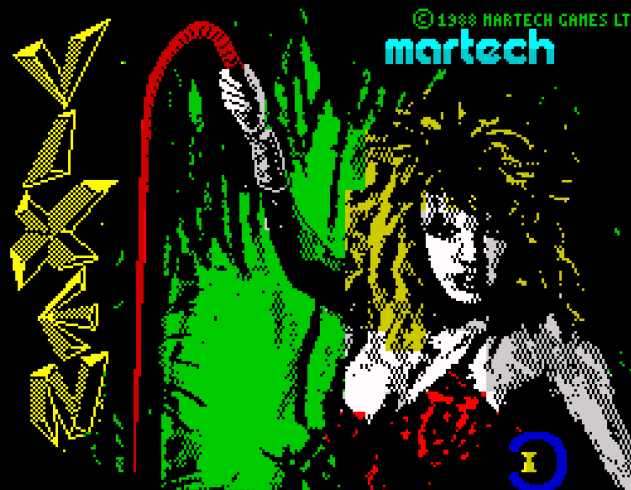
Vixen, when it was released in 1988 by Martech, caused quite a controversy due to the advertisement and cover design of the game. Like other games that came under fire, such as Game Over 2 and Barbarian 2, the reason was the depiction of a scantily glad female. In the case of Vixen it was page 3 model Corrinne Russell.

High street chain Boots refused to stock it, forcing Martech to re-release it with a less provocative cover. In some cases they re-issues the game with a large, less revealing sticker over the cover!

So, down to the game....

You play the Vixen, the last human on the planet Granath. Raised by foxes, she now has to get revenge on the Dinosaurs that rule the planet.

To do this she has to move from left to right across a scrolling landscape, collecting items and killing the creatures that are out to stop her.

Using her whip she can destroy hanging globes and tomb stones to reveal things that will help her, like extra time, and also kill a few dinosaurs too.

When a globe is destroyed a fox head appears, and collecting enough of these will allow her to transform into a fox for the next level.

The backgrounds are not particularly detailed, but offer enough variation to keep things interesting. There are gaps to jump across, and hills, albeit blocky ones, to ascend.

During her long walk there is a constant stream of dinosaurs that appear from both sides of the screen. Some of them look very strange, like mutant spiders, but they all need a good whipping to get rid off them.
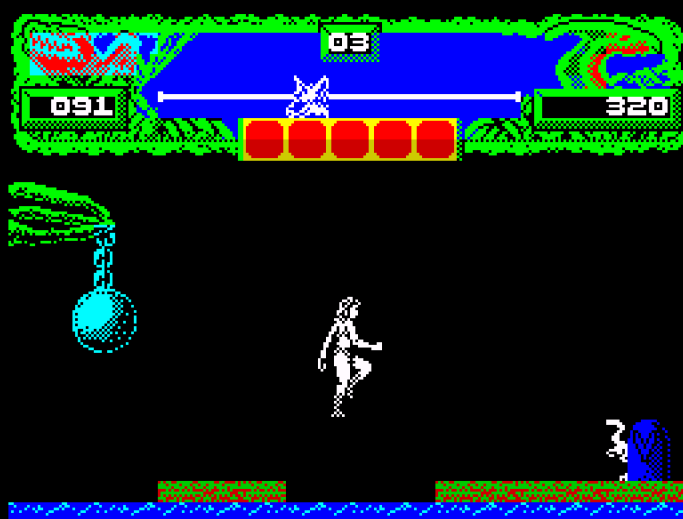
The main character is very well drawn and beautifully animated. She can crawl, walk and jump, and has the ability to transform into a fox. For different levels.

For the fox levels, the gameplay changes slightly in that a time limit is set to complete it, and there are more jumps to negotiate.

During these stages the gameplay changes to an underground setting. The fox animation, although good, is not as good as the main female sprite, being much smaller and less well animated.

Because of this these sections seem harder and the jumps more difficult. Missing just one jump results in the whole section being abandoned, which is a bit harsh really.
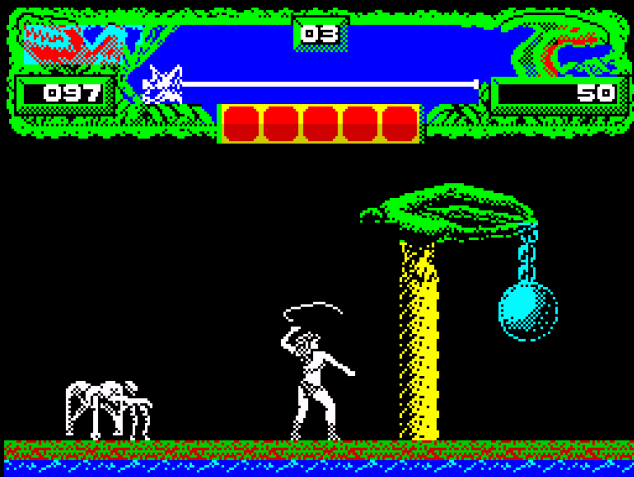
The normal human / Vixen gameplay is very much the same for each level, walk or crawl along, kill dinosaurs, collect things and get to the end without dying and in the allotted time.

The character is easy to control and progress is made quickly, although some of the jumps are a bit tight and you have to be very precise.

Missing the landing will cause your female character to drop into the water and disco dance her way to death.

Sound is good, with a great AY tune playing for the into screen, but sadly during gameplay all we get are a few spot effects.

This is a challenging game that will take time to master, but can soon become repetitive.

There is no doubt the selling point for this game, apart from Corrinne Russell, is the great animation, but does that make up for an overall average game?

Your choice... but I would certainly say have a go before deciding...

An interesting bit of trivia is that the word Vixen in German means 'to jerk off' and so the game was re-named She Fox for that market. Thinking about it though, that meaning would also suite the game :-)
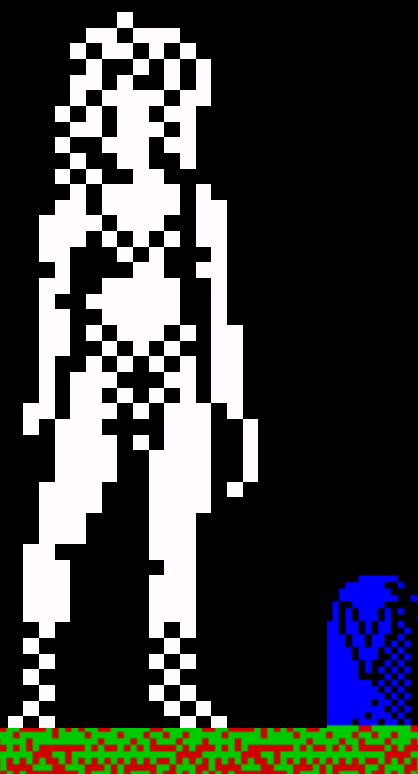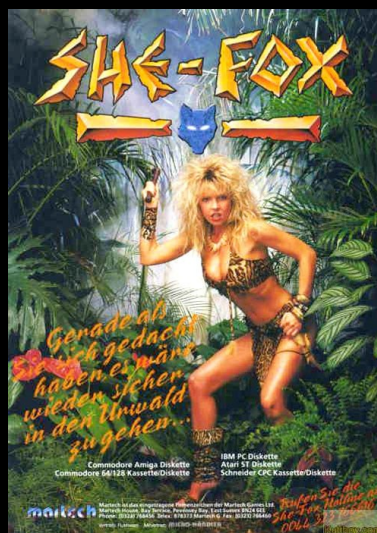
International NINJA Rabbits

Micro Value 1991

A factory has been spewing out evil chemicals that are effecting the animals, and you, as a ninja rabbit, take on the job of sorting it all out.

You have to get to the factory and stop the leaks, but the chemical has affected the other animals, and they want to attack you.

Yes, it's a beat-em-up, of the animal kind.

The graphics are very large and well drawn, but the backgrounds are too detailed, and coupled with the colours used, make this game difficult to play.

Some of the characters blend in and because you have to time your kicks and punches based on distance from the enemy, it can be tricky.
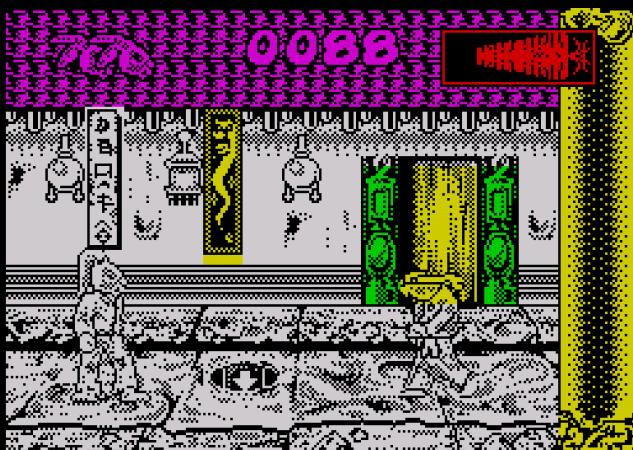
The screen doesn't scroll, instead you fight two opponents, usually taking around 4 hits to disperse them, before you can move on to the next screen.

In some areas you can drop down into sewers or caves and if you are lucky, will find a carrot to help keep your strength up.

There is only a limited amount of moves to use, which keeps things simple; low, mid and high kick plus a punch.

The game pace is dreadfully slow, with the main character sometimes not responding to your key press for about second, and plodding across the screen at a speed not befitting a rabbit.

Animation is good, although the rabbit does look like he's walking with a limp, or doing an impression of Charlie Chaplin.
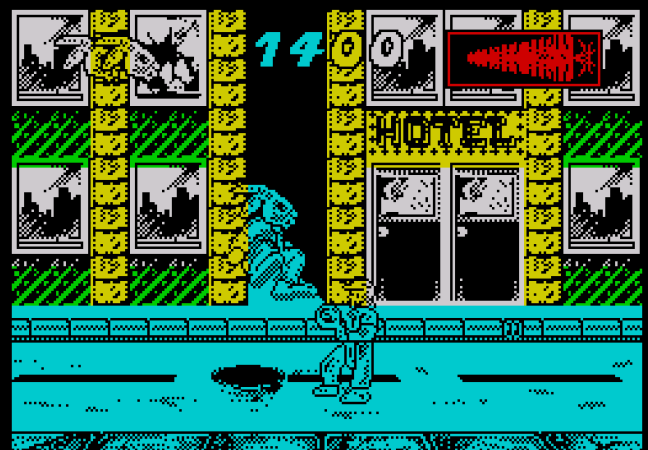
Sound wise, there is a great tune that plays on the intro screen, and the in-game sounds are limited to puck puck sounds as you or your opponent land blows.

The game has three difficulty settings, I played on easy here, and the game was fun for a few plays, but the pace just kills it.

There are better beat-em-ups for the Spectrum and most of them are better playability wise.

I watched the RZX first and thought it was awful, but having played it, it is better than is looks, but only just.
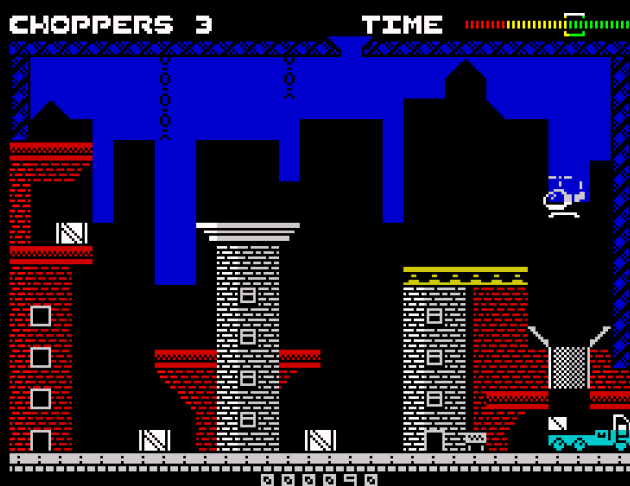
CHOPPER DROP

Paul Jenkinson 2010

I thought it was time I plugged one of my own games and so here is Chopper Drop released in 2010.

Playing a chopper pilot, it is your job to collect packages and deliver them to the waiting lorries.

Collect all four in the time limit and you move to the next level.

This isn't as easy it sounds, as there are things in the way and things to avoid as you fly around. Hitting them reduces your time rather than killing you which means completing the level is made harder.

Cranes, buildings, trees, birds and balloons are just some of the things you need to avoid, all the time keeping an eye on the ever decreasing time.

Packages are collected by simply flying into them, and are automatically dropped when you are over the lorry.

If your version doesn't automatically drop them, you need to get the newer version, this feature was added as a request from players in the WOS forums, and does improve the gameplay.

Graphics and sound are nice, and the difficulty is easy to average.

Once you get used to controlling the chopper, it's easy to whizz about collecting packages.

Some levels require a bit of strategy, as some packages will take longer to get due to other moving hazards like blimps. You have to decide which is the best order to minimise the time you have.

Controlling your chopper is key!

From the feedback the game got, it seemed well received, although a few people said it reminded them of several other games.
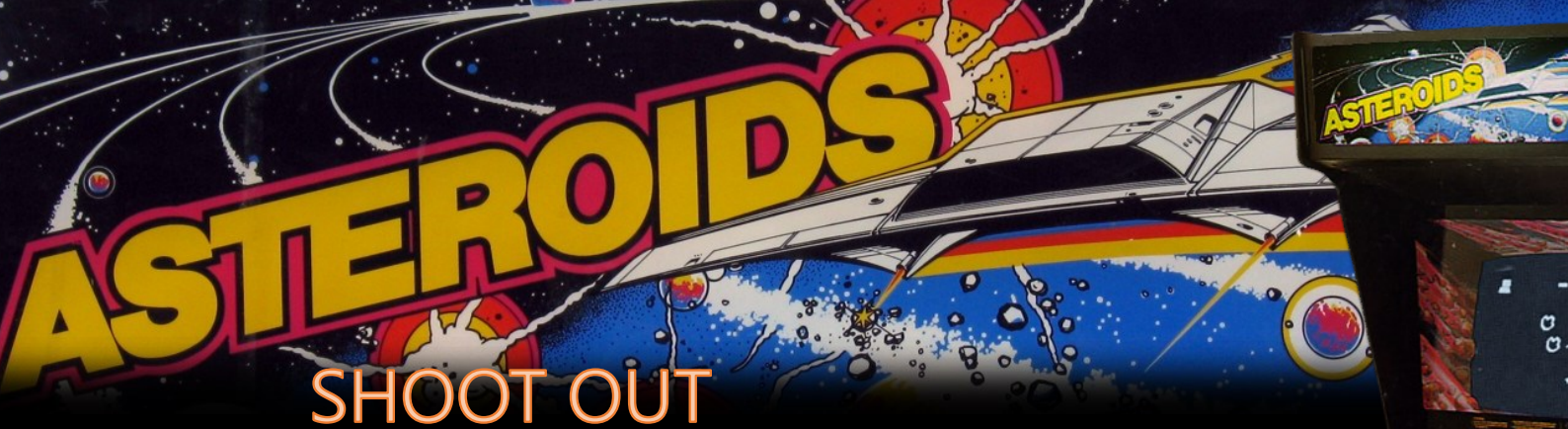
I can say it was not intentionally copied from any other Spectrum game.

In fact it was originally going to be a copy of a Flash game made for the UK television show, The Gadget Show, called Heli-Golf. (goggle it!)

This proved a little too complex and so Chopper Drop morphed into its current state.

A nice little game then, please give it try.. its free!

SHOOT OUT

Asteroids made a break from traditional raster based graphics and introduced the game playing public to the wonderful new, neon-like style of vectors. Released in 1979, the game also gave the player freedom to traverse the screen in any direction.

The player's ship could not only move anywhere on screen, but also disappear on one side and re-appear on the other; commonly known as screen-wrapping. Another new feature in the game was hyperspace jumps. If the player found themselves in a tight situation with lumps of rock bearing down on their tiny ship, a quick press of the button and the ship vanished. In the blink of an eye, it re-appeared randomly somewhere else on screen; not always a good idea!

Because the arcade machine required special hardware to produce the new style of graphics, home versions struggled to replicate the display. Instead the game companies used different techniques to emulate the look, from sprites to custom written, maths-heavy drawing routines.

The raster based games could not quite grab player like the original, and of course made for a less than authentic arcade clone. The custom written engines on the other hand, needed faster processors to really produce the smooth arcade-like displays.

How did the Spectrum versions stand up?

Cosmic Debris (Artic Computing)

The first game under the microscope is Cosmic Debris from Artic computing. This version of the classic looks very authentic, having vector-like graphics and all the game elements of the original.

The asteroids move around as they should, splitting into smaller chunks when hit and the saucers make random appearances. Thrusting differs from the arcade in that the ship continues to move until opposite thrust is applied, making control a bit tricky.

The sound is adequate but the real let down comes when you lose a life. The screen fills with diagonal lines and you have to press a key to continue playing. There is also no on-screen information like scores, hi-scores or lives.

A bit of a mixed bag really.
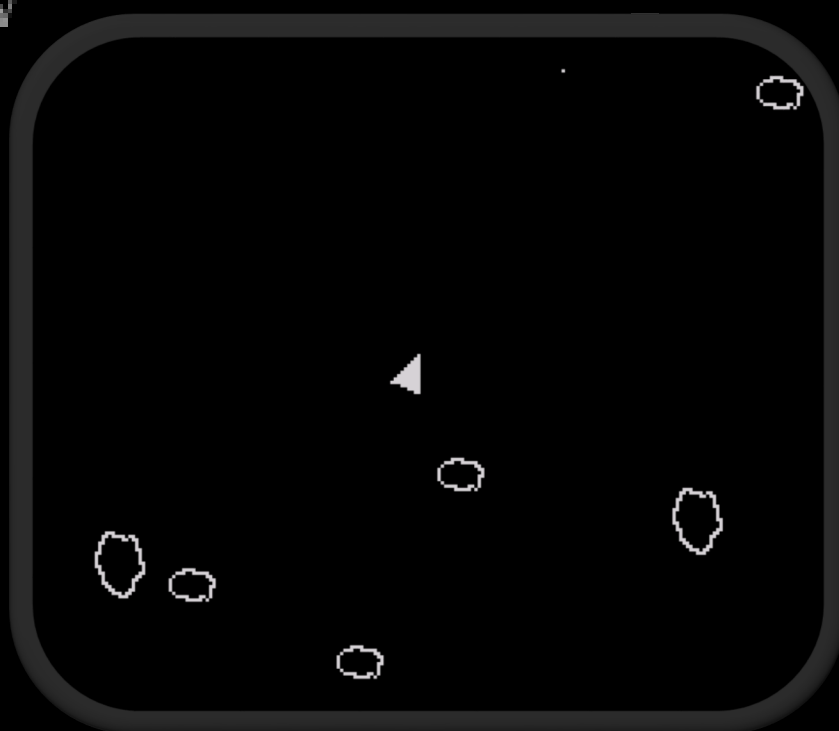
Meteor Storm (Quicksilva 1982)

This is one of, if not the first, commercial Spectrum games to include speech. A scratchy voice calls out as the game begins, but the exact words have been de-bated over many times. My opinion is that the game shouts 'scramble, scramble' but no doubt you'll have your own ideas.

The asteroids move around less smoothly than Cosmic Debris, seemingly in character based jumps, despite this the game does play quite well. The random saucers are there, but in a different colour which helps locate them on a busy screen.

The rotation of the player's ship is fixed to 8 compass points instead of a smooth arcade-like movement and firing is also limited to those directions.

When thrust is applied the ship moves until reverse thrust is applied, unlike the arcade game. This makes things difficult, often caus-ing your ship to carer into an asteroid as you stab wildly at the thrust key.

The sound is simple, with a firing sound and saucer sounds, but it could have been better. Overall this is a competent version that plays well and has all the elements of the arcade version.
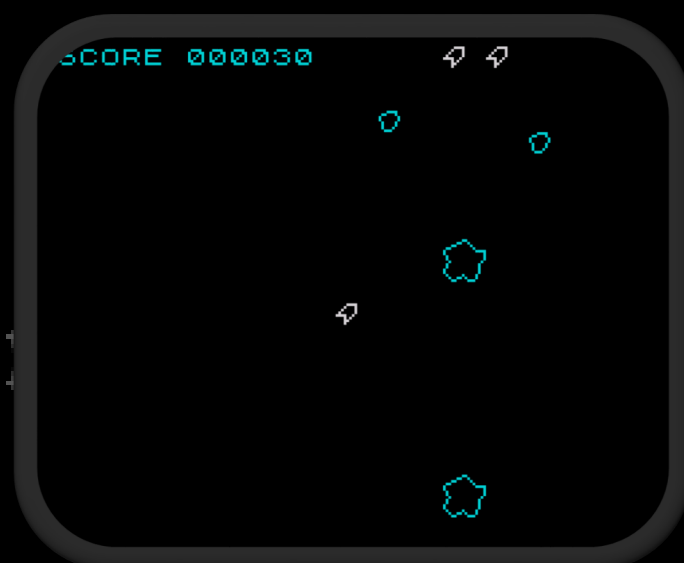
Meteoroids (Softek 1982)

If I didn't know any better I would have said this version was compiled BASIC judging by every aspect of the game. The only thing that is machine code is the sound, and even that uses the same routine used in a vast majority of early games, and was available as a small type-in in many magazines.

The game uses large graphics; I deliberately did not use the word sprites on purpose. The large character based images, jerk around the screen following predictable paths through space.

Thrust cause the ship to move and then stop. There is no inertia. This makes control easier, but varies from the arcade.

The sound, apart from the game start and game end siren, consists of simple 'tick' sounds when firing or when the sau-cer appears. The players ship is fixed to 8 positions of rota-tion which doesn't help this already poor version.

ASTEROIDS SHOOT OUT

Meteoroids (DK'Tronics 1982)

This very early Don Priestly game shows just how much his talent grew within twelve months, but doesn't exclude it from being judged as poor.

The graphics move in character based leaps and the player's ship is again fixed to 8 points of rotation. The game stops when playing sound effects and there is an inherent problem when asteroids are hit close to the player ship. As the asteroid splits, smaller versions are generated, 8 pixels away on the 8 axis points. That means if you hit a large asteroid that is within 8 pixels, the newly generated rock immediately destroys your ship.

The thrust does mimic the arcade, in that you move and then slowly come to a halt but its in character based jumps which makes the whole thing look terrible.

After each life is lost, the game flips back to a holding screen and beeps until you press a key to continue !!

This game is one to stay away from.
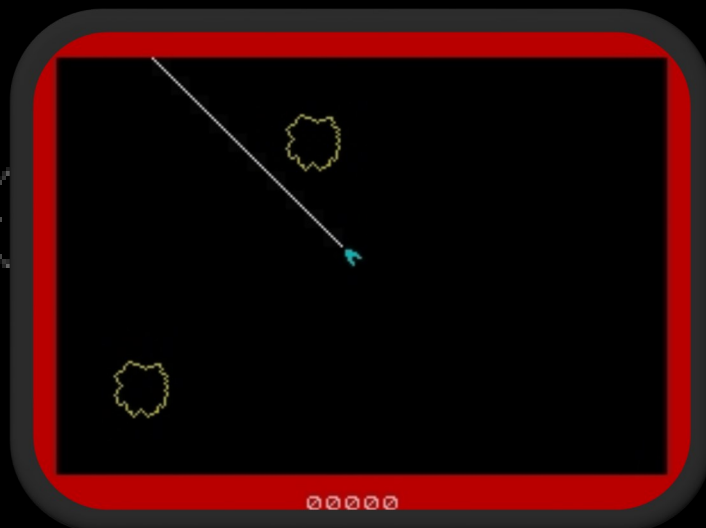
Planetoids (Psion 1982)

Although this version of the game is not authentic, in that the graphics are filled, it does play rather well and has that all important 'just one more go' factor.

The graphics are very smooth and control is responsive making for a good playing experience.

The sound could have been better though with just a 'tick' sound when firing, and two uninspiring beep effects. The playing screen does not display the remaining lives either, which really should be there.

One major factor is the rotation which is improved from every other game by having sixteen angles. This makes the rotation smooth and the game much more playable.

The thrust work just like the arcade machine, although with less inertia, again making for a better experience.

This is considered by many as the best Asteroid game for the Spectrum, but there is still room for a lot of improvements.

Spectroid Storm (Abersoft 1983)

I don't know really where to start with this dreadful game.

Considering it was released in 1983 it should at least be 'like' the arcade machine, instead we get a white screen, multi-coloured asteroids and strange alien ships that meander about randomly.

The graphics are character based and the standard 8 position rotation is used, but with all that colour and white background, it really does irritate.

The score flashes constantly, which causes a distraction, and at times there is just too much on screen.

Using the thrust is madness; your ship just hurtles around the screen sometimes seemingly invincible, but at the same time totally uncontrollable.

Very disappointing considering the completion and year of release.

This game falls into the 'extremely poor' category!

Deep Space (PSS 1984)

Deep Space is, despite being graphically average, a decent game to play.

The small character based asteroids move around in eight pixel jumps and because of this the smaller ones are very difficult to hit. The ship has fixed eight point rotation and the sound is limited to just explosions.

The star filled background is nice and doesn't detract too much from the game and control is responsive.

The size of the graphics lets the game down though.

Thrust moves the ship and then stops, there is no inertia, but we do get the saucers making an appearance.

As mentioned before, game-play is nice, giving a good long game, it's just a pity about the size and movement of the graphics.

And the winner is....

ASTEROIDS ARCADE

Winner : Planetoids

Despite coming out the winner, the game is far from perfect.

I still think there is not a single good asteroids clone on the Spectrum – which is real shame.

Maybe it didn't have the raw power to do real vectors, but I'm sure it had the capability to improve on the mediocre games that exist. For now, if you fancy breaking some rocks, I suggest grabbing a copy of Mame.

By the way, I deliberately left out Blasteroids, simply because it was an arcade game in itself which came much later, although the Spectrum version is quite good.

SHOOT OUT

0023200

DRAGONSBANE

Quicksilva 1983

Occasionally companies that specialised in action games, released something outside of their comfort zone, and although Quicksilva did put out the odd adventure now and again, its main staple of releases were aimed at arcade fans.

Dragonsbane, released in 1983 had a really nice cover, as did most early Quicksilva games, and pointed to a game that didn't feature alien blasting.

Once loaded the game generates a random maze before throwing you in at the deep end with just a sword and some food. The idea of the game is to wander around the corridors and rooms of Earthstone Castle and try to rescue the Princess Paula.

The view is drawn in wireframe 3D, with the various monsters shown as large graphics. At the top of the screen is the input area, where you control the game via single key commands. A list of command can be viewed by pressing H.

On the right you can see your selected weapon, room number and various statistics such as strength, endurance and skill. Other markers show how close you are to the princess and the deadly dragon, which you really should avoid early on in the game.

You move around using the cursor keys, which can initially be confusing. To understand that, imagine you are looking at a map, key 7 will take you to the room to the north, confused.. yes so am I...

Initially I thought that 5 and 8 rotated you, but going by the room numbers, this was not the case, however, the compass does change, which just adds to the confusion! And to make things worse the keys worked differently depending on exits, so for example if you pressed 5 to move left and there was no left exit, you are rotated, but if there is an exit you are rotate and moved.

After a few hours play it finally dawned on me how the game engine worked.

The room drawing is accurate, and moving around is straightforward but you have to remember that when you move left or right, your view is rotated to that direction and you are moved into the adjacent room. So for example if
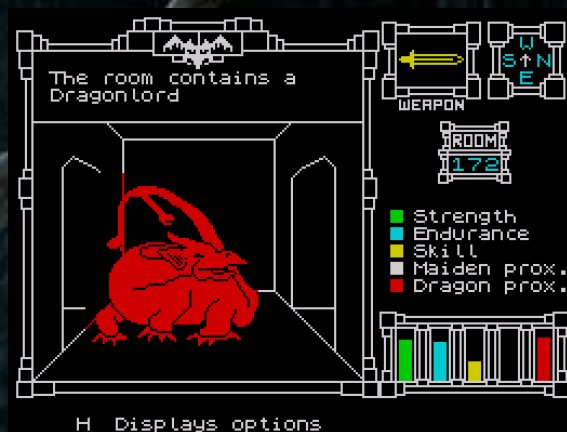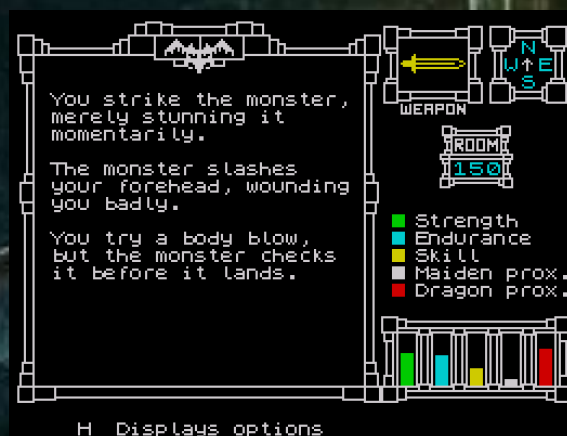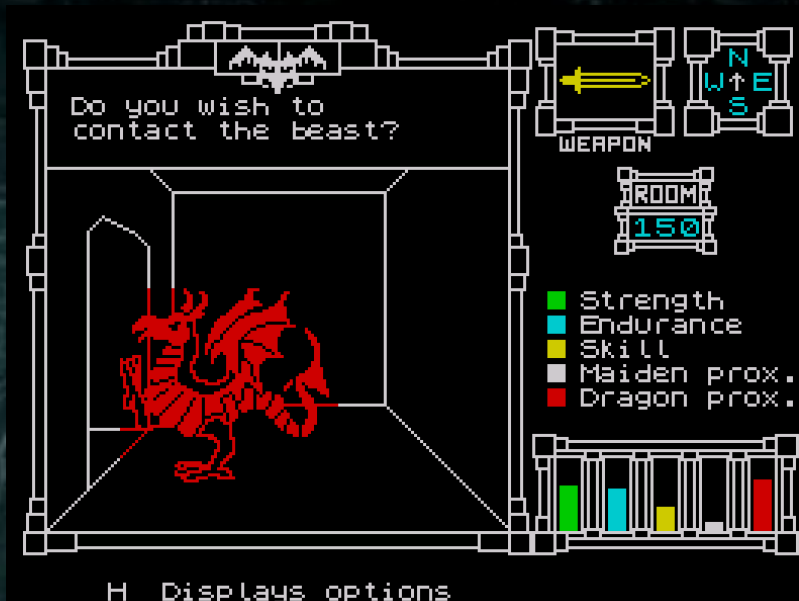
there is a doorway to the right and you are facing North, pressing 8 will move you left into the room and rotate the view so you would be facing East. Once you grasp the concept, moving around becomes a whole lot easier.

A very confusing, and in my opinion, flawed system that detracts from the game.

As you move you use up your strength and to replenish it, you have to eat food.

As you walk about, the screen updates and it won't be long before you meet up with a creature of some kind.

Some creators are friendly and you can trade items for food. Most though will attack you without any input from you, so you have to think fast.

Attacks are depicted in words, with your stats and selected weapon calculated against the creatures, the outcome can also have a random elements. Most of my attempts seemed to end up with me running away or getting killed, which was very frustrating.

If you are getting battered, you are given the chance to flee, which takes you to another room. However, the creatures can follow you and continue to kick seven bells out of you. If this continues, you have no chance to eat food and will, very quickly, end up dead. It would have been much better to introduce progressively tougher creatures rather than dumping you into a fight with a huge ghoul or zombie.

I found the best tactic was to stock up with food whenever possible, although be careful, eating too much will cause indigestion (I kid you not) and this will reduce your strength.

It would seem you have a limited amount of time to complete the task based on the amount of food you have, which in turn is dependent on how many monsters you fight. There are food parcels lying about, if you are lucky, and you can trade items for more food, but these opportunities are rare.

So, the aim is to use the proximity guides to head in the right direction as quickly as possible while eating when required and trying not to get your head smashed in by various creatures.

I played this game quite a few times.. and probably spent a good 4 hours trying to get close to the princess. When I finally found her, in room 1, after falling down a trap and randomly heading towards the lower room numbers, I was told I couldn't free her until I had found two keys! So off I went again, very frustrating, and most of your time is spent trying to figure out how to actually navigate.

One key is randomly placed in the castle the other is guarded by the Dragonlord in room 172. Get both keys, head back to room 1 and the game is completed.
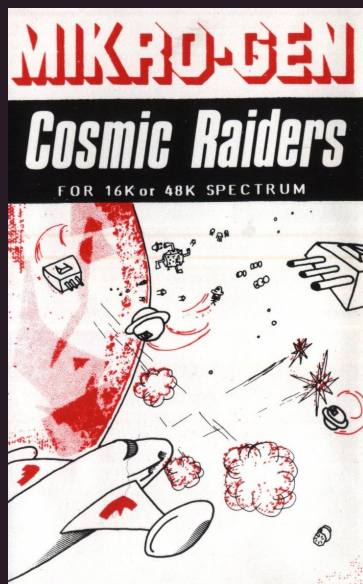
I had to use the infinite food poke, and this does improve gameplay a lot and makes it much more enjoyable. You still have eat to keep your strength up, but you don't have to worry about running out.

I don't think this game will be to everyone's taste, and it's a great pity the navigation is so painful to use. Once you understand how it works though, it does improve the overall gameplay.

Not a bad game once you get into it, but not for everyone.

POWER OF THE
IMAGE
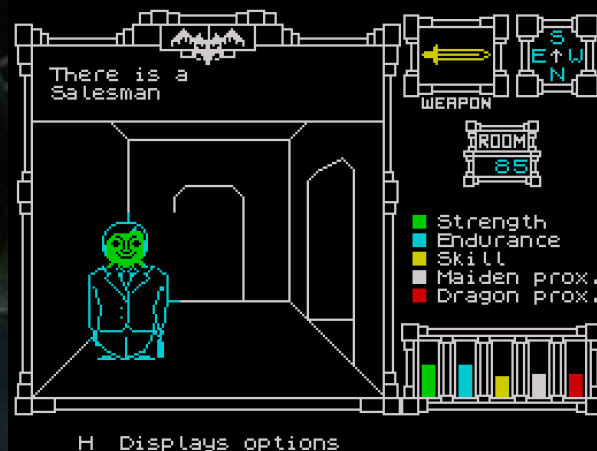
In the early days of home computing there was no internet, and there was a limited number of ways you could get your game noticed on the shelf. Not many companies had the revenue to run large adverts in magazines, many just having small, 8th size boxes somewhere near the back.
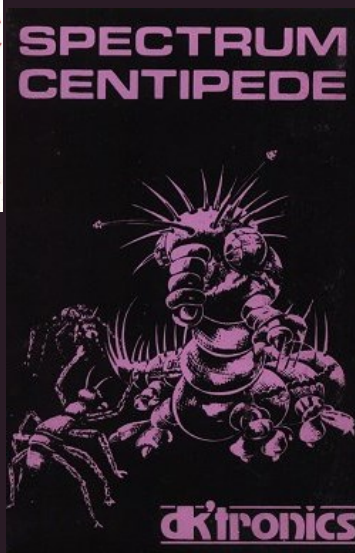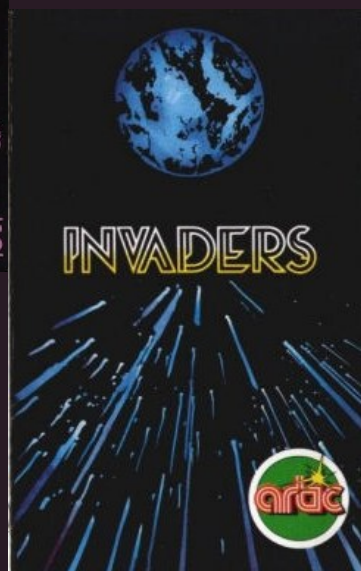
Word of mouth played a large part in things, as did magazine reviews, but faced with a shelf full of games, how would you set about making your game stand out? The answer, for many companies was game art.

Very early game art consisted of black and white images, maybe with some spot colour thrown in. In these cases, the art had to excite the user, had to draw them in. It had to depict in a few inches of space, the whole essence of the game. Most were not done by professional artists, and some looked hand drawn. The end result was a mixed economy of different looking products.

As the marketing war began to hot up and the shops began to be flooded with games, the companies had to think again, and this often ended up with a series of game packaging that matched.

The company looked more professional if it had a logo too, as this could be used to identify other games from the same stable, something which sold games even if they were rubbish. I remember buying Centipede (before it's name was changed to Cenit-Bug) from DK'Tronics just because I wanted the full set. The game was average at best, but it meant there was no gaping hole in my collection.

Collectors were being tempted, and who could resist. Many companies now employed a graphic artist, and the art work took a huge leap forward, with some of the best game art to this day I think.

Companies like Silversoft, Imagine, Ocean, PSS and Rabbit released games that could easily be identified, and that drew in the collectors. If you had the first 5 games from a company, and they brought a new one out with matching art work, you just had to have it.
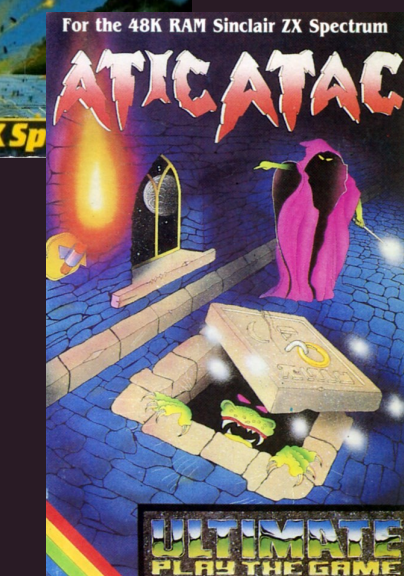
Game art and professional image is something we take for granted now with multi-million pound investments in games, but this was the dawn of the computer entertainment marketing.

Browsing through my collection, some the images are truly wonderful to look at, particular favourites being from Quicksilva, Softek and
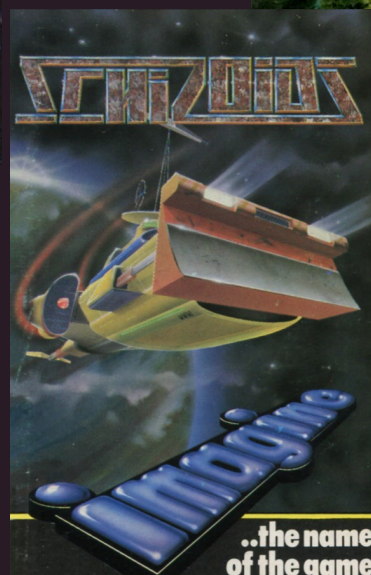
the early Imagine games. Schizoids is brilliant; it's a pity the game so poor. But that was part of the lure, part of the plan to get you to buy it.

The art work varied between companies in how they got the game across to punters. Some chose a cartoon look, even if the game was a shoot-em-up. Others swayed towards fantasy art while some limited the images to just basics. PSS's early games all matched and had a very basic look, but at the same time you knew what the game was about.

It was very rare to find a real photograph on the cover, this being mainly held back for strip poker games or games featuring semi-naked women. Barbarian 2, Vixen and others were no doubt devised to temp teenage boys, the vast majority of game players at the time, to part with their pocket money.
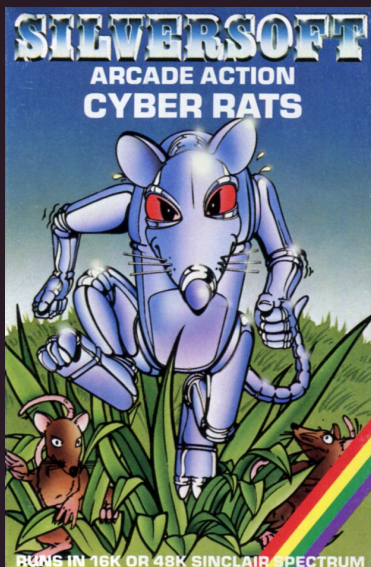
Around the mid 80's there was a quiet revolution, and gamers were beginning to get annoyed with companies for 'tricking' them into buying games based on the artwork. Remember there was no internet and the magazines were

often 'swayed' by large advertising promises.

It was then that screen shots began to appear, but again the marketing machine was up to its tricks again. Many Spectrum games included screen shots for other formats,
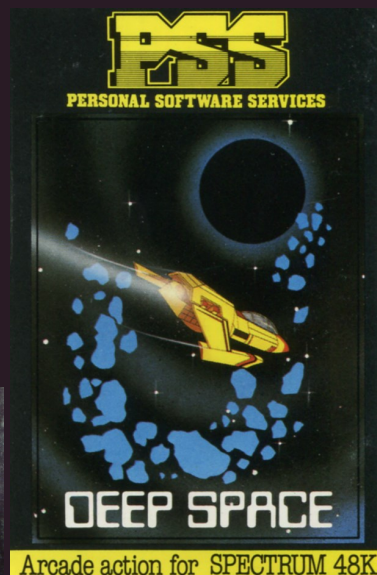
typically the Commodore or Amstrad. That really was a con!

Luckily this type of marketing is no longer possible due to the world wide web and of course the limited (compared to the 80's) range of hardware. Most games look the same despite what they are being played on. The marketers still do try their tricks though, showing FMV in adverts with tiny text at the bottom that says 'not actual game footage'. How can a game be sold by showing something that is not game footage?

I am not a huge fan of modern games, and it amazes me that people think that pre-rendered FMV is somehow linked to the quality of an actual game.

I was amazed recently when a friend showed me a game he had just got. I won't mention it by name, but it took about twenty minutes to get to the part where you could interact with it! And we used to moan about waiting 5 minutes for a game to load while looking at a loading screen!

I'll shut up now.

DIVIDE
AND
CONQUER

MODERN MASS STORAGE FOR YOUR SPECTRUM

You may have seen in previous editions, the feature about converting tapes to disk for the plus 3 machine. However, what is you haven't got a plus 3, or fast storage or just want to load things into your Spectrum as fast as possible, well that's were this device comes in.

This is a DIV-IDE, some refer to this device as Divide, but being old school and remembering the old IDE interfaces for 386 and 486 PC's, I can't help but call it a DIV-IDE. (div Eye Dee Ee)

Whatever you call it, this great piece of hardware must surely be top of the list for any discerning Spectrum user, and I wish it had been available during the 80's.

There are several different types available, some with cases, some without and some with a nice slim-line look, others projecting out of the back. Not wanting to have anything protruding too far from the back of my Spectrum, I opted for the slightly more expensive DIV-IDE 2k version.

All versions will work with most models of Spectrum, and you just have to set jumpers or switches on the board first. Whichever version you opt for, the functionality will be the same, providing you don't re-flash it with a different firmware, but more about that later.

As it stands, the device, as its name suggests, is an interface between your Spectrum and most IDE devices, such as hard drives, CD roms or memory cards. Some version requiring an additional board to allow memory cards to work. The slim-line version though, only has connectivity for a compact Flash card, and

requires no further boards.

Once you have checked the jumpers or switch settings, to make sure they are set for you model of Spectrum, power off, plug it into the expansion port and power back on.

With the default Firmware, you will immediately see the DIV-IDE screen, pressing any key will drop the machine back into the operating system. If you have a 48k machine this will be 48K BASIC. If you have a plus 2 or plus 3, it will be USR 0 mode.

This means no menu screen and no access to the floppy drive on plus 3.

To activate the interface just press the button and the Spectrum will display the file browser.

Here you can view the contents of the flash card and

select any files to load. The device supports TAP, Z80 or SNA files, both 48k and 128k.

The storage can be divided up with folders, so for example you can have a folder for demos, 48k games and 128k games. You can then, as I have, sub dived those folders in to alphabetical groups.

Being a compact flash card, you can pull it out of the DIV-IDE, when the power is off of course, and plug it into a card reader on your PC. This shows up as a normal memory card and you can easily copy files across by simply dragging and dropping. Once finished, just pop it back into the DIV-IDE, power on and you are ready to go.

In the file browser you can use the cursor keys to move around. Once you have located the file you want to load, just press enter.

If it is a SNA or Z80 file, it will be loaded automatically.

If you select a TAP file, you are dropped back to the Spectrum OS where you have to load it like a normal tape.

Pressing the button again you can usually pick another game and load it. I say usually, because some games cause the button not to work, in which case you just need to reset the machine.

As it stands, the firmware supplied, Fatware, is read only, meaning you can only load games and not save them, or save data. A bit limiting if you want to do anything other than play games.

Loading a different firmware, typically this will be exsDos or Resi-Dos, will re-configure the whole device to allow writing directly from the Spectrum

Resi-Dos and Exdos have some great features too, like tape emulation for reading and writing to the same, or a different tape file, but the file browser, even though it loads games instantly, only displays up to 8 letters of a filename. This can be quite limiting if you have six version of space invaders!

To keep you confused, there are also different versions of different firmware – so be careful.

If you do brick your DIV-IDE, it can be re-flashed using a real tape recorder though, so it won't be disastrous if things go wrong.

When I first got my +3 I was delighted with the floppy drive, but there are things that simply can't be moved onto disc.
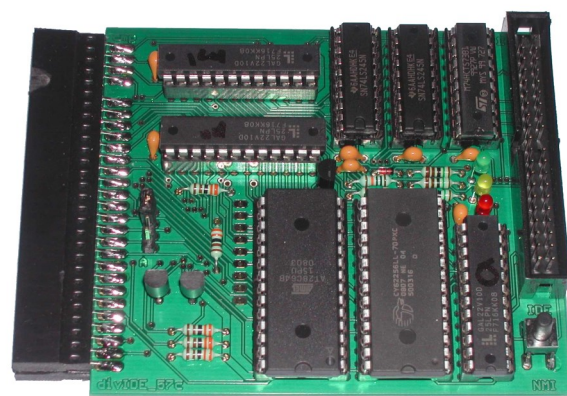
Alternative version

I bought a second 3.5inch drive, but still larger or complex loading programs cannot be moved across.

The DIV-IDE is the solution for the vast majority of things. Anything in the formats mentioned before can be simply copied via your PC to the card and loaded straight into the Spectrum, including multi-load tape files.

I say vast majority, some things still didn't work for various reasons; some to do with timings of the load, some because the program needed to write to the media.

But, for the vast majority of games and applications that don't need to save data, the DIV-IDE works brilliantly.

Writing to the device, at the moment, isn't a priority for me, so I will be sticking with Fatware for now. It is however, nice to know that I have the option should I need it later, and the firmware is still being developed and tweaked.

Another downside is that when you use the DIV-IDE on a +3, the disk drive is disabled, because the machine is dropped into USR0 mode, so even if you load a word processor from memory card, you can't write data back to the disk drive.

Overall though, this is a superb piece of kit, and anyone who uses a real Spectrum frequently will wonder how they managed without it.

All your games, demos and programs on one card, select and loaded in seconds...

If you can afford it, it's well worth the price.

Where to get them...

http://lotharek.pl
http://www.rwapsoftware.co.uk
http://velesoft.speccy.cz
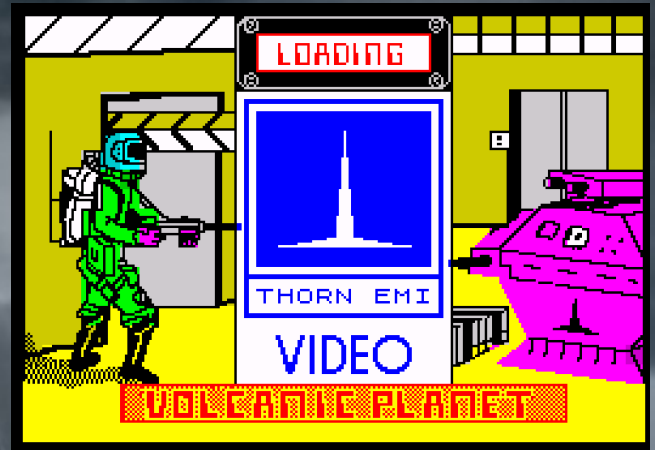http://sintech-shop.co.uk

Volcanic Planet

Thorn EMI 1983

Volcanic Planet from Thorn EMI, is an interesting game, and comes in a really nice inlay depicting a fight between someone who looks like a punk and a strange alien creature.

It is your task to destroy all of the aliens, called Zerans, by travelling to the planet Zeras, locating the volcanic plug and planting a bomb there.

The bomb is set to explode in a given time, flooding the planet and the alien base with lava. You, of course, have to escape before that happens..

The game has five skill levels which relate to the number of levels in the base. The easiest mode gives you 3 levels.

Starting at the top level, you have to search for the lift to take you down.

Once at the lowest level, based on you skill you selected, you have to find the plug and plant your bomb. Set the timer and run like hell to get out before you are toast.

The Zeran's base is of course occupied, but they don't all attack you. It is easy to move around without killing anything, and this is the best approach.

Occasionally one of the Zerans will take a shot at you, deal with these on their own and continue your task. If you go in guns blazing, the more the Zerans will attack.

If you haven't already guessed by the plot and the actual game play, this is very close to the Amiga classic, Alien Breed.

The screen displays the map of the current level, along with the usual health and scoring.

The screen moves in character based jumps, but that's ok for this game, and only occasionally do you get stuck in narrow corridors.

There is a lot squeezed into this 16k game, and I really enjoyed playing it, there is a great thrill once the bomb is set and you are charging back to the top level, trying to remember where the lift was and hoping the Zerans don't decide to attack.

There is only one problem with this game, and it's a big one, the sound.

There is none. None at all. No firing sound, no walking sound, no explosion, nothing. It's very sad not having anything, and so I recommend playing this game with some suitable music in the background, maybe even Alistair Brimble's fantastic Alien Breed music.

But I certainly suggest you give it try...

STAR FIREBIRDS

Incentive Software 1985

Star Firebirds was released in 1985 by Insight Software and swiftly re-released by Firebird Software.

The game is based on the arcade shooter Space Firebird and is an out and out shoot-em-up.

The Spectrum had a lot of old-school shoot-em-ups from the twilight years, the early attempts were usually poor character based games with little or no quality.

Some games stood out, but for us old fashioned arcade lovers the pickings were very thin with games like Pheenix from Megadodo and Moon Cresta from Incentive standing out.

Here then is another one worth mentioning, a game you can just pick up and play. It follows the usual style of vertical shooters, no scrolling landscape to get in the way, just a nice starfield and lots of aliens to blast.

Things seem to move slowly at first, even your own laser shots appear pedestrian, but you soon realise they match the pace of the game.

Flocks of aliens swoop around firing at you, and your job is to just survive and rack up a huge score.

Different types of aliens appear later on like the large bomb slowly heading down the screen and of course the large firebirds.

There is no special tactics, just keep moving and blasting.

Occasionally aliens will appear from underneath you, which is very annoying. You also have to be careful if you are at the very edges of the screen, more often than not you will be destroyed by another batch of inbound aliens.

After spending hours learning and playing Dragons Bane, this was a real breath of fresh air, something to take out the frustration on.

Control can be by keyboard, Kempston, interface2 or cursor joystick and there are different levels of play from easy to dangerous.

On the easy level, things are manageable and you usually get a nice long game.

The aliens swoop around smoothly and control is nice and responsive. The sound is a little lacking, with just firing and explosions. The Spectrum would never match the arcade machine, but a little more would have been nice.

On easy level the game starts slower than the arcade and as you move up the levels, the speed increases. I would say that level 3, medium, just about matches the arcade.

It's a great little shooter this, only let down by the aliens that suddenly appear at the bottom of the screen and kill you. Impossible to dodge as you can't see them coming, but very annoying when you lose a life for no fault of your own.

Overall then, a great game for arcade fans.

cRaY_5

Retroworks 2011

Because of pollution, governments of the Earth have got together and come up with a plan for space colonisation.

A huge spaceship is built with a crew of 500, and is launched to find a new home out amongst the stars. However things don't go to plan, and the computer controlling everything, the Cray 5, is damaged in an asteroid collision.

Because of the damage the computer enters self-destruct mode and the countdown begins.

Obviously this is not good and so you set off to try and repair it. It's always you isn't it!

Nothing is that easy of course and the Cray 5 has numerous defence systems created to protect it. These range from magnetic walls that drain your energy, roaming robots and the odd force field or two.

To fix the systems you have to disconnect the main computer by activating all of the switches. These switches are placed around the ship and require keys to enter the areas. This means you can't access all areas straight away and have to work your way through them when you locate a key.

You are armed with a pulse rifle which can be used to destroy the guard droids, but you also have to avoid some parts of the walls, as these can damage your space suite.

Giant magnets....

There are also giant magnets hanging from the roof that drag you into these killer walls. Why would anyone leave a giant magnet about?
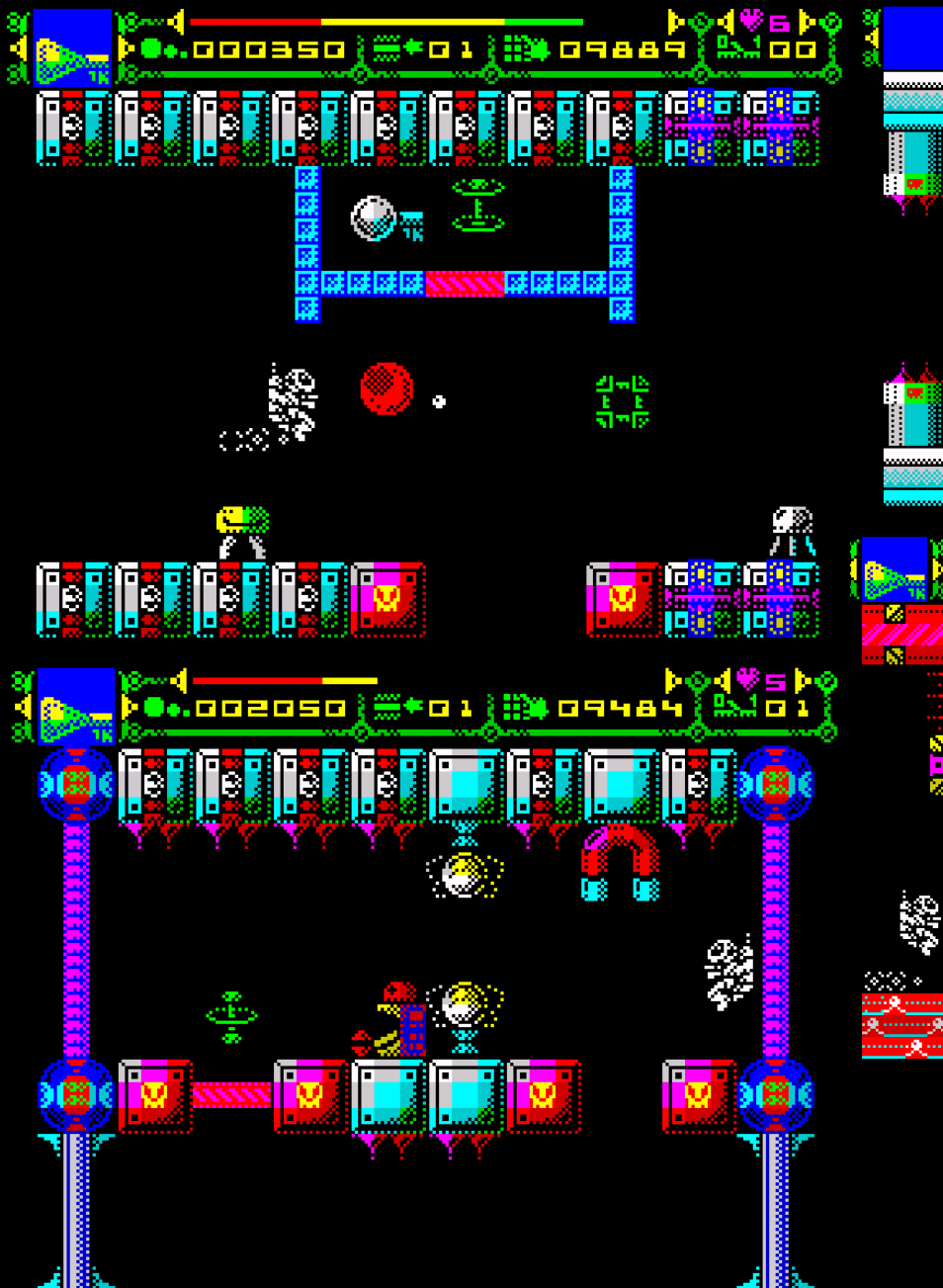
Flying around is easy, avoiding collisions isn't, and careful manoeuvring is key to the game. The control reminds me very much of my favourite game Jetpac.

The control system is like Jetpac...
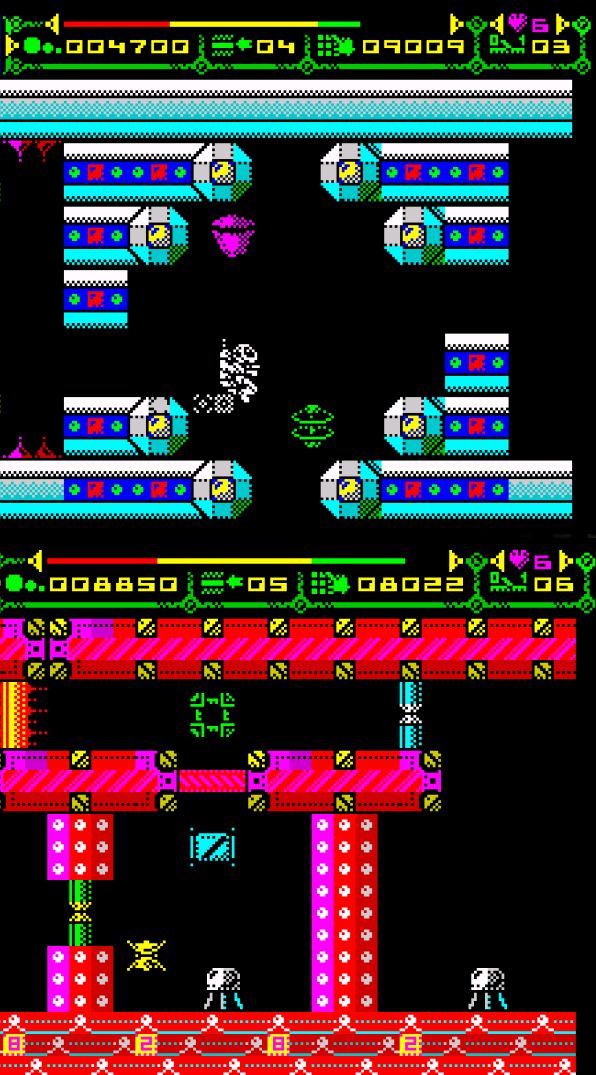
You can only carry one key at a time too, needed to unlock doors and areas, so you have to plan your route. Once you access the teleport, you can go to the levels that you have access to.

The graphics are great, and very colourful and detailed. They move smoothly and are responsive to the controls. It's a joy to play once you get the hang of things.

Sound is also great, with a good tune at the start that continues to play through the game. Sound effects are also well thought out and suite the game.

Difficulty is about medium, and once you learn how to control your man, it becomes a matter of avoiding the magnets, hazardous walls and droids, and remembering where the keys and switches are.

The game map is huge, so this will not be a quick game to finish, but you'll certainly enjoy your time playing it.

This is a great game that will keep you playing for ages, and is highly recommended.

Jetpac
On Your Windows 8 Device

Jetpac is my all-time favourite game so when I heard it was going to be made available for Windows 8 computers and devices, I couldn't wait to grab a copy.

Livewire Design were the company responsible and they certainly went about things in the right way. Ultimate games are not authorised for distribution, so the first problem was getting the agreement from the current copyright holder.

Since Ultimate changed to Rare, and Rare were bought by Microsoft, this is where the rights came from. With that in place, the games had to be converted and certain changes made to avoid further copyright issues.

Rather create a Spectrum emulator, the authors decided to create a custom game harness that took the game and allowed it to be run on modern equipment. This meant obviously adding touch screen controls for mobile phone and tablet users. The Sinclair font also had to be removed, replaced with a font used by Ultimate in later games.

During the reverse engineering of the games, Livewire found some very interesting things, all of which are recorded on their website.

Of particular interest were the graphics for Jetpac. It seems the enemy aliens were all to have two frame animation, and indeed the first three (meteors, fluffy aliens and balls) do have two frames. After that, the other five types only have one. This was assumed because of shortage of memory.

Also, the order the rockets are built were changed prior to launch, as inspection of the game code indicates. The released version of the game has the rockets in the order 1,2,3,4 but the code points to an order of 3,2,1,4 – and looking at the graphics this would give a more logical progression of ship design.

The game itself, once finished, was almost identical to
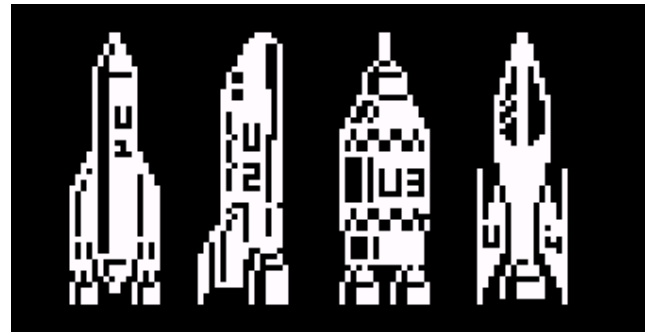
the classic original. The only difference is the game font. The intro screen has some nice graphics and the score is stored in a high score table ready for you to try and beat. These details are displayed on live tiles for both desktop and phone systems.

Now released and available from the Windows Store for a meagre £1.49, the proceeds all go to Great Ormond Street Hospital, so it's a worthwhile purchase.

Livewire have gone on to convert other Ultimate titles to this format and you can now enjoy PSSST, Cookie, Tranz-am and Atic Atac, with the remainder being worked on.

Give some cash to charity and get an officially licensed version now, it's well worth it.

Check out the Livewire website for more details.

http://www.livewiredesign.co.uk

Original

Windows 8
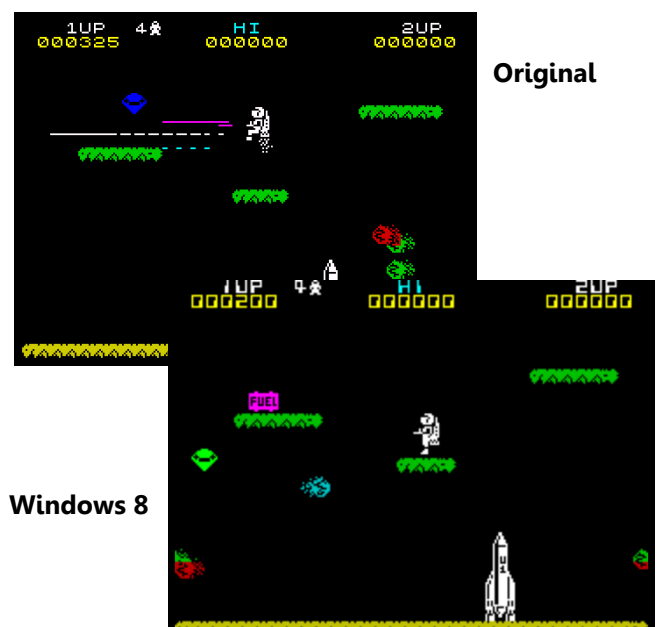
AVENGER

Abacus Software 1982

Being a very early release it is no surprise that this game is far from arcade perfect, but I can only best describe this game as terrible.

It is supposed to be a thinly disguised version of Scramble, although many elements are missing, presumed lost along with the gameplay.

The landscape judders across the screen and the ship is limited to just up and down, there is no lateral movement.
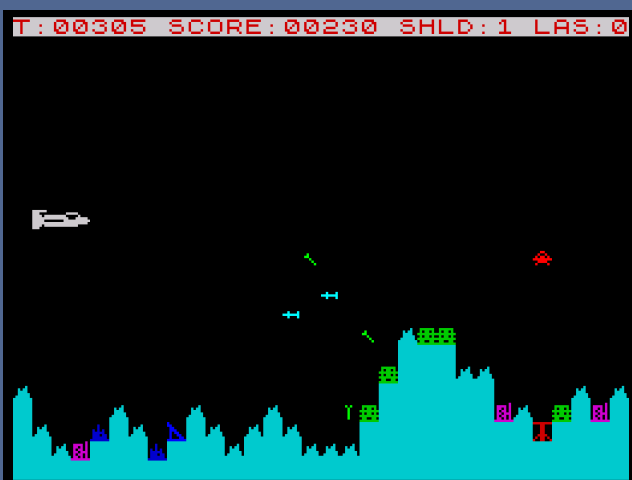
You are armed with lasers and bombs, but use the laser too much and it will overheat and then fire only slowly.

Ground based enemies fire projectiles at you that can only be destroyed by your bombs, your laser is useless on them so the best plan I found was to just keep bombing in the hope of destroying them.

The laser can be used to kill air-born enemies, that also fire missiles back at you, making for a sometimes very busy screen.

There is no fuel element to this game, which I sup-

pose is a good thing considering how many other things you have to remember and avoid.

Your ship has five shields that can take hits from anything except the landscape and once drained you lose that ship.

The graphics are basic and move in character based jumps and the sound is limited to just two effects. One for the laser and one for when something is destroyed.

The levels do not change like the arcade game and there are no meteors in later levels, again, probably for the best.

If you do manage to get far enough into the game, for some reason a huge nuclear explosion erupts and destroys your ship. I had no idea why until many many games later when I realised that if you destroy the small white blobs, this causes the explosion! So this is yet another thing to keep an eye on.

All in all, a below average attempt that not only has many of the arcade elements missing, but has terrible gameplay too.

16K GAME
Mission Impossible

The inlay claims a distress call has been received from some astro-miners on Titan and you are sent to rescue them. As your mother ship orbits above the planet, you have to drop down in your pod, avoiding meteors, enemy craft and force fields to get to the stranded miners.

This then is a version of the arcade game Lunar Rescue. The mother ship is at the top of the screen, there are four miners to rescue at the bottom, and a lot of meteors.

The controls are easy enough, ZX for left and right, and space to fire your booster. This is needed to slow your ship down and get a soft landing, otherwise you will crash.

The game drops you from a random starting point, which can be tricky, especially if its near the edge of the screen. Using your booster you can navigate through the meteors and land safely.

At this point one of the miners hops on board for the trip back up. Now we have alien ships to content with as well, but lucky the pod has a laser that is fired using the boost button. This isn't of much use until we get to

the forth miner.

As we collect the forth miner, a force field appears half way up the screen, and you have to shoot a hole in it to allow passage back to the mother ship.

This is very difficult to achieve, the trick is to line up your shots to make a large enough hole, keeping in mind you'll only get four shots at it. If you manage to get through that, there is an impossible section.

Your pod starts at the top of the screen and has to navigate through a mine field - but because of the mine positions, this is often impossible.

Complete this and it's back to the normal game, but this time there is a force field at the top of the screen.

For 1983, the graphics are nice and smooth, usually early games have character based movement, but the author has done a nice job of getting things moving smoothly.

There is plenty of colour too, and the sound is good, although it does use the standard zap effect found in many early games.

Control is responsive, which is essential in this game, and overall it has that 'just one more go' feel.

Impossible...
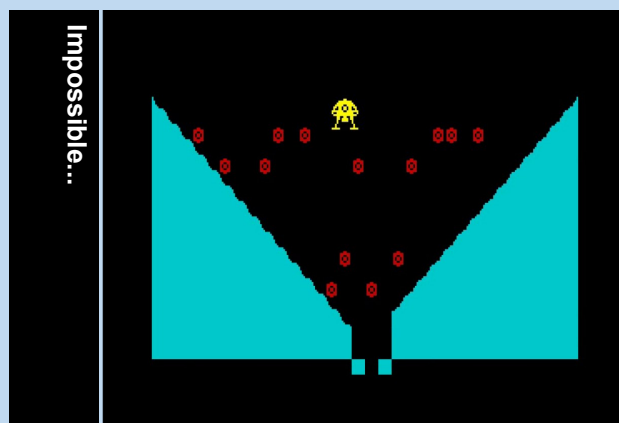
TimeGate

Quicksilva 1983

Time Gate from Quicksilva at first seems like an overly complex 3D shooting game, and has a comprehensive manual included on the tape.

Reading this gives you an overview of the game and more importantly, how to use the controls and subsequently advance in the game. It certainly makes the game more enjoyable and gives you something to aim for.

A vicious race of aliens called The Squarm have enslaved humankind and only a few survivors can be

found. Together they unearth a ship and plan to travel back through time to destroy the home world of their captors before they evolve into the now overpowering race.

To do this you have to travel back using Time Gates, to the year zero so that you can wipe them all out. There is only one time gate in the galaxy and you have to locate this by jumping from sector to sector, much like the hyperspace scene in Star Wars.

Sectors that have aliens, represented by dots on your HUD, will not give up the time gate until they have been destroyed.

Fighting often results in damage to your ship, which can be repaired by landing on planets, represented by crosses on the HUD. You can only land on a planet once though, so careful planning is required.

Once you locate the time gate, you zip back in time to another alien filled time and the process starts again.

Finally you get back to the year zero after two jumps, and can now set about wiping out the Squarm.

The control panel is the focus for your journey, especially in alien filled sectors, and once you know how to use it, locating them is easy. You just have to blast them a few times before they explode.

Each time jump gives you more aliens, so the game becomes gradually harder.

This was one of the first games I completed, and because the galaxy is random each time, you can keep going back for another try.

Overall this is a good game with some unique features, especially for 1982.

An I can certainly recommend it.

Do It Yourself
GAMING

The ZX Spectrum, when launched in 1982, cost £99 for the basic 16k model, and £199 for the 48k machine. At these prices there were an expensive item, especially for something that just played games. Sinclair cleverly labelled the machine as a household tool that would let you calculate your finances, write letters and famously, help the kids with their homework.

The children of course, knew better, and to them is was a toy. A little black box that would let you play endless games of *Space Invaders* without having to put coins into someone else's pockets.

As responsible parents, games were often limited to birthdays or payday treats, unless of course you were financially well off or slightly older and had a job or good pocket money.

To fill in the gaps between games, magazines began printing simple listings that users could enter into their machines and save to tape. After a few hours, or in some cases, days of work, you had a brand new game to play.

Type-ins have many memories connected to them; random crashes and error codes being the most prominent. The quality of the print in the magazines often caused the most frustration, with zeroes looking like letter Os, and 6 and 8 sometimes merging into blobs of ink.

Some of the time these problems could be sorted out quickly; a quick re-read of the listing often picked them up, sometimes it was a matter of guess work. This act of de-bugging was the chrysalis of game development.

Once you had managed to get the game working there was always a desire to modify it. Put yourself as the author, change the title or the colour of the user defined graphics. Make the beeper do different things and for the more experimental of us, add or change the graphics.

Early listings not only included games, but often things like character set generators, screen effects and small business type programs. Which you chose to type in was down to your individual needs and once you got familiar with Sinclair's Keyword syntax, short listing were a breeze.

As early as 1982 there was a dedicated magazine that just contained listings, Sinclair Programs, and this was very popular.

Over time, listing began to incorporate small elements of machine code to spice up certain aspects of the game. These were usually sound effects or screen effects such as full screen inverse or pixel scrolling.

Small machine code sections were not too bad to enter and some listings came with checksum verification. Because they were machine code though, if entered incorrectly they could have a catastrophic effect on your hard work. The computer could freeze or just reset because one digit was wrong. Constant saving was the key because the single time you didn't, the whole thing wold come crashing down.

Listings soon grew in size with some magazines, like Your Computer, offering full machine code games to type in. These were a mammoth effort to enter, often resulting in something that you had no chance of de-bugging. In BASIC you had at least a chance, in machine code it was very different.

To save the user this torment
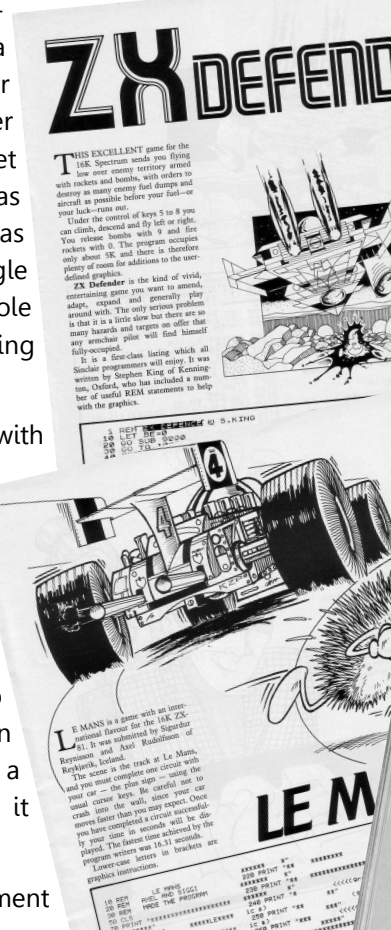
```
2630 POKE USR "R"+2,BIN 00111111
2640 POKE USR "R"+3,BIN 00000111
2650 POKE USR
2660 POKE USR
2670 POKE USR
2680 POKE USR
```


publishers produced four different alternatives; a covertape with the games on, a telephone download service, a television broadcast game or an electronic magazine with the games ready to play.

Your Computer had their own TeleSoft service around 1985, where a small listing was entered into your micro that allowed you to download games via a modem – if you had one.

Several companies tried the television method with Channel 4 broadcasting games during the testcard for several computers. These could then be recorded onto your cassette recorder, ready to be loaded later.

The tape magazines are covered an earlier issue of this magazine, and were a welcome change to hours of typing and un-expected crashes.

Back to the listings though, and once you had typed them in and modified a few games you felt you could actually write you own. Borrowing bits of code from the games you already had, it was immensely satisfying to see your first home-grown graphics move across the screen.
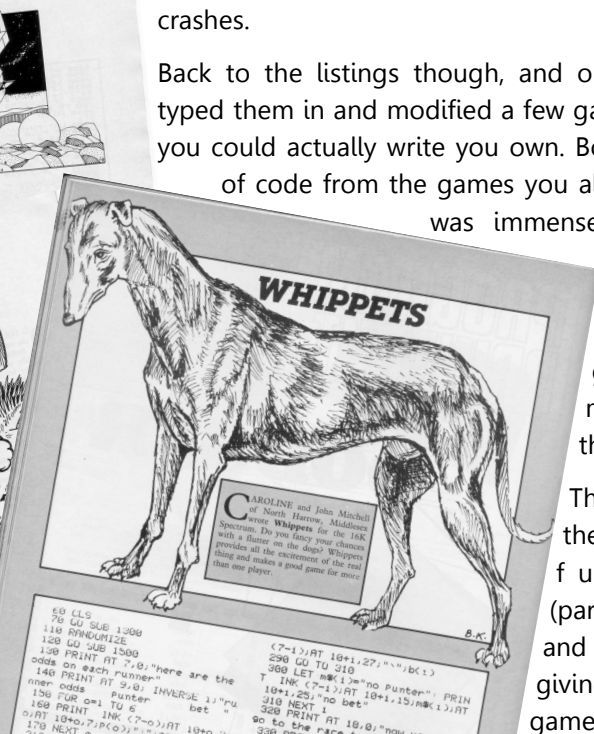

The listings then changed function (pardon the pun) and instead of giving you free games, they were

a library of routines that could be harvested for your own needs. A beeper effect here, screen scroll there, a keyboard reading section, hi-score table, everything was there if you looked.

For the more advanced user, and that didn't include me, the next obvious step was the murky and exciting world of machine code. For those with a talent, they could pick up the basics in a few months and have their own game ready to sell. The bedroom programmer had been born.

There were no end of adverts in all of the popular magazines asking for games to be sent to companies, and many users did. The amount of money they made varied on the game, the company and the royalties. Some set up their own companies that continued on for years, some are still going today.

From the small BASIC listings in computer magazines grew a whole software industry that is worth more than the world of movies, and that provides jobs for thousands of people and games for millions of users.