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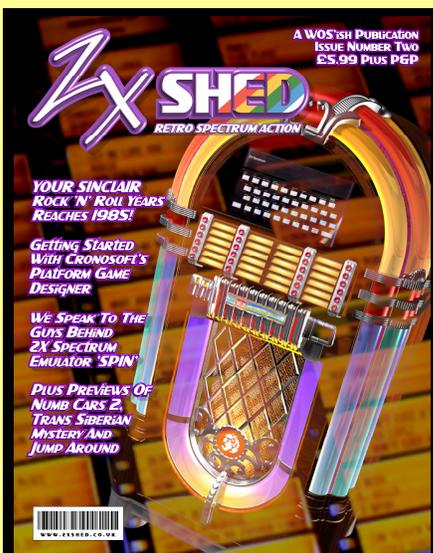
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WELCOME

So, there I was at half past 3 on Christmas morning. Glass of beer in one hand, two un-built kids bikes in front of me, trying to put Issue 2 together!

It's been a long road to get this issue out. We started off with the aim of releasing this issue in October and having Issue 3 in December. Unfortunately, we are only human and all of the Shed staff have real lives to contend with. However, we feel that this issue is infinitely better than Issue 1. We have taken on board the positive and negative feedback we received and hope you will agree that we are just about there!

So, what's happened since Issue 1? Well, we had CGE2005 for a start. I was personally a bit let down by this for a couple of reasons. Firstly was the no-show by Matthew Smith. I was looking forward to this, and there was no announcement made at all. We were all left wondering whether he was going to show up. Secondly, the whole setup seemed to be very commercial.

Having never been to CGE before, I was unsure what to expect, but it looked like most of the stalls were selling games, magazines & consoles on the extortionate side of eBay prices. Is this really what retro gaming has come to?

On the plus side, I did get to meet some very nice WoS forum members, although not enough of them brought beers for me!

In all, 2005 had its ups and downs for retro gaming. We've had many titles denied distribution for one reason or another and it remains to be seen whether this is going to be beneficial or not. We've also had a massive amount of new titles and remakes which will hopefully continue into 2006.

There's also been a fair amount of in-fighting within the community which really does us no good. At the end of the day we are all here for the same reason and should be enjoying ourselves!

As well as ZX Shed, we have seen a couple of other magazines start, along with the demise & resurrection of Retro Gamer.

Before I go, I must say a huge 'Thank you' to Sarah Hughes aka Muddywho for being very patient over the last few months and especially for stepping in at short notice to take over the artwork for the magazine.

Lee Fogarty

Editor

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CONTACT US

Got something to say? You
can contact any member of
the ZX Shed team at
contact@zxshed.co.uk

If you'd like to make a
submission to the magazine,
check out the website!
<http://www.zxshed.co.uk>

Well, there's no point in the ZX Shed staff having to work, so we encourage our readers to do the articles for us!

We start off with Andrew Wareings' thoughts on the mammoth Lords of Midnight. Take it away Andy...

 To be honest the first time I played this game I didn't appreciate it, I was just 13 in the summer of 84 and it looked daunting, strange and unlike anything else I had ever played. Even the old world style language used in the game was unfamiliar, luckily a pal of mine was more persistent and got to grips with the then unfamiliar way the game played, he called me up to come and see the game in full flow, I saw armies battling, a full world of warriors, magic and excitement, from that moment I was hooked.



Starting off as the four main characters – Luxor, Morkin (his son), Rothron the Wise and Corleth the fey the object of the game is basically to save your land of midnight from the witchking doomdark. You must use each one (except Morkin) to gather up a large enough army to guard your citadel Xajorkith against the impending attack by doomdark's forces.

Getting back to Morkin, his quest is a different kettle of fish, he must sneak up towards doomdark's citadel Ushgarak and recover the ice crown, the item that has plunged the land of midnight into a perpetual winter, and destroy it with the help of Fawkrin or drop it into the lake of mirrors.

The graphics were and still are very impressive, the game is played in full 3d, the mountains, forests, armies, hills, keeps, citadels and more, rise in the distance rise as you progress through the world of Icemark. It might not sound much by today's graphical standards but it was a major leap back then.

 During the day the land of midnight is yours to wander quite freely, except for various creatures such as skulkrin, giants and wolves which are usually disposed off easily, the hours of daylight left are built into the terrain that's traversed during day which can last between 2 and 7 moves per character, sometimes if your lucky you can find items which bring a new dawn or



maybe your army is tired from marching all day and need a rest to rejuvenate them, also the lakes can be used once to fully refresh a tired lord or army.



Recruiting riders and warriors to the cause is done via the keeps and citadels, each Lord will have his own army and usually have spare riders or warriors at his citadel, as long as your Lord matches the race of warriors to recruit then you can quickly gather a huge army behind Luxor and make your way to defend Xajorkith. When playing I usually try and recruit between fourteen and sixteen lords, each with a huge gathering of armies and lead them to the capital, as the game progresses and doomdark's forces march on towards your Citadel your army must be in place and ready to defend like crazy for around twenty nights of intense fighting, you can also send one chap – (usually I send Corleth the fey) up north as it were, to recruit some fringe troops which you can meet later on, once the battle down south has eased off, meanwhile Morkin is making his way up the western side of the map towards Ushgarak trying to steal the ice crown and distracting doomdark's forces along the way.



Considering this game is crammed into around 42k of ram, Mike Singleton has done an exceptional job, it contained 32,000 different views from within the land of midnight, 6000 locations, independent computer controlled warriors, great graphics and for the first time made you believe in the world you played in, I was totally astounded by the plot and depth that was shown in the game, it is a non linear game so you can play it different ways every time, I think that's part of the appeal, at the time its closest rivals would have been the basic war games combined with a text / graphical adventure, to me it was a great leap forward, showed what the spectrum was capable of and will always remain a milestone in gaming history.



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LOST TREASURES

Welcome to the inaugural instalment of 'Lost Treasures', a look at some titles that may have been ignored when originally released for several different reasons, either because they weren't released by a major software house or because they didn't get the exposure they deserved.

Firstly, I will look at Alternative Software's N.E.I.L. Android. This one is not as obscure as the others but still not very well known. Unfortunately I lost the inlay for this game years ago so I'm not sure about the plot. According to the in-game instructions, a spaceship called Epic was forced to land on an alien planet to do some repairs. While there, the ship was invaded by an alien virus and the crew were wiped out. Before the last crew member died, he sent a distress call. This is where you come in as you control N.E.I.L. in an effort to wipe out the alien infection and destroy the robots that just happen to be there too. Maybe the inlay will explain that but, as I said, I haven't got it any more and there aren't any instructions at WoS.



Basically, this game is yet another Alien 8 clone, but with graphics more like Imagine's Movie. Controls are straightforward (the usual Q A O P and SPACE to move N.E.I.L. around the ship and shoot the baddies). It's not quite as amazing as Ultimate's

classic but still fun to play. One annoying thing I found is you can walk into an alien the moment you enter a room and lose a life without getting the chance to move out of the way. It can get a little boring as there isn't much variety to the game play but it's still fun to play when you have nothing else to do.



Now to Silversoft's Armageddon. This is another unofficial clone of an arcade game, this time 'Missile Command'.



This next title will be of interest to those of you who enjoy more sedate, relaxing games. While out walking in a forest one day, you meet a scary looking old man who coerces you into entering a series of caves known as the 'Time Tunnels' to

retrieve a gold ring that he claims he "lost". These caves are ruled over by a group of guardians who will attempt to guide you in your quest, and it is strongly advised that you listen to what they tell you. The game is completely coded in BASIC so it is a bit on the slow side, but that doesn't take away from the game at all. All actions are handled automatically by the program except for movement (obviously), which is controlled by the N S E W keys. The quest is split into two parts. The first part sees you searching for five parts of a key that opens a chest hidden somewhere in the maze. That part is easy and you will very quickly find yourself in the second part, which increases the danger level quite a bit. I will not describe the second quest here so you can enjoy it yourself. Bandits can be found everywhere in the tunnels and will attempt to steal from you if you run into one. Overall it's an excellent little game, and a favourite of mine from my childhood. Adventure fans should download it and play it straight away.

I'm sure you already know all about the game, but here's a quick description. Nuclear war has broken out (yet again!!!) and the Strategic Air Command has detected several nuclear missiles, which are about to hit your cities. Your mission is to intercept and destroy the missiles before they reach their targets. For this you have three launchers of your own, each contains a certain number of missiles. A small x-shaped cursor can be moved around the screen and rockets will travel towards that point, once launched. Movement is controlled by the cursor keys (5-8) and Caps Shift will allow faster movement. Missiles can be launched using the 1, 2 and 3 keys to launch from the left, centre and right base respectively, or you can use the 0 key and the computer will launch from a random base. This is a fun game to play, but it is quite difficult, especially on later levels when you're down to only one launcher and all the incoming rockets are heading from your one remaining city. Colour and sound are both great, and fit the game perfectly. If you're after a quick arcade game, you can't go too wrong with this one.

Columns

Publisher: CEZ Games Studio

Release year: 2005

Download: <http://cezgs.computeremuzone.com/eng/>

Ben - It's going to be hard to introduce this game without saying something along the lines of Columns is a bit like a cross between Tetris, Klax and Dr Robotnic's Mean Bean Machine. I jumped at the chance to review this game because I usually end up completely addicted to them, wanting to play them over and over just to beat my score or somebody else's.

The actual game is so simple to play. Move a column of three randomly coloured gems (they're little stone tiles in this Speccy version) either left or right as they fall down the screen. You can also change the order of colours by pressing fire and make the tiles fall faster by pressing and holding the down key. If you manage to make a line (horizontal, vertical or diagonal) of three or more, same coloured tiles then those tiles disappear, giving you space for more tiles. When tiles disappear the ones that were directly above them fall down so it's possible for them to make lines too. Clever players can soon make the points add up this way. You also earn extra points for making long lines or chains of lines disappear.

You can opt to play the game either in Arcade or Levels mode in any one of three difficulty levels. In Arcade mode you have a time limit of 100 seconds. As you earn points the timer will either pause briefly or if you've been very good you may even get a second or two added on. You don't get long so you have to think really fast or it'll be Game Over before you know it. In Levels mode you are required to attain a certain number of points before you can move on to the next level. You still have the time limit and it gets tighter as you progress through the levels. To be honest I've only ever managed to reach Level 5 (blush).

I've been playing CEZ Game Studio's version of Columns for months now and I'm still not tired of it. Not only is it a cracking good game, it's simple to play yet amazingly addictive. Columns is beautifully presented too. As soon as the game has loaded you're greeted with a colourful title screen that leads on to an equally pretty options screen where you are invited to select your method of control. It's very easy to see what's going on while you play the game and I still love the way the tiles fade out when you make a line.

You can choose to play either with a joystick or redefinable keys. All keys can be redefined, even those that control the volume levels. Not that you'll want to switch the sounds off ever, they're gorgeous. The game plays different tunes depending on the level you're on and they're very similar to the arcade version's music. There are also some nice little sound effects throughout the game, for example the nice 'bump' noise you hear when you place a tile.

Now before playing this game, my favourite version of Columns has to be the Sega arcade version. It's colourful, has a two player mode and plays some very nice tunes while you're playing. Am I suggesting that the Speccy version is better? Well, not quite. It's a definite rival and it compares very well. I just wish there was the option of a two player game. And my

one criticism of CEZ Game Studio's masterpiece is that they've been very mean with the time limit. I'd love reach the higher levels but I just can't do it. Not that it really matters of course. Once the Game Over message has cleared of the screen I just start again. Only this time I'm *going* to beat my high score.

Marks

Playability - 9

Graphics - 8

Sound - 8

Instant Appeal - 9

Addictiveness - 9

Overall - 86%

Super Bruce

(Bruce Lee remake)

Toni Rocket

Release year: 2005

<http://remakeszone.com/juegos/juego.php?id=111&lng=spanish>



"You have offended my family and you have offended the Shaolin Temple." Is it too late to say sorry?"

Ben - "What's this?" I thought, "A remake of the US Gold classic Bruce Lee... all brought up to date with fancy graphics, atmospheric tunes and good sound effects? I'd better download it and have look." I remembered the fun I had with the original on my rubber keyed Speccy many years ago. Controlling Bruce was so simple, you just used the direction keys and tapped the fire key to make him punch or do a flying kick while adding your own sound effects "Yie!" and "Ar!" as appropriate. Bruce had to run around twenty screens collecting lanterns to open up doorways which led to other rooms. There were killer bugs, swords and flying blades to avoid and Yamo, the Sumo and his Ninja pal were often in pursuit. There was a background story about Bruce being on a quest to defeat an evil wizard and steal the secret to immortality but I just had a lot of fun seeing how fast I could complete each screen, or finding cool ways to kill Yamo and the Ninja guy.

The original Bruce Lee is one I keep going back to so I couldn't wait to try Toni Rocket's remake. The title screen introduces the game and gives you a couple of options. I just wanted to dive straight in so I tapped the fire button and started to play. I chose to guide Bruce around using Q, A, O and P as direction keys and space as fire but you can use the cursor keys and ctrl if you like. So off Bruce went, collecting the lanterns with Yamo and his sidekick chasing him about. Visually the game is fairly impressive. I liked the way the characters look and they're well animated. The backgrounds are nicely drawn and it's pretty easy to see what's going on. The lanterns even flicker and swing in the breeze. The dungeon levels look the best though, with bones and shackles on the floor. The in game music is quite funky with each play area having its own theme.

The first negative thing I noticed was the sound effects. Both Yamo and the Ninja seem to make a really odd gurgling noise as they chase you without ever managing to catch up with you. Just like the original, neither of them are particularly tough opponents and it only takes a couple of flying kicks (Ar!), and they scream like girls before flying up towards heaven. Also, for me at least, the game does get very difficult. I got stuck on one screen and I'm sure it's impossible to get any further. I could just be rubbish though.



"Notice that the stiffest tree is most easily cracked, while the bamboo and willow survives by bending with the wind." What's behind door number two Bruce?"

There also seems to be a couple of bugs in Super Bruce. If any of the characters fall off a platform they are able to keep moving and even change direction. It may be intentional but to me it just doesn't look right. It's also possible for Bruce to get a bit stuck on the ladders sometimes. This can be really annoying, as on later levels timing can be fairly critical, especially if you want to avoid being zapped by bolts of electricity. But I found this bug the most annoying, I'd finally got Bruce to where he just needed to collect the lantern that would move the wall and allow him to get to the next screen. But I'd missed one at the top of the screen and he was stuck at the bottom with no way out and nothing to kill him. I just pressed the Escape key at this point. I could have pressed Tab to get back to the title screen and had another bash but Super Bruce is just a bit unforgiving and with

too many bugs for my liking.

The author has clearly put a lot of effort into the game, and it could have been great, but a few things let it down. One of the features I loved in the original was the two-player game but this hasn't been included in Super Bruce. A real shame because Bruce Lee was even more fun with two people shouting "Yie!" and "Ar!" at the screen. The version I played is the final beta version so there is a good chance that some of the annoyances will be fixed and some improvements made. In the meantime I'll be playing the original.

Marks

Playability - 5

Graphics - 7

Sound - 7

Instant Appeal - 6

Addictiveness - 5

Overall—60%

Monty Mole: The Remake

Release Year: 2005

Richard - I've a confession to make, I was never a big Monty Mole fan. I played it for a bit but never really 'got it', I guess it's like Marmite; you'll either love or hate it. I watched the ITN news back in the 80's when Monty Mole was featured because it had a sprite which looked like Arthur Scargill, this alone encouraged me to go out and buy it but after half an hour at the keyboard I wondered why.

So with a great deal of trepidation and a large slice of cynicism I loaded up this new version. The first thing that struck me was 'Software Projects' the Escher like triangle which Software Projects used was now the logo for Space-Time Productions. A faithful reproduction of the loading screen followed which led to the menu screen...



REVIEWS

Ok Ok, I'm stalling here, I can't really be bothered to play the game, now if it was a new version of Starion...

40 minutes later... This isn't bad, the game is simplistic enough to have the feel of an 8 bit game, graphically it's not going to rival GTA but it's looks like an 8 bit game on a PC which is quite pleasing, I'm not looking for a huge 3D world with a graphics card pushing around millions of polygons, all I want is decent gameplay and I think I found it. The main Monty sprite is instantly recognisable with nice animation and there are some nice tunes playing throughout the game. It looks to have been paced nicely with good reactive keyboard controls. The look and feel of the game is definitely bedroom programming but I kind of like that.



It's a menu screen. What more can be said?

I had to compare it to the original, so a quick boot up using my DIVIDE interface and I had Monty Mole playing on the Spectrum, from what I could see the PC version does look like a faithful remake but appears to be less annoying. The music when you die on the Spectrum version really grated after the 2nd time so that was just one obvious improvement on the original. On the whole this is a game I think I will be coming back to, definitely more so than the original Spectrum version, which even after all these years is still annoying the hell out of me.

Marks
Playability - 9
Graphics - 7
Sound - 8
Instant appeal - 8
Addictiveness - 8
Overall—80%

Space Harrier

Publisher: Elite Systems Ltd
Original Price: £7.95
Release Year: 1986

Richard - Space Harrier is fast, I mean really fast, you won't believe how fast it is... sorry to paraphrase Hitchhikers Guide to

the Galaxy but it is a space game and it is really fast, in fact it's so fast sometimes it's hard to keep up with everything that's going on. Keith Burkhill has always been one of the unsung great Spectrum programmers and this time the man excelled himself. He pretty much did the impossible in converting the arcade game to the Speccy whilst retaining the speed (did I mention it was fast?), excitement and playability of the original. The 3-D looks quite impressive as the landscape scrolls underneath you and the enemy hurtles towards/across you. The end-of-level enemies are also very large and imposing and will give you plenty to think about.

The big question to ask is did Keith get everything perfect in the game and to be quite honest the answer is no. Even a programmer as good as Keith would be hard pushed to get everything from the arcade version into the Speccy version with the same quality. The landscape which looks to 'hide' the main character and the enemies at times was making life a bit difficult if you're trying to pick out a bad guy to give him a good blasting. Sometimes the choice of colours for the landscape can send you a bit crossed eyed but perhaps this was deliberate on Keith's part to try and get you through to the end of the level as quickly as possible. The Spectrum version hasn't quite got the same number of levels and the sound is understandably a bit limited but that is to be expected but to be quite honest you don't really notice, you're too busy concentrating on the screen to worry about anything else.



I've seen mixed reviews on this game, whilst most people tend to like the game initially, some doubt its long term interest. Personally I like it and it is a game I have gone back to regularly, nothing better after a stressful day at work than an hour mindless blasting of some particularly nasty aliens.

Marks
Playability - 8
Graphics - 9
Sound - 7
Instant appeal - 8
Addictiveness - 8
Overall - 80%

Moggy

Publisher: Computer Emuzone
Original Price: Free
Release Year: 2005

There are times when I wonder why I bother to review the new games, after all games writers pretty much just reinvent the wheel nowadays and then a game like Moggy turns up which re-establishes your faith in humanity. When you first look at the screen nothing you see gets your palms moist with anticipation, just a number of different coloured UDG's scattered about the screen. Then you start to play and the first thing that happens is you're being told to 'HURRY UP' and before you know it it's 'TIME OVER'. Ok, let's play it just one more time, damn where did the last forty five minutes go???

Bizarrely this is a very addictive game, you don't have to do a great deal, just control your strange little smiley friend around the screen and collect your sour faced mates whilst collecting/avoiding other little goodies along the way. Half the fun is learning what you can/need to collect and which to avoid and as you start to move through the levels the action can become quite frenetic. The controls take a little getting used to but once mastered you'll find that they work very well for this type of game and you'll find that movement around the screen becomes second nature after a while. I saw the main character described by someone as a drunken ball which the way he lurches around the screen is not too far from the truth.

On the whole a very addictive if simplistic game which whilst not spectacular visually will keep you at the keyboard for more than ten minutes a session, I would have liked the learning curve to be a little less steep but have seen that some people have completed the game so perhaps it's just my lack of hand eye coordination. Oh the music, in my opinion best played with the sound off, it WILL grate after about 5 minutes.

Marks
Playability - 9
Graphics - 7
Sound - 5
Instant appeal - 8
Addictiveness - 9
Overall—76%

Stormlord

Publisher: Hewson Consultants Ltd.
Original Price: £8.99/£12.99
Release Year: 1989

Richard - Back in the mid/late 80's Raffaele Cecco did a monthly diary for Crash as he worked on Cybernoid 2. Around two thirds of the way through the diary he revealed another game he was working on... Stormlord. It was going to be big, bold colourful and full of gameplay. Well, the graphics are definitely big, they are most certainly bold and extremely colourful BUT the gameplay, oh dear. Mr Cecco is one of my favourite coders but did he screw up this time, this game is so damn hard that I gave up after about

forty five minutes. Whilst it looks superb (and I'm all for busty topless birds on my computer screen) it is impossible to play. You need the hand-eye coordination and timing of an android from the thirty fifth century to get anywhere and things (monsters, weird crawly things, plants) come out of nowhere to kill you. This is a real shame because this was a game which had so much potential but is let down by the complete lack of play testing by anybody of average game playing skills.



So if are you someone with the reflexes of an Aussie wicketkeeper you'll want to know what the game is about, basically a wicked Queen has kidnapped all the fairies and it's your job to rescue them, so it's pretty standard fair, it's up to you to save the day (again... it's a tough life being a saviour). Each level has five fairies to be saved and the bad guys are all over the place so it's best to keep your wits about you. I suspect if you were to persevere you would find a pretty damn good game in there somewhere and if you do then I salute you. Perhaps my game playing skills have gone a bit rusty?

Marks
Playability - 6
Graphics - 9
Sound - 8
Instant appeal - 7
Addictiveness - 6
Overall - 72%

So you think you can review a game better than us?

We welcome readers reviews of old games, new games or remakes. Send us your ramblings to:

contact@zxshed.co.uk

Don't forget to tell us who you are, and include the ratings where applicable.



including string variables (we'll see an example of that in the Key Redefine sub-routine).

Next we come to the ego-feeding copyright message of line 8080. The only thing of interest here is the TAB keyword that inserts blank spaces when printing to screen. The number after the TAB keywords indicates how many blank spaces to insert. Note that this number ranges from 0 to 31 inclusive. So to insert only one blank space, use TAB 0, not TAB 1, which will insert 2 spaces!

Now we come to the interesting part of actually finding out which option the user has selected and then acting on it. The first step is to read in the key pressed by the player when choosing an option.

To find out which key has been pressed is achieved by using the INKEY\$ command. When the Speccy encounters this command it immediately (well almost) scans the keyboard to see if a key has been pressed, and if so, it returns the value of that key. If no key has been pressed, it returns a null value. In line 8090, we ask the Speccy to do just that and save that value in a variable called a\$ (which you will remember we initialised to a null value in line 8010), so that we can act upon the information.

Line 8095 does a simple check to see if the user has pressed a key that we are interested in. If not we simply GO TO line 8090 to again wait for a key press.

This requires an introduction of our first conditional statement via the IF-THEN statement. It's simplicity itself, really. The IF statement takes the form, IF <condition> is true, THEN do this otherwise skip this entire line. You can string multiple conditions together in an IF statement by using the OR and AND operators. ORing two conditions together will evaluate to true if any one of the conditions is true. ANDing any two conditions together will evaluate to true only if both conditions are true. It's pretty similar to how things work in English. For example: IF it's raining AND I don't have an umbrella THEN I'll stay in. Here you will stay in only if both the conditions - rain and lack of umbrella - are true. Another example: IF it's raining OR it's windy THEN I'll stay in. In this case you will stay in if either of the conditions - rain or wind - is true. The BASIC form of IF is similar except that the conditions aren't in English like above. They take a slightly different form which will become apparent as we examine our code in detail.

Right, so what does line 8095 do? It will GO TO line 8090 IF the value in a\$ is null (no key pressed) OR if a\$ has a value greater than 4 (we are interested only in keys from 0 to 4 that correspond to the options on the screen). Simple, eh?

In line 8096 we take our first stab at sound effects on the Speccy. This is achieved by using the BEEP command that takes two parameters. The first one is the duration in seconds (so 0.3 here indicates that we want a short note) and the second one is the pitch of the note (in semi-tones above or below middle C depending on whether it's positive or negative). As I'm not musically inclined all I can say is that lower values of

second parameters give you a low guttural sound while higher values give high-pitched "shrieky" sounds. Here we want to emit a short low pitched sound to indicate that a valid key has been pressed by the user and that an option has been selected.

Line 8100 is an interesting one 'cos it handles the event for key 0 being pressed. If you notice there is no option that corresponds to key 0. It's just a hidden Easter-egg that pops up with some irrelevant information (to the user), waits for 4 seconds and then clears the screen. In case you are wondering who the other people are, apart from my parents, that I've mentioned, they are my cousin (whom I consider my sister), my niece and my ex-crush (don't ask).

Right ho! Back to the code and we come to line 8110 which checks if the user chose to play the game, in which case it simply RETURNS control to line 20 from where it was called originally, where it just finds the REM statement lurking after the colon symbol and so skips on next to line 30. You can clearly see the sub-routine process in action here. Line 20 called the main menu sub-routine, which after it was done, simply returns back to line 20. You can call this sub-routine from anywhere in the program and after it's done, it will RETURN control to from wherever it was called from.

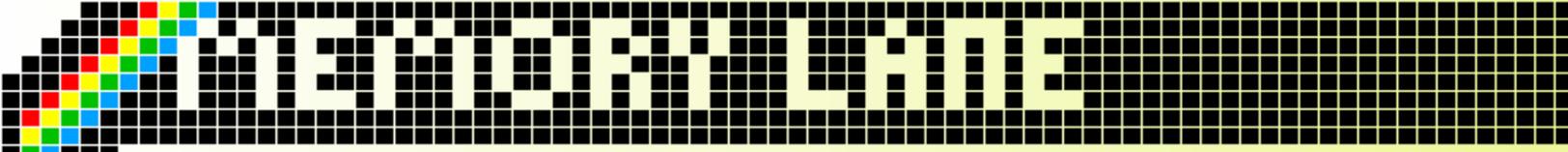
Line 8120 calls the Key Redefine sub-routine if the user has selected 2. So once that sub-routine is done it will return here, back to the main menu. Similarly, line 8130 calls the Instructions sub-routine and line 8140 calls the Credits sub-routine.

The last line in the sub-routine, 8150, does a GO TO to the beginning of the sub-routine (line 8010), so that the main menu is displayed again. This is done because the sub-routines may have displayed something else on the screen (instructions for example) and we want to re-display the main menu once control returns from the sub-routine.

And with that we come to an end to this instalment of CSG: BASIC Part I. I hope you've understood most of the stuff in here if not all. Experiment with the BASIC stuff introduced here and you will get a good hang of things. The one good thing about Sinclair BASIC is that it's pretty intuitive for the most part and is quite easy to get to grips with.

In the next edition of this guide, we'll introduce the key-redefinition sub-routine, graphics and the actual game loop where all the action resides. So, until next time, cheerio!

Comments and feedback are most welcome and appreciated! Please note that the article is not meant to replace the Spectrum BASIC manual as a reference tome and as such I would encourage you to look up any keywords that you come across in the article for further insights. Also, please address your queries regarding BASin to the author of the program Paul Dunn, especially regarding bugs, features and operation of the program (the article will only cover parts that are essential to the discussion).



Well, it's been a fair few years since we got our speccys, and for some the memory has faded. For others, it's still fresh in our minds & there is a burning desire to tell the world... Well, this is the best place to do it!

Many of us play 20 year old Spectrum games for nostalgic purposes, it brings back those glory days when there didn't seem to be any stress, yes we hated school but at 3.30pm the day was over and you could do practically anything you wanted. To me I don't just play the games to bring back memories of my childhood, I play the games just because they are so playable. Perhaps at the time we really didn't appreciate those special years when the Spectrum was huge and every kid wanted one, let's take a trip down memory lane!

Imagine it, you go round your friends house one Xmas as you hear he's got one of these new home computers. You saw them in your mums catalogues at the back, all different types, you didn't have a clue what it all meant but they looked so cool and look at those cool graphics on Space Invaders or Centipede ? But what could they really do?

I remember going round my friends' house to see his Spectrum many many years ago in the early 80's. There it was all wires, tape recorder in front of the TV and his whole family huddled round. He put this tape in and loaded a game and damn! It was like having an arcade in your house, there he was playing Spectral Invaders, then Zzoom then an amazing game called Manic Miner. It was just brilliant. Back then there were the odd handheld game but on my pocket money I couldn't afford many of these and had to wait for birthdays or Xmas.

Here was my friend with this computer loading up all different games, no more boring board games for me I thought! When I finally left his house later that day I had to beg my parents to get me a computer. Luckily other parents must have been talking about getting their kids a computer and the reaction wasn't as bad as I thought, had to wait till my next birthday but the excitement was building up and up each day.

I finally received my first computer and it was amazing. For months I had been going into WHSmiths buying a Spectrum mag salivating at the new games coming out which I couldn't wait to try. I was around 11/12 at the time and used to write out a top ten list of games I would want to buy. But now as I had my first computer the fun could start! There it was set up in my bedroom, the Spectrum still had that 'new' smell and thanks to my friends I had copied about 10 games to try on it. It was amazing, every night I was addicted to that computer, would secretly turn it on during the night to have a quick game of anything, just a pity I couldn't turn off the beeps!

Those years were magical. You would go into any newsagents; WHSmiths being the best and saw racks full of computer magazines, there were a fair few for the Speccy, every few months a new title would appear. You could even buy a type in mag so you could have your own games, I used to do that tons in the early years but after typing in some with

bugs I used to be fed up when finally when I tried to run the game there would be an error and I wouldn't know what to do!

Going into shops such as Dixons was a magical moment for a kid also. There displayed was every type of computer all working for you to try. There seemed to be so many different types but as soon as I saw a Spectrum on display a huge smile came to my face. Computer shops were appearing all over towns in the UK, these were like an Aladdin's Cave. You entered them and woahhhh look at all those games on display, all those kids huddled round a screen to see the latest game. As for those people who worked in those shops damn I was so jealous. You could just see by the looks on their faces they were saying to you 'yep I can copy every single new game which arrives'!!

Then finally the budget range of games came out, even in chemists and other smaller shops there was a stack of 1.99 games for you to browse and use your hard earned pocket money on. Most of the early games you couldn't see what they looked like, sure the front cover looked amazing of a barbarian fighting with a snake or something, take it home and load it up and hmmm it was pretty basic. Then again for 1.99 you couldn't be too upset and it was a way to get new games quickly.



A computer shop sometime in the 80's. Around 3pm-4pm.

Once a month at school some kid would bring in the latest issue of Crash to show off. You used to leg it to the local newsagents to get it but they had sold out so you then had to wade into town, all that way just for one magazine but boy it was worth it. I used to always have a quick flick through then go to the back pages to see the upcoming games for next month, damn look at all those new games coming out, the graphics on some of them looked amazing. Boy I couldn't wait till next month to get one of those games! Then at the weekend you would take your pocket money, get the train to the nearest big town which had the best computer shop and finally get the game you had been saving up all month for. The train journey home wouldn't go quick enough, you would read the review in Crash, this game seemed amazing, you would read every bit of the instructions building up the excitement on the way home, then finally straight home, load that game up and WOW it was brilliant and well worth the wait.

The early days of the Spectrum had some very simple games but some brilliant playable titles such as Manic Miner and Jet Pac. Then in later years arcade conversions took over which I loved. All those years in Spain with my parents bored as hell until I found a local arcade to spend my money on, remember that first go on Star Wars you had when you climbed in the cabinet and heard the voices? Now here I am with a copy of 3d Starstrike in my hand, it's the same game! I remember playing Commando over and over in Spain, a year or so later here I was on my Spectrum playing a brilliant conversion of it! It was a dream!!! Some of these arcade conversions were brilliant, okay the sounds weren't quite the same or the graphics but the game was there and damn they were so playable. Elite shot straight up in my estimation, Commando, Bombjack, Space Harrier and Paperboy. It was like having a huge arcade in my bedroom!

Then magazines started having tapes on the front cover, I remember getting a one level demo of Ikari Warriors. WOAHHH, Commando was my favourite game and now to see this, basically Commando with 2 players plus you could swim and get in tanks. Oh my god! I kept looking at that release date; I HAD to have the money by that date whatever. I remember the day that game came out; I was the happiest kid around. Around this time there were many other great 2 player games, instead of having to take it in turns (very annoying when your mate wouldn't get killed in a game for ages) you could both play all these 2 player games which were brilliant. Bubble Bobble was another instant favourite which we kept playing over and over again.

Every day at school you couldn't wait to hear what games your friends had bought or had copies of. It was a huge chain, friends of friends of friends would have different games to swap, and I couldn't buy enough of those C90 tapes! It was disappointing as anything when some copies wouldn't work but when you practically got them for free you couldn't complain too much. Once I received an offer from Britannia to sign up for Spectrum games every month, I knew the offer

wasn't great but it said 4 games when you joined for 99p, if you weren't happy then send them back! Heh heh! I joined up, taped the games then sent them back saying no sorry don't want to join. Seemed to work fine, even got several aunts/uncles to sign up for me just to get 4 or so games for me every month!

I used to tear out some great adverts from the magazines and blu tac them to my wall, the Ultimate posters to me were some of the classiest and I loved seeing new adverts for their games. Seeing Knight Lore for the first time, damn!! That was just amazing; I used to just love looking at the game and watching people play it. The game was so hard but the graphics, it was unbelievable.

It was my best ammunition against C64 users, when my one C64 friend came round to see it even if I couldn't say much. Heh heh, I had moved ahead in the war against Speccy/C64. Ha look at Staff of Karnath on your machine; hmmm know what I would rather have!

Then there were the computer shows at Olympia. I went to a few of these and again to a young kid it was an amazing day out. Games everywhere, huge displays, and the first one I always used to rush to was Ocean. They used to have a huge stand with sneak previews of some of their new titles, around this time movie conversions were the 'in' thing. Some of the games weren't great but after being addicted to some of the films out at the cinema when a game came out of that movie the excitement was at fever pitch again. How about Ghostbusters? That film gripped my age group, loved that film and then when I heard the official game was coming out, wow I had to get that. The game wasn't brilliant but damn it was Ghostbusters, you had to trap the ghosts and defeat the Marshmallow Man, all this on this little tape I could play whenever I wanted, how good could life be!!!

Times were great (not including school), every newsagent you went into there were piles of magazines to read, my pocket money was going up so I could afford to buy two Speccy mags a month instead of just one, my network of friends with Spectrums and their friends were growing, every week I would have a new C90 tape ready to go round a friends house to tape his games. Life was good!

If anything there were too many games to display, games I loved I used to buy whatever. I remember when I first saw Elite, thought what all the fuss was about, finally gave it a go and DAMN I was addicted. Played that non stop and really believed I was this pirate/trader in space with many missions to do. I received a Spectrum +3 for Xmas after many months of begging. This I loved, press the red button on top of the Multiface I had and bam, there you go, game saved to disk. Now it took about 20 seconds to load a game instead of minutes. I had grown tired of the latest games where you had to keep starting the tape to load up new levels or rewind on side b but the latest games on disk were brilliant.

Sadly at the time I noticed the magazines were getting slightly thinner and thinner, to me the quality of games were also going downhill.

Granted there were still a few classics but the feeling I had about the Spectrum was declining. Once I had saved up money for a game and bought a new one I was often disappointed with it, the reviews didn't seem to be the same either. Once I had agreed with every Crash review there was, now I found myself angry when I had spent 9.95 on a new game only for it to be pretty dull. I was one of the last ones to move on from the Spectrum, I had just started my first job so I could afford a new game easily and quite often but so often I was disappointed with the latest games. My network of Spectrum friends were dwindling, they were all moving onto the new computer, the Commodore Amiga. I found it quite strange after hating Commodore for so long in the famous C64/Speccy playground wars that they were moving onto them! But it was like a flashback to 8 years ago when I went round my friend's house, the same friend now had an Amiga, there was this bouncing ball moving round on this chequered background and god damn! No colour clash, the sounds were amazing, I had to get one So the cycle started again! The excitement of getting the Amiga was huge, again copying games from all my friends was also huge but to me it still wasn't the same as the first moment I clapped eyes on a computer, the Sinclair Spectrum. For many years the period was magical to me, every electrical shop such as Dixons had all these computers on show (every computer seemed to be displaying a rude scrolling message some kid had typed in!), newsagents were full of great magazines to flick through and I used to spend an hour quite often just flicking through so many different magazines, there were adverts on TV for computers and everyone seemed to have one.

Many years passed, I still had fond memories of the Spectrum but I had now spent many years on the Amiga/Megadrive then my first PC. But then an interesting thing happened - I used to buy a few PC mags and saw an advert for something called an emulator? A what? It advertised the Spectrum and suddenly it was like seeing an old friend again, I recognised the names of the games and all those memories came crashing back. I ordered the disk and oh my god, it worked, here I was playing Spectrum games on my PC! My mum thought I was crazy; after all I had just spent 1100 pounds on my first computer, a high spec 66 MHz PC! I would be paying that off for 2 years and here I was playing old Spectrum games on it!

For a while I thought I may have been the 'only one'! Then the internet arrived and one day I thought I would type in Sinclair Spectrum, damn I couldn't believe how many links there were. Then I find World of Spectrum, bit like finding the holy grail. I went to the site and oh my god, so many other people are just like me, love the

Spectrum, and here they are in the forum chatting about Jet Set Willy. It was like I had come home! And look at the archive, all these games ready to try again or to read the reviews of, I knew I was going to be at this site quite often!

And there it is my mini life story with my Spectrum. Those glory years where every shop/newsagent had spectrum games/magazines were brilliant. For a kid to see their first computer and to get one it was a magical moment. Years of boring board games and then came along your first computer. Now here we are 20 years later with 3000 Spectrum games on our PC, ready to play whenever we want, the games load up in seconds, I can play Spectrum games on my phone or Pocket PC. To me I still smile like anything when I load up Knight Lore and hear that music when you first start the game. All those great memories come back of a golden era. Paul Johns...

My Xmas story - how I got my Speccy...

I'd seen my cousin's Speccy 48K early in the year, and had been saying since that day how much I hoped Santa would bring me one (I was young and innocent).

Xmas day arrived, and we raced into the living room and I begin frantically ripping open every single present with my name on it, like a man (well, boy. Ed) possessed. The contents of each glanced at, and put aside until I found the present I'd been begging Santa for.

Alas - I reached the end of presents with my name on it. No Speccy was to be seen. Lip trembling slightly, I began to play with my other presents while my younger brother and sister did likewise. My Dad then asked me to go into the kitchen to get him something from the fridge.

With my best "I'm not upset or disappointed, honest" face on, I slouched into the kitchen to find a large wrapped present with my name on it, sitting on the table.

Switching once more to paper-ripping-fiend mode, I had the paper shredded in about 1 second flat. Sure enough, there sat the Holy Grail in the shape of our beloved rubber chum.

Apparently, Santa must have had to come back in later in the night, and left it on the kitchen table in case he woke anyone up. Ho Ho (Ho? Ed). Gerard Sweeney...

So what's your story? Got any happy memories (and photo's with dodgy hair and clothes)? Get typing and send us your memories to contact@zxshed.co.uk

Cheaters Corner

Just when you think the issue is going to be released without any new pokes, along comes Viktor Drozd with a whole shed (ahem) load! So, here's Viktor's very own section!

Firstly, we have a little known Spanish game:-

Akerico by Crazy Soft and what a good game it is too!

Infinite Lives	30427,0
Infinite Time	24987,0

Onto the classic RPG **Bloodwych** by Image Works.

Infinite Hit Points	52537,126
Infinite Vitality	56966,126
	58808,126
Infinite Coins	62533,183
Open Door With Any Key	50319,0

Lets go and mend some fences in **Colony** by Bulldog

No Enemies	55475,24
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Next we have a nifty Ukrainian game - **Crime Santa Clause: Déjà vu** from BrokImSoft

Immunity	31842,201
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And so onto **Egghead 4: Egghead Entertains** by Jonathan Cauldwell

Infinite Lives	37238,182
Immunity	37716,201
Infinite Time	32600,182

Boulder dash fans are in for a real treat now – an immense amount of pokes for one of the best set of games ever! (In the editor's opinion). These pokes are in addition to the ones in the tipshop...

Boulder Dash was re-released by Prism Leisure Corporation. These pokes will only work with that version.

Infinite Lives	31018,182
Infinite Time	26021,33
Immune To Boulders	26927,195

Boulders Don't Fall Down	26842,195
Boulders Don't Roll Down	26827,201
Immune To Diamonds	25475,195
Diamonds Don't Fall Down	25607,195
Diamonds Don't Roll Down	25592,201
Immune To Nasties	25212,195
Immune To Diamond Nasties	25202,201

Boulder Dash 2: Rockford's Riot - Prism Leisure Corporation PLC

Infinite Time	26028,33
Immune To Boulders	26963,195
Boulders Don't Fall Down	26878,195
Boulders Don't Roll Down	26863,201
Immune To Diamonds	25482,195
Diamonds Don't Fall Down	25614,195
Diamonds Don't Roll Down	25599,201
Immune To Nasties	25148,195
Immune To Diamond Nasties	25138,201

Boulder Dash 3 -Prism Leisure Corporation PLC

Infinite Lives	31008,182
Infinite Time	26011,33
Immune To Boulders	26917,195
Boulders Don't Fall Down	26832,195
Boulders Don't Roll Down	26817,201
Immune To Diamonds	25465,195
Diamonds Don't Fall Down	25597,195
Diamonds Don't Roll Down	25582,201
Immune To Nasties	25202,195
Immune To Diamond Nasties	25192,201

Boulder Dash 4—Hi-Tec Software Ltd

Infinite Lives	60221,183
Infinite Time	62523,201
Immunity	61254,0

Bolder Dash Construction Kit—Databyte

Infinite Time	62523,201
Immunity	61254,0

One hundred and three years have passed since Hasrinaxx defeated Acamantor. Now Acamantor has returned in Firebirds **Druid 2: Enlightenment**. Looks like you will need some help...

No Enemies	34386,0
Walk Through Obstacles	32006,1

Get your rapier machine gun loaded and prepare to kick ass with US Gold's **Line Of Fire**

Infinite Lives	42638,190
Infinite Energy	42633,183
Infinite Bombs	42973,0

Help Mr. Gumby get his brain back in the surreal **Monty Python's Flying Circus** from Virgin Games Ltd.

Infinite Energy	42900,183
Infinite Tries (Cheeseblok Protection)	36970,183
Cheese Identification	36918,58
Always Correct	36932,58

Paranoia Complex from Gremlin Graphics. I'm not paranoid. I KNOW everyone is talking about me.

Infinite Clones	42533,0
Infinite Money	44053,0

Victor will be back next issue with some more pokes, along with our new resident poker, Andrew Ryals..

Got any new pokes? Stuck on a level or need a cheat? Our team are here to help de-stress your gaming experience.

contact@zxshed.co.uk

Don't forget to tell us your name!

THE SPECTRUM WITH NO FAME



Cherry keyboard and rack-mount case with Kempston joystick, headphones, volume, NMI, dual CF slot, LED and PS/2 slots visible.

The Super Speccy you've all been waiting for is finished but we still don't know if and when we'll see it enter production. Andrew Owen reports.

It was twenty years ago today, give or take, that Your Spectrum's Max Philips flew over to Spain to review a pre-production version of the Spectrum+ 128K. So, as an admittedly biased writer on the subject, this author will try and follow Max's lead in this review of the pre-production version of the Spectrum SE.

Few people have heard of, fewer seen pictures of, and only a tiny minority ever used one. There is only one prototype in existence and there are no plans for even a limited production version. So what's all the fuss about?

From the advent of the Usenet group comp.sys.sinclair to the creation of forums on the World Of Spectrum pages, there have been many calls for a 'new Spectrum' that would offer more features while remaining true to the spirit of the original machine. In February 2000, after much toying around with the Spectrum ROM, this author decided to go ahead and design a new machine, enlisting the talents of Polish hardware guru Jarek Adamski.

Public debate on Usenet led to a specification akin to the Loki - the 'Super Speccy' that never was. Either the project could remain a pipe dream or it would have to be revised to something that could be realised. The solution was to combine the results of two previous attempts to update the original Spectrum design -- the Timex 2068 and the Spectrum+ 128K.

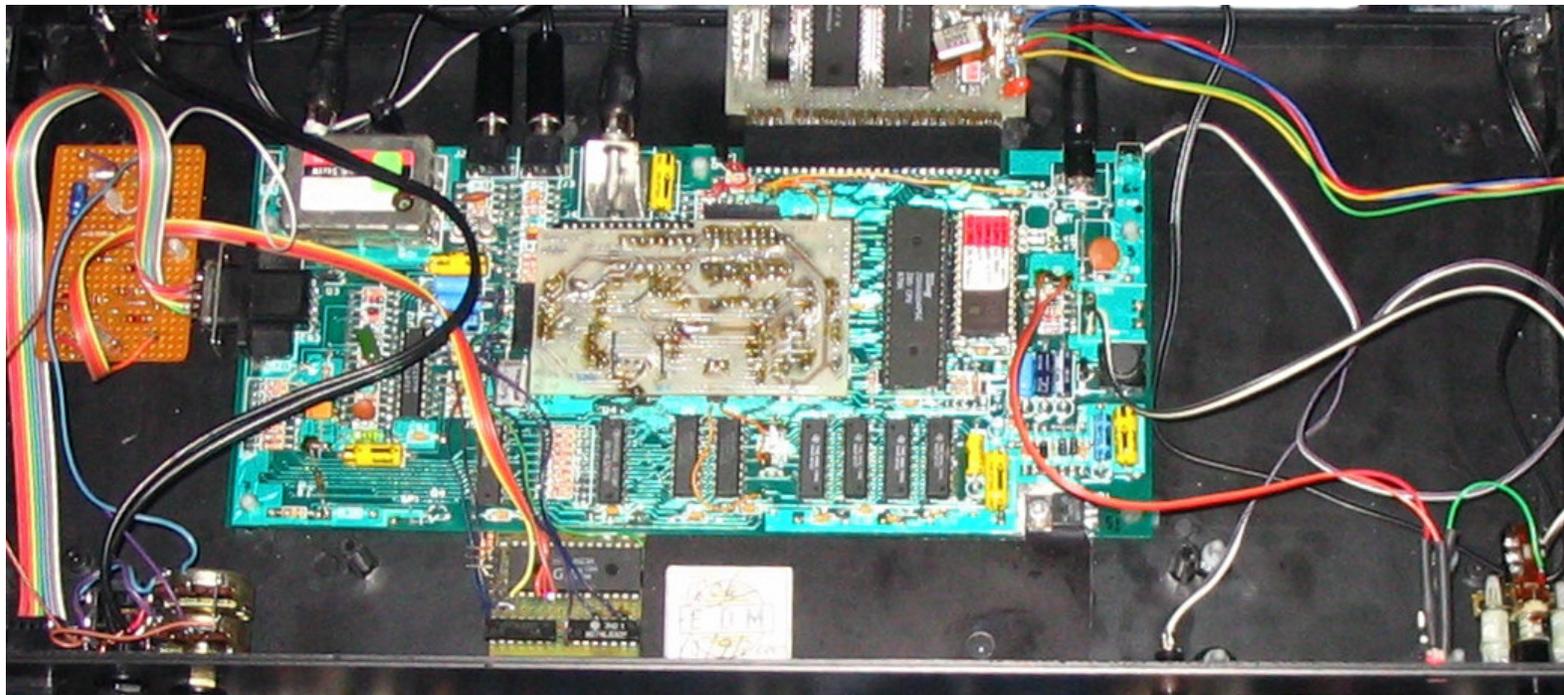
As the US distributor of the ZX81, it was natural that Timex would want to launch its own version of the ZX Spectrum. But the company realised that in 1983 the Spectrum just wouldn't cut it against the competition and redesigned the machine to include a memory management unit theoretically capable of addressing 16 megabytes of memory, an AY-3-8910 three channel sound chip, two joystick ports, a cartridge slot and enhanced video modes. Despite these enhancements the machine was not a success and was withdrawn from production barely a year after it hit the shelves.

By 1984 the Spectrum was also failing to cut it in Spain and distributor Investronica asked Sinclair to design a successor. Launched in December 1985, the resulting machine featured 128K of memory, a shadow screen, an AY-3-8912 three channel sound chip, RS232, MIDI-out and keypad ports. Despite launching an English version of the machine in the UK the following year Sinclair ran out of money and was forced to sell out to Amstrad who continued to make versions of the machine as the Spectrum +2 and +3.



Running the TS2068 version of Cyber Zone with AY sound effects.

Meanwhile, Timex Portugal was selling its own versions of the US machine as the TC2068 and the cut down, but more compatible TC2048. It is the latter machine that forms the basis of the pre-production Spectrum SE. When the first prototype was completed in September 2002 everything still fitted in the original TC2048 case but the 2005 version occupies a half depth 1U rack-mount enclosure. The other main difference from the earlier prototype is the addition of the DIVIDE interface which provides mass storage via compact flash cards.



Not everything is where it should be. That gap on the right should hold the ProFace AT board and the CF daughter board while the DivIDE board is mounted upside down over the motherboard. The vero-board on the left is the stereo sound circuit. The two green boards are the TC2144 and AY modules. It's a good thing Timex made the main board so compact.

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Sinclair Spectrum 48K
Acorn BBC BASIC Version 2.20
(C) Copyright R.T.Russell 1983
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Running BBC Basic (Z80).

Externally the front panel features a Kempston joystick port, 1/4" headphone jack, volume control, NMI button, twin CF slots, PS/2 keyboard connector, power button and power led. The rear panel includes separate left and right audio and composite video in addition to the usual television, MIC, EAR, expansion bus and 9V DC power slots. Connect a suitable AV to SCART cable and the machine produces a pin sharp picture with glorious ACB stereo sound from your NICAM television. The single joystick port is adequate for most games and the Cherry notebook size keyboard is a joy to type on and a more than acceptable joystick alternative for two player games. One of the problems of the Spectrum has been a lack of standardised mass storage but the DivIDE interface fitted internally in the Spectrum SE goes a long way to solving that by offering a selection of operating systems including one that allows you to load .TAP files and .SNA or .Z80 snapshots from an MS-DOS formatted drive. This effectively

allows you to transfer your emulator files direct to a compact flash card and load them instantly into the Spectrum SE using a menu accessed by pressing the NMI button.

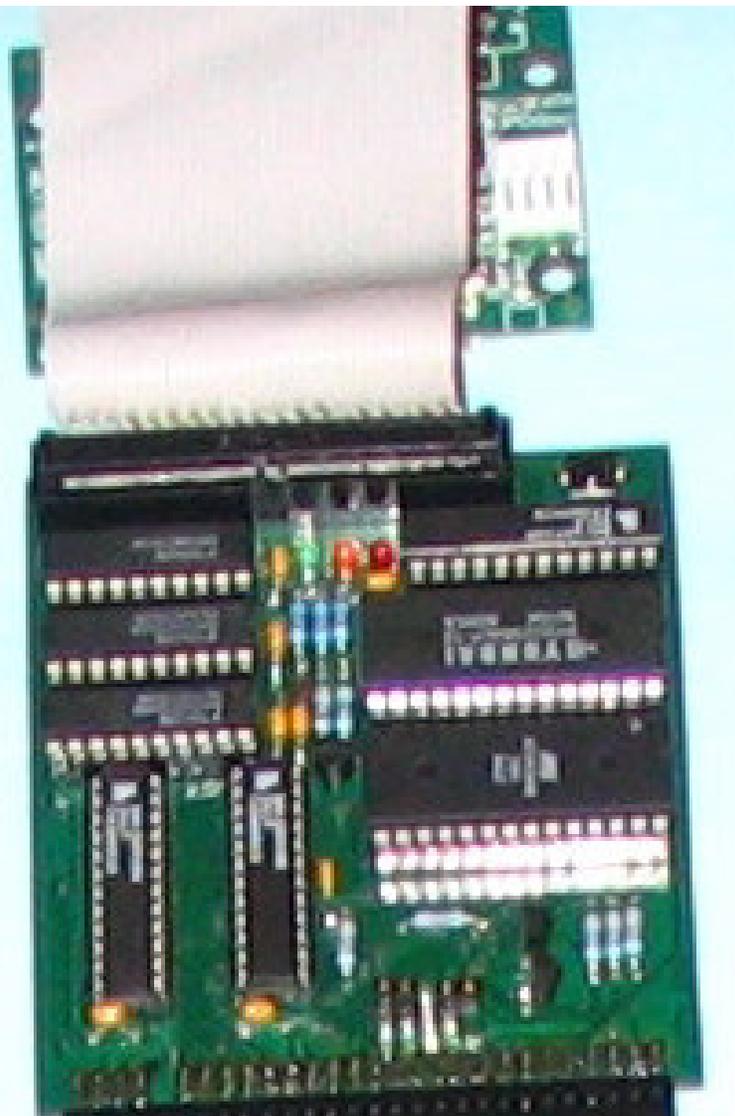
Internally there are a few surprises. In addition to the AY-3-8912, available via either Spectrum or Timex addressing, and 144K memory expansion, which allows most 128 programs to run without modification, there is a further 128K connected to a Timex memory management unit, pageable in two exclusive banks of 64K in 8K chunks. Among other things this allows the use of custom ROMs and emulation of other machines including the ZX80, ZX81 and Timex 2068. Then there's the video chip. The SCLD offers three screen modes -- normal Spectrum, 512x192 mono and 256x192 high colour with a two colours per 8-pixel line limit as opposed to the usual two colours per 64-pixel character limit. There is a shadow screen that can be paged in for both the new modes and up to three shadow screens for the standard Spectrum mode. This encompasses support for all the Timex and Spectrum 128 screen modes. Of course one of the big questions over the machine is that of compatibility. Unlike the 128, it is not possible to deactivate the additional features of the SE, which will cause issues with some games. However, since the SE uses the original 48K Basic ROM, some programs run which refused to work on the original 128 should work without problems. The additional video uses a port which is checked by some programs for their screen updates, although fixed versions of most are available as the +2A also has this issue. Those who have come to appreciate the main benefit of the 128 editor -- not having to remember which key a given command is on -- may lament its absence. However, the SE can happily use custom versions of 48 Basic, including Geoff Wearmouth's Gosh Wonderful ROM which provides letter-by-letter keyword entry and line renumbering as well as fixing all of the bugs and most of the features. It is still not possible to run programs which use the additional RAM disk and sound commands in 128 Basic, but a 128 Basic emulator is promised. A version of BBC Basic that uses the extra features of the machine is also in the works. There are also some timing issues as the SE uses a 3.5Mhz processor, like the original

machine, but the SCLD doesn't keep exactly the same time as the old ULA. Still, the ability to run software written for the ZX80, ZX81, TS2068 and BBC Basic probably outweighs the relatively small number of games and demos that will not work correctly.



Running Shadow of the Unicorn under Mikro-Plus emulation

So how good is the SE? The total of 304K of memory opens up the possibilities of more levels in new software, or at least single load versions of existing titles. The stereo sound gives a pleasant improvement even to 20 year old tunes. The absence of the 128's RS232 interface is made up for by the inclusion of an expansion bus which should allow you to plug in your Interface 1. The ability to use custom versions of Basic makes up for the temporary lack of 128 Basic support. The new video modes will only be of use if new software is written to take advantage of them, but with conversion utilities like BMP2SPEC now available it there are some interesting possibilities. But the big selling point is the ability to copy ZX80, ZX81, Timex 2068 and Spectrum snapshots to a compact flash card, plug it into the SE and load them instantly at the touch of a button. Unfortunately on the machine we reviewed the ZX80 and ZX81 emulation was not yet working owing to conflicts with DivIDE but a solution is promised. However Amstrad are unlikely to put this machine into production, but there is one way you can get your hands on an SE -- via emulation. FUSE includes Spectrum SE support from version 0.7.0 on and DivIDE support is slated for inclusion in a future release. Versions are available for MacOS 10.3 and higher and various Linux flavours from the project's home page at <http://fuse-emulator.sourceforge.net/> and a functional but unpolished Windows version is available from <http://home.exetel.com.au/fredm/fuse-win32-sdl-test.zip> although since the software host site is down if you want any software to use on it you'll have to email this author (aoweninoz@yahoo.com.au). For those brave enough to want to develop for the machine, the Sinclair FAQ includes all the technical information you need at: <http://www.sinclairfaq.org/cssfaq/reference/sereference.htm> although an update has been sent (but not yet posted) clarifying the differences between the DivIDE equipped machine and the emulated machine.



The missing boards. These will be mounted internally once a bus-splitter ribbon cable is added to the machine

SPECCCY SPEX

Here's how the Spectrum SE looks at the moment. Be warned, all details subject to change on production versions!

PROCESSOR

Z80A, 3.5Mhz

MEMORY

144K RAM in 16K pages (128 scheme).
128K RAM in 8K pages (Timex scheme).
32K RAM in 8K pages (DivIDE scheme)
24K ROM, 16K original Spectrum ROM and 8K OS ROM.

PRICE

The prototype has cost around £300 to build but a production model should cost considerably less. If you can't wait and want real hardware Jarek Adamski can modify any Timex 2048 or 2068 to SE Specification <http://8bit.yarek.pl/>

interview

For quite a while now SPIN has been widely regarded as the number one ZX Spectrum emulator for the PC, with it's fairly easy GUI, virtually everything a Spectrum developer needs and more options than you can shake a stick at you can't go far wrong whether you're a noobie or a seasoned coder. SPIN didn't just appear out of thin air though, it's taken many hours and late nights for over 3 years to get SPIN to where it is today. ZX Shed spoke to Dunny and Marko, two of the main coders from the SPIN Development team about SPIN and its development and also about BASin which has been a labour of love of Dunny.

The Spin team consists of Dunny, Marko, Woody and Damien. Each brings their own special talent to the team to help build Spin into finely honed piece of software available today.

ZX Shed: So who actually started SPIN?

Dunny: That would be me then.

Z: And when did the other members join?

Marko: Woody joined before I did, didn't he?

D: Yes he did, a long time ago.

M: Although I was testing SPIN before Woody ever saw it.

D: SPIN started off as BASin.

M: Myself and Dunny used to own very similar PCs. same motherboard etc.

D: So testing by Marko was quick and easy and ensured a high level of compatibility with his machine (if not everyone else's).

M: I joined because of the tape code, one night, Dunny asked me if I knew how to speed up the tapes and it kind of went from there.

D: It was about 2002, I wanted a BASIC interpreter, but Woody kind of convinced me to write an emulator. For 100% compatibility with the ROM, he argued that I needed a simple emulation that would run the ROM, but I had absolutely zero experience of z80 assembler, so I spent a couple of months learning as I went.

Z: When did the 1st version get officially released and what features did it have?

D: The first version looked nothing like the one you see now it was black for a start with rainbow stripes in the corner.

M: Oh yes, the speccyque one.

D: It didn't load tapes, just snapshots.

Z: Was that 2002?

D: Yep, I think it was around the time that Marko and I had joined #speccy,

and I'd written Screen\$ which was how we "met" so to speak.

M: Yeah, we both joined #speccy at roughly the same time.

D: Marko dictated features for screen\$, and I implemented them, which made him a logical choice for the tapes.

M: Except I was always drunk

Z: Did you know Woody before SPIN?

D: No, not really, Woody offered to help with my interpreter after I'd passed out a very preliminary demo of a BASIC parser.

Z: Just wondered seeing as you're both from Scunthorpe.

D: That was quite a shock, actually, not just both from the same town, but literally round the corner from each other.

Z: Damien does the graphics, yeah?

M: Yep, and other bits too, he also revamped the options code and some other internal stuff for images.

D: His disk image editor was going to be integrated at one point, but it kind of grew a life of its own.

When you spend so many years developing a piece of software you get very close and protective of it. I wondered what elements of Spin and BASin they take most satisfaction in having coded.

Z: SPIN has been in development for over 3 years, which feature are you most proud of?

M: Hmm, I'd probably be bound to say the tapes, but I'm not sure that it really is.

The debugger is more useful to me and the UI code.

D: For me, it's the RZX rollback and the keyboard helper.

Z: Its little touches like the keyboard helper which make SPIN look so professional.

M: And little bugs of mine which make it look so *un*professional.

D: (laughs) Yeah, but we work through the bugs and do actually get some fixed with each release. 0.6 is looking very good indeed so far.

Z: There are a lot of people looking forward to it...

M: Yeah, including us!!!

Z: Is there anything you would have liked to add to SPIN but were unable to include (or BASin for that matter)?

M: I'd like to have flashloaded more stuff, but it's not always possible and 256 colour support. It was because of the core rewrite though, that we couldn't, well not couldn't, but... didn't.

D: I'm not sure there's anything that I want now, which we've not done. I can't speak for the others, but it's pretty complete as far as I'm concerned.

D: As for BASin, I wanted PLAY (AY, 128k) support, but it's going be an almost complete rewrite of the z80 core and the BASIC handling system. I do have an idea of how to get PLAY into the 48k model and flagging to save as 128k snaps etc but when I add that, people will want the RAMDisk. The memory paging etc and that would screw me up royally, not to put too fine a point on it. Though the assembler in BASin would take it in its stride mostly because it is actually SPIN's assembler and written by you-know-who.*

(Marko looks around innocently) With the different programmers spread around the country there needs to be a fair amount of communication. All the coders need to be going in the same language though in Spin's case this does not seem to be completely true.

Z: What language do you code in?

D: SPIN is Borland Delphi 5 simply because I was comfortable with that

package.

M: I code it in Delphi because that's what the rest of it was coded in, but I use ASM when it's practical to do so.

D: However, a very large amount of the real work is done in assembler.

M: Delphi hasn't exactly got the best embedded asm implementation though and we have certain sections written in NASM and linked.

D: That's why Woody's +3 floppy disk controller and csw handler is in MASM.

M: Yeah, Woody likes MASM and I prefer NASM, constant battles!!!

D: (laughs) And I prefer BASIC!!!

Z: How much time do you spend coding SPIN/BASin?

D: Well, I have a full time job, which mingles with a full time University course so I suppose, on average about 4-6 hours a day. But most of my time is spent running BASin and SPIN rather than coding it and of course BASin's manual is taking most of my time at the moment.

M: I was wondering when you were going to eat/sleep etc (laughs). I'm a full time layabout. I have to admit I use SPIN a lot less than I would have had I not been involved in coding it. Only a few hours per day coding here, if that, quite a few times nowadays I don't code at all for days.

D: My 11 year old son spends more time playing the Speccy games than I do. I spend most of my time looking for bugs, that's why I have the two projects, when I get tired of one I switch for a while.

Z: Kids love the simplicity of the Spectrum ever since I got my Divide my 10 year old son plays on my Speccy quite a lot.

D: Jet Set Willy will never lose its appeal, though I do get tired of having to play my son's "reworkings" of the game, "Jet Set Willy's Dog", "Jet Set Willy's cat".

M: Why, is it a bit ruff looking?

D: Jet Set Willy meets the Predator. (laughs)

Z: Perhaps Cronosoft will publish it...

D: When they're in a fit state, I may give that a try. You ever seen a dog on ice? That's what the dog looks like. (laughs)

Z: Dunny, Did you ever consider involving the rest of the SPIN team in the development of BASin?

D: No, actually.

(At this point Marko storms out, I'm hoping he'll return.)

D: To be honest, I really used Woody and Marko in more of an advisory role

than actual coding. Woody contributed quite a lot to the core, as I needed some real speed to get it running on a 486.

M: (Having returned) BASin's not really my kind of project to be honest. Because I don't really use BASIC.

Z: It's not really that far from SPIN though.

D: You'd be surprised actually, BASin under the "hood" is a lot different. However, Marko is invaluable in issues such as how to work through the help file, how to get the best from the UI etc and he wrote the assembler. Which I shamelessly lifted almost complete out of SPIN and into BASin. The only part of that which is mine is the editor.

M: I had to alter it a bit for BASin though.

D: Yes, you did.

Z: Why an assembler in a BASIC app?

D: BASin is better with an assembler; it's not a heavyweight development system like SPIN's. But take the Frogger cascade cassette 50 program, it uses machine code to scroll the cars and logs, BASin can do that now - and send your small stubs of assembly straight to DATA statements ready for POKEing.

Z: Ok, handy for small routines then...

D: Yes, you could use it for a whole game if you wanted but that's not why I included it.

Z: Dunny, what can we look forward to in future versions of BASin?

D: A more complete manual, for a start, possibly a sprite editor and sprite routines for use in the assembler. The BEEP composer will get finished at some point, and a "DPaint-alike" screen editor but the real biggie will be the compiler.

For me, though, BASin is almost complete. I'm getting quite a lot of contributions from people - data files such as UDG's, fonts etc. I've been considering publishing BASin under Cronosoft for a while, a boxed version with printed manual appeals to me especially as I spent so damned long on the manual. (laughs)

Z: You've had some help on the manual haven't you?

D: Yes - Paul E Collins had the idea of a .chm (html) manual for BASin, and offered to put one together; he did a great job setting that going. I wrote a huge, monolithic .doc file of everything I could think of, some 48 pages at the last count and he did the hard work of getting it into html.

Z: Is he still involved?

D: No, he's since departed, he intended only to get the Sinclair "Orange book" into BASin, and a small help file. But when it became apparent that the manual was getting bigger and he had almost no time to devote to it, I took it back over.

Z: What have you got planned for SPIN in the future?

D: Marko is working on some nice stuff at the moment.

M: Well, SPIN's graphics editor (which has actually been in there for a long time, but hidden) will soon be fully available, both it and the debugger can now squirt data directly into the assembler. The assembler will be integrated to the debugger, so you can set breakpoints in the editor etc and there's a new code profiler.

Z: Is that the direction you see SPIN going, as a Spectrum development system?

M: I'd like it to. I wish I had something like that back in the day!

D: And umpteen new tapes now flashload.

M: There's also all those new rendering tricks, yes, Dunny? 2xSAI etc.

D: Yes, the scan lines are back too.

Woody is working on TR DOS for SpecEmu, so that will most likely be winding it's way into SPIN soon and there's a new WOS integration I've got going at the moment.

M: yes, we've got the scan lines back! Finally!!!

M: And it can save snapshots as TZX files now, what use that is, I'm not exactly sure.

D: Yes, and at turbo speeds too. You could fit a lot more at that speed onto a blank audio CD.

(Dunny wonders just what he's done lately)

M: You've done lots!

D: It's all a bit of a blur - we've done quite a bit of work. But not a great deal of it's actually visible.

M: We kind of don't know who does what anymore, all those lines blurred a long time ago.

D: Most of the UI bugs are gone now have to say though.

M: Yep - no more title bar oddness.

D: And I'm working on ironing out the last of the bugs in the emulation engine itself.

Some games just won't RZX properly with rollback, and I'm stumped as to why at the moment.

M: We're forever finding bugs in Delphi

itself! We've coded quite a bit of stuff just to work around that.

D: In retrospect, it's not the best package to have used, but it is very easy to bang stuff out in Delphi.

M: Yeah and fast!!!

Z: In hindsight what would you have used?

M: I'd have used C++, if I'd ever bothered to learn it!! I'm going to be learning it now though.

D: (After a moments ponder) Probably would have stuck with a "visual" language, so C++. Pure asm (as Woody does) is nice, but a bastard to get anything like SPIN done quickly. Yeah, we both have to learn C++ now.

M: Oh, I wouldn't write an entire program in ASM any more.

D: Did I mention that people keep bugging me about DivIDE? Turns out that SPIN's IDE emulation just needs a tiny modification to become full 16bit. This means that DivIDE may well make it yet.

M: Mind you we get all those requests to emulate obscure east-European hardware too...

D: God yes, you should see some of the emails we got .They make Ivan** look sane.

M: "can you make SPIN emulate the coffiemakersky?"

D: naming no names, but that guy was hatstand.

Z: Where do you see yourselves compared to Spectaculator, EmuZWin and RealSpectrum?

D: Hmmm, contentious, that one.

M: I don't know where Spectaculator has gone recently and RealSpectrum seems to have all but vanished!

D: Spectaculator is a good emulator and Jon's done a great job throughout, it's always been more stable than SPIN but Jon's direction is different to ours.

M: Someone keeps asking me to make SPIN's debugger more like EmuZWin's - it's not going to happen!!! I much prefer ours.

M: Jon's feels more geared towards the everyday windows user.

D: We're more geared to development, he's more for the Windowsy-joe bloggers user.

M: Especially the everyday XP user, I don't mean that in an offensive way!

D: SPIN can be very scary to people who don't have a reasonable level of knowledge about the Spectrum or Windows.

M: It's all those configuration options; we've had fallouts about this before

haven't we?

D: Yep we have. RealSpectrum will always have been there first.

M: Sometimes I think SPIN has a few too many options. I just know there's extra stuff we could bung in that would speed it up further, but not everyone would like to use it.

D: Though their claims of "100% accuracy" were rather exaggerated.

Z: RealSpectrum is horrible in my opinion, especially the debugger.

D: Well, it's still got its roots in DOS, that debugger in RealSpectrum is awful.

M: Actually, I didn't always like SPIN's, that's what made me want to change it!

D: I have BASin's now, I like that.

M: Yeah, so does Woody.

D: Indeed he does. (laughs)

Z: Would you ever go down the shareware road?

D: No, absolutely not.

M: And no again.

D: That's not what we're about, we're coding SPIN (and this may be unpopular) not for the users but for us, what's in there is the stuff that we wanted to see in a Speccy emulator.

M: Yeah, the debugger stuff was mostly done because it's what I always wanted.

D: So why charge? It does what we want, so let others just download it and tinker.

M: It's quite cool, because I get to have it perform exactly like I want.

D: And I think that's why SPIN and Spectaculator are different. Spectaculator is written for the users in my opinion.

M: Which is why SPIN is so much more tech oriented

Z: People obviously like that.

M: Yeah but it doesn't half push the support emails up!

Z: Can you envisage a time when development of either SPIN or BASin stops because you feel you've taken them as far as they can go?

M: Well, hmm, how do we put this one Dunny?

D: We've been working on these for a long time now.

M: The enthusiasm is waning now, let's just say

D: It's getting to be a grind.

M: And it's not a request for bribes. (laughs)

D: And a change is as good as a rest... so...

M: SPIN will be having a very long rest.

D: 0.6 will be the last major SPIN

revision for a long time. Note that I said "major SPIN revision".

Z: So the SPIN development team continues...

D: It does.

M: Well maybe...

D: We'll be supporting SPIN, bug fixes etc, anything that *needs* doing.

M: But our main focus won't be SPIN any more. Despite our team name.

D: But we do have plans for other things.

Z: I look forward to future projects...

D: So do we, that's why we want to learn C++ in more depth.

Z: Would you like to say something about it?

D: We aren't leaving the scene, but it will be fun to watch from outside for a while, well...

M: It's... a game and that's all I'm saying.

D: (laughs) Yeah, let's leave it at that.

Z: When can we expect the next versions of SPIN and BASin?

M: SPIN...

D: "soon"

M: The 13th of october

D: BASin... next week. Arjun already has a copy he's been testing the font handling in the editor.

Z: I appreciate you guys taking the time to chat. Good luck for the future in whatever you end up doing.

*The SPIN assembler was written by Marko.

** Ivan is not his real name, changed for the purposes of this interview.



How times change! An early SPIN screenshot

So You Want To Be A Remaker?

Well, who doesn't? Put your hand down at the back, this obviously isn't the article for you!

Somewhere out there in the darker echelons of the internet, a bunch of folk hunch over their computers and attempt to reinvigorate the classic titles from years gone by. United by one thing, the love of old games. These folks call themselves remakers. But this article isn't about them, it's about you and how you can help bring these old games to a new audience.

Sounds difficult, is it?

To be honest, remaking isn't that difficult a task if you sit down and put your mind to it. Thanks to the joys of the internet and the dedicated work of a number of sites such as World Of Spectrum that catalogue and store images of these old games, there's people who've already sat down and mapped the games for you, there is replays of the games from start to finish, shots of the loading screen - its almost like most of these good people have done the really hard work for you.

With that in mind, its time for a step by step guide to making the game a reality.

Step 1 - Pick a game that you loved and still adore.

Everybody has at least one game that they adore and would love to see remade from the 8-bit era surely? Well, that's how most people begin their ride on the rocky road to addiction that is remaking. Not necessarily by learning how to code (as you'll find out later on, that isn't even a necessity in this modern age) but just from wanting to see that game how you always imagined it to be.



Fancy having a go at Atic Atac?

I grew up with the fruits of Sir Clive, and my heart will always be with those obscure Spectrum games that no-one really cares for. Everyone remembers Head Over Heels, Monty On The Run, the Ultimate games. I'm still in love with the games that padded out c90's across the country, games like BMX Racers, Android 1... For the most part, the not even also ran games. Remaking them was my way of making sure they don't get lost in the mists of cloudy nostalgia and live on today. Even

if I did massacre them, at least I tried.

And that's the key. If you love the game enough and really want to bring it back to life, there's nothing stopping you. If you start with a game you don't care for, there's a high probability that it'll hit the kerb faster than KITT after an unfortunate incident with a banana skin.

Don't be afraid of making a complete hash of it, no-one expects perfection from you and no-one really bats an eye lid if it's an abomination. I'd have stopped long ago were that the case.

Step 2 - The Master Plan.

Now is the time to work out your grand vision. Are you keeping the same map or is it going to be an extension of the original game? Are you going to use the original graphics or are you going to draw your own? Are they going to be 3d or 2d? Were there things that you always felt the game needed and you could add to it or are you going to be 100% faithful?

Write it all down, gather any maps from the internet you need. Grab the image of the game, play it till your fingers weld to the keyboard or joystick and you know its quirks as well as you know your right hand. This is the fun part, the part where you can surround yourself with scribbles, doodles and fill your hard drive with any remotely relevant rubbish whilst playing a game you love.

But what if you can't find the map for the game you want to remake? Then you're left with a few choices. You could always make up a new one; there are hundreds of remakes with only a scant resemblance to the original - no ones going to lambaste you for it. Or, you could map it yourself (if you follow this route, don't forget to submit your completed map to WoS or whichever repository would love to host it).

Okay, your desk is now piled high with notes and scribbles, your hard drive screaming for release from the reviews, maps and replays you've downloaded. Time to discover your weapon of choice.

Step 3 - Choose Your Weapon

Its time to pick what you're going to make the game in. Notice how I didn't say "code the game". We're not in the mid 80's anymore, there's no need for an in-depth knowledge of the inner workings of your machine in order to get a game out there, think of it more as the early 80's where anyone could get a game released using whatever they could adapt to. Don't be afraid, it doesn't have to hurt.

The best advice I can give you is to download everything you can possibly make your game in. Most languages and packages have free trials so you can sit down, turn the music up, make a cup of tea and get to grips with them in your own time. You may find that a BASIC language is the route you

choose, if that's what you're comfortable with - then so be it. You may find that you just want a package that lets you drag things into the window and you tell it what to do from there, not a line of code in sight. Don't let anyone frown upon you for doing that. If it gets the game done, if it gets it out there and more importantly - you are happy going down that route - do it.

I could wax lyrically for days how some of the best remakes have been put together by people who couldn't string two lines of code together to save their lives, but hey - you already know that don't you?

Of course, you might find that you're one of those lunatics who prefer to code in C++. Well, good luck! I'd be hiding behind the sofa covering before I even had the guts to open the development environment.



Nemesis has already been done.

Step 4 - Making the game.

Up until someone makes a dongle that feeds straight from your brain and into your computer, this is the part where you're tied to your computer for however many hours you can spare a day making those notes and scribbles come to life.

Best make yourself comfortable; it can get frustrating at times.

The first few weeks are the fun parts. It might be that you're starting from scratch coding so you're discovering what you can do. The first time I made a little man run from left to right I near screamed with joy.

This is the point where depending on how things are going - you either think its going to work, you can do this - this game will happen, or you want to repeatedly head butt the table in frustration as the silly thing won't do what its told. Hold in there and keep at it, what starts off as a brick wall will begin to crumble the more you stick at it.

Once the game starts taking shape, it's a fantastic feeling. The amount of time you'll spend just running around the 1 test screen you've got up and running just because you made it do that is one of the best moments. It might take days, weeks or months to get there - but I promise you, it will.

Don't worry if your original plans seem over the top to where your

level of expertise is, its better to go crazy and overreach than to be an underachiever isn't it? For my first remake I wanted to make a huge Jet Set Willy game with scrolling ("Sacrilege!" I hear you cry) with sprites that would make Probe shed tears of shame. I ended up with a 9 screen Manic Miner clone using the original sprites. Them's the breaks, kid. The trick is, to finish one game, no matter how big or small. Where most projects tend to fall to the wayside is after the initial rush, once its all up and working its easy to let Mr Boredom be your closest friend as you tediously cut n paste bits of code/routines or rooms and place the enemies/ player/objects around the place. The bigger the game, the more chance you've got of this happening. If you can overcome this, then you've got the end in sight. Once you can see that end, its plain sailing aside from the odd tweak here and there.



So has Green Beret

Step 5 - The end of the road.

So, you've finished your game - what now? Get your friends to test it, force them at gunpoint if need be. For the sake of argument and skipping the part where they complain they fall through the platform on level 7, we'll assume that they've ran through it from start to finish and you don't have to go back and fix anything. What now? Easy. Don't keep it to yourself, get on your soapbox and shout it from the rooftops. "I did it, this is my remake and I shed blood to make it, but its here and I'm proud of it."

There's just one consideration to take into account now. Somebody, somewhere down the line did that too with the original game. Out of courtesy, I always recommend at least attempting to get permission to release the game from one (or more) of the original authors. Most of the ones I've been in touch with over the years have been incredibly supportive and gave their blessing without blinking an eye. One time, I even contacted the wrong David Jones about a Spellbound remake - who responded incredibly politely that he is in fact not the same David Jones, but would love to see the game remade anyway. It doesn't hurt to spend two minutes firing off an email and may save you some hassle in the long run.

And that, my friends, is all the wisdom I can share. The rest is down to you. I look forward to playing the fruits of your labours when they're completed.

Numb Cars 2

Publisher: Triumph Game Labs

Release date: TBA

Numb Cars 2 is from Russian programming team Triumph Game Labs. It's the sequel to Numb Cars (special edition). I have to say, games like Numb Cars appeal to me because I like nothing better than getting behind the wheel of a sports car, accelerating to impossible speeds and ramming other cars of the road. To be perfectly honest it's probably why I haven't got a licence yet. I don't want to go to jai.

So, I downloaded the first Numb Cars and had a go. And I have to say I enjoyed it from the outset. The graphics are great, it's easy to see what they are and I love the way the police cars lights flash as they swerve along the road at high speed. The woodland track has some pretty green trees along the side of the road so the display has a fair amount of colour too. Add a couple of tunes and good sound effects and you end up with a great game. I've got a feeling that Numb Cars 2 is going to work for me too. TGL have decided to add a more complicated goal to the second game. In the first it appears that you simply have to drive at full speed and reach the end of the course within the time limit. In the sequel you will have to take a cargo from point A to point B and this time some of the cars will actually be trying to stop you. No sign of that yet because a collision with any of the other cars on the road just slows you down at the moment.



So far it looks good. The game itself is still a vertical scroller and the cars have been made bigger and more detailed. TGL have kept the colourful scoreboard part of

the screen but sadly, the track area of the screen is now in monochrome and its all got a bit barren. The road has wide and narrow sections now though so that adds a bit more variety. And judging by the icons that have been included there it looks like there will be a few power ups or dirty tricks available to help you on your way. I especially like the look of the spikes. But the in game tune just doesn't work as much for me as the music in the original Numb Cars and so far there are no sound effects at all. Call me an old softie but I want to hear my enemies' crash when I ram them off the road. This reminds me, I do hope that TGL can add a few more cars to the game. It was fun being able to watch bikers, cops and mad drinkers all burst into flames at the side of the road. And there is one neat little effect, which I hope gets to stay in the final game. I quite like the way when you accelerate or slam on the brakes you get a trail of skid marks on the road.

Personally, I'm really looking forward to Numb Cars 2. Even if I don't know what a 'numb' car is. I liked the first game and from what I've seen of the sequel it should be good. In order to make this game different to the original TGL are going to have to include the cargo mission element and the power ups and dirty tricks (I've always wanted to drop spikes behind my car and watch my pursuer's career off the road). If they can't then it may be a little too similar to the first Numb Cars and it may not have quite as much appeal. There is no release date as yet but I'm pretty sure you can rely on us to keep you posted. In the meantime, I'm going to apply for my provisional licence.

Trans Siberian Mystery

Publisher: RetroSpeced

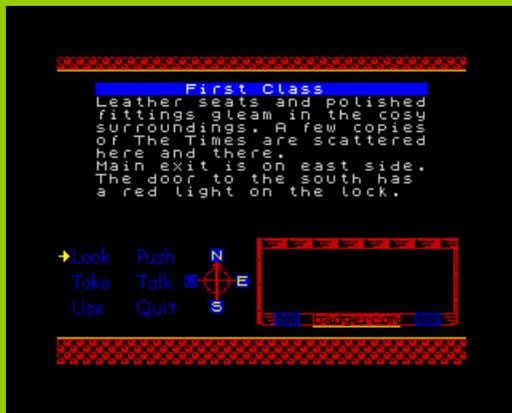
Release date: TBA

So there I was, trapped on a speeding train that was about to suffer an awful crash. Rebecca had already gone to the rear carriage to assist in releasing the emergency brakes ... oh wait, wrong game. But it is an easy mistake to make since the entire demo version of Trans Siberian Mystery bears so much similarity to the opening scenes of Resident Evil Zero on the Game Cube. But this game contains no zombies or evil pharmaceutical corporations conducting

illegal experiments on the populace. What we have here is the bizarre tale of the singer (I think) in a band called '28 Costumes' (check them out - they're quite good) who has awoken on the aforementioned train with absolutely no idea how he got there, or where he even is. It could be the future; it could be another dimension; it could even be a strange nightmare brought on by mixing the wrong combination of drugs and alcohol. But whatever it is, it's definitely an 'impending death' type of situation unless you can apply the emergency brakes. Despite the plot similarities to that well-known Game Cube title, Trans Siberian Mystery is an entirely different type of game. It plays like one of Lucasfilm's early adventures (e.g. Maniac Mansion) but is almost entirely text-based; with a few graphics thrown in (I'll get to those in a minute). The interface is easy to use and very straight forward. Movement is controlled by pressing the required direction key (N S E or W) and interacting with your environment is simply a matter of selecting the required command from a list, which will then display a list of objects in your possession or in your vicinity. The compass on the main panel displays the possible exits from your current location. As you make your way through the game, cut-scenes will occasionally pop up. These contain digitised graphics along with comic book style speech bubbles, and they add to the game greatly.



As I said, the interface is primarily text-based with a few graphical borders surrounding parts of the main display (which, for some odd reason, is called 'Badger Com'). A nice sound chip tune plays over the intro, but apart from that, sound is virtually absent from the game.



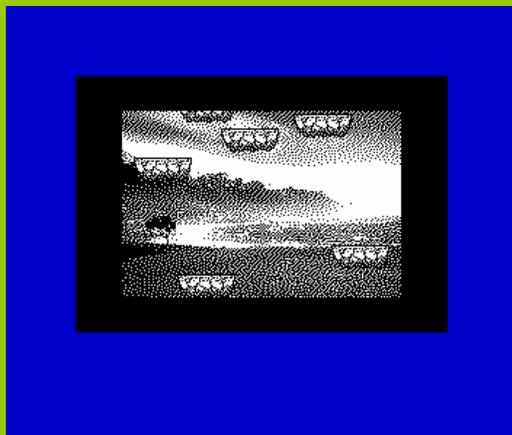
They were the pros, now here are the cons. The game is a bit on the slow side. Movement between locations takes about five seconds. This is presumably due to the fact that the game is written in BASIC, and I expect that some players will become annoyed with the sedate nature of the game.

Overall, I enjoyed it even though the demo is a bit on the short side. I certainly can't wait for the complete game to be released. It will be published by Cronosoft "sometime in the future".

Jump Around

Publisher: Derek Smith

Release Date: TBA



The premise is simplistic to say the least, all you have to do is jump from platform to platform as they fall and collect the treasure along the way. Ok, that sounds promising and from what I've seen from this early demo Derek Smith could have quite a popular game on his hands. At the moment all we have is some falling platforms in front of a gloomy background but the quality of the animation is very good and the dark background makes it very atmospheric. If Derek can complete this or one of his other demos then Cronosoft should be taking a keen interest in his work because I can see a contender to a certain Mr Caldwell's

throne as the foremost current Spectrum programmer.

YSRNRY 1985

Has Nick Humphries created his magic yet again? Will it feature a lot of great Speccy classics? Will it also have brilliant 80's music to transform you back to your younger years when you had to wear some terrible jumpers your Nan knitted you and some pudding bowl haircuts your mum forced you to have? The answer is a huge big fat yes; once you download the 73.5 mb file you won't be disappointed!

1985 was a great year for Spectrum games and the 7 minute 22 second clip will certainly take you back to that golden era. As soon as you start up the clip a classic Level 42 clip starts and you instantly are taken back to 1985. You can just picture your old classroom and your old school disco dancing away to some of these 80's classics!

We start off looking at some of the great platform games, Technician Ted and Monty Mole. Wally Week also gets an appearance in the games 3 Weeks in Paradise, Herbert's Dummy Run and Everyone's a Wally. Despite the terrible colour clash in these games the whole series of Wally games were brilliant and some of the best loved on the Spectrum.

Other games featured include Back to Skool, Fairlight and Spellbound. One of the best things about the Rock 'n' Roll series is the memories it gives you. Not only does the music take you back but you might suddenly see a classic Spectrum game you haven't tried for ages which makes you want to find the game and give it a go in your emulator.

Saboteur gets a mention as does the classic Gyron. Other wireframe games get a look in with Elite and Starion. The music carries on bringing back the great memories with Dead or Alive's 'You spin me round' and also a look at the doomed C5. As a kid I thought back then that the C5 did look a bit crazy and I couldn't imagine many people riding round in one of these in the city!

The great games continue with Gyroscope which is an excellent (and frustrating!) game and the classic Elite game Rollercoaster. A game I loved to play to see the different levels but 9 lives to collect all those money bags? I can't believe anyone can complete this game

without pokes!

Way of the Exploding Fist is featured, one of the best beat em up games on the Spectrum. Watch as the main character misses on several kicks and punches before landing a superb knockout blow! Plus for many blokes out there you will wince with pain when you see the painful low punch to a certain area! Need I say more!

Several sport games also get a mention in World Series Baseball from Imagine, Match Day from Ocean and the brilliant Hyper Sports. US Gold were a great software house back in the day who released many great games (and a fair few poor ones!) and they are featured in this video due to their arcade conversions such as Spy Hunter and Tapper. Other arcade games featured include Moon Cresta and one of the best arcade conversions of all time, Commando. The brilliant music continues with Glenn Frey's 'The Heat is On' from Beverley Hills Cop. Just hearing that song again will again bring back so many great memories. 1985 also features the magazine wars between Crash and Sinclair User and the famous 'Unclear User' which was eventually withdrawn. How I wish I still had my copy of Unclear User which may be worth something now!! Your Spectrum is also featured as it transforms into Your Sinclair and a more game-based fun Speccy magazine.

The whole 7+ minute clip flies by and you are genuinely gutted when it reaches the end. The whole series of clips from Nick are brilliant, it will be sad when the whole series of clips will have ended but they will make a brilliant DVD.

Playing Spectrum games of course bring back a lot of very good memories from a golden era. It was a great time as it took us back to our childhood plus it was for many of us our first glimpse of a computer and what it could do. The whole music and images from this clip just take you back to that time where you would rush down the shops for the latest issue of Crash or run into town with your hard earned pocket money to get the latest blockbuster.

Of course you would also be in school armed with your C90's trying to get quite a few pirated games as well!

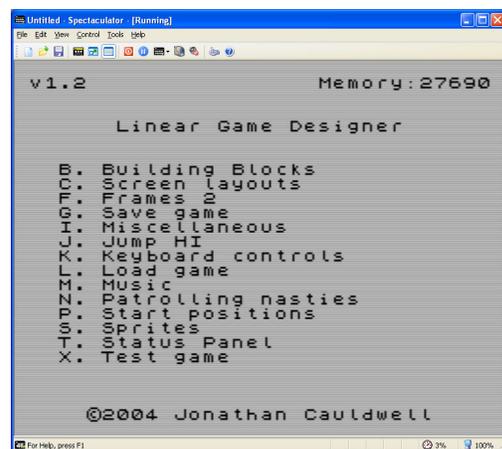
The wait to download this file will be well worth it and you will be smiling at the end after another magical trip down memory lane.

How To.....Build a game with PGD

Ever wanted to create your own Spectrum game? Gave up all those years ago after trying to learn Machine code? Well thanks to the prolific Spectrum programmer Jonathan Cauldwell you can now create your own platform style game for the Spectrum and save it to either tape or as an image to use with an emulator.

Platform Game Designer from Cronosoft gives you the ability to either create a 'Manic Miner' style linear platform game or an exploration 'Jet Set Willy' game.

Many editors for games can be confusing and too much time is taken with lengthy manuals and you often need a lot of time to practice creating the screens. With Platform Game Designer you can simply create your own game in a matter of hours!



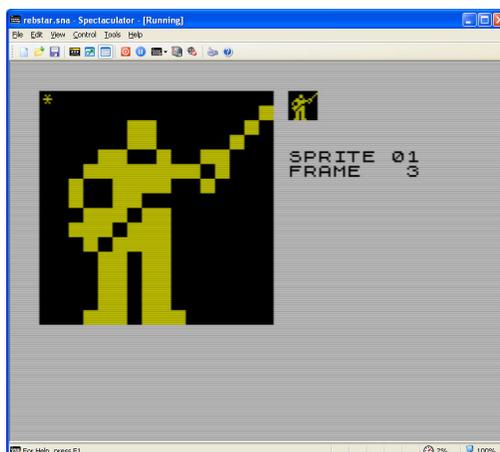
The instructions to Platform Game Designer are only 7 pages long and they are very clear on what you can do with the utility. Before you start you should sketch out the rooms for your game and also create the graphics. Try to work out the screens before you start to code them and also give the player a bit of a chance!

From the main menu you can select if your character can change direction mid air, if there is a time bar or not, how many lives they will start with and also change the status message at the bottom of the screen. You can also set whether you can jump high or low which can make some games much more difficult. Now its time for the fun in creating the sprites!

The main character sprite in PGD has 8 frames of animation for left and 8 for right and because of this you can create a really smooth animation for your main sprite. For enemy sprites you can create 4 frames for the animation and create as many different sprites as you so wish. To create the sprite you simply move the cursor along the grid and create a simple graphic using two colours. You

could actually combine some of these to create a larger sprite made up of 4 enemy sprites; it's entirely up to you.

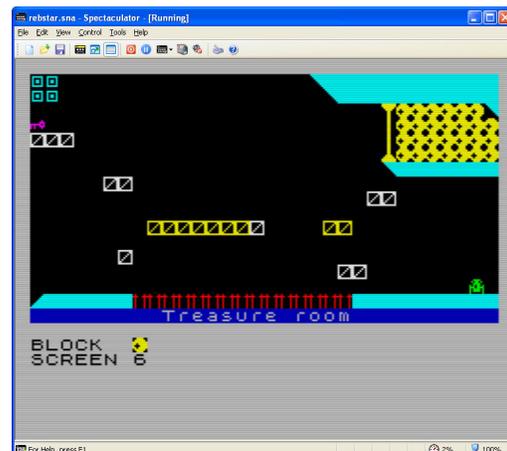
Once you have created your sprites its time to create the building blocks used for the screens. The blocks vary from solid wall, normal platforms, conveyor left and right, crumbly floor, collectable, on/off platform and several more. Once you have created your building blocks the real fun starts when you create your first screen!



Firstly choose the start point for your sprite and then start designing and creating those screens! Try not to make the first few screens too difficult but later you can really create some difficult screens to test the player. You simply go through the different building blocks you created earlier and paste them onto the screen. You can of course re-use the tiles over and over and if you change your mind simply paste a new block on top of the old one. You can create many screens, for the Jet Set Willy style game there is the added option of the Map Layout. Here you define your game with the exit points to other screens. Most platform games seem to be between 20-25 screens but you could create many more with PGD if you so wish.

Once you have created your rooms its time to add the enemy sprites. This can be a bit tricky at first but you will soon get the hang of it. You can insert several enemies on each screen but be warned if you have 4 or more on a screen it can slow down at times. As with Manic

Miner / Jet Set Willy the enemy sprites can only move up or down or left and right but you can still create some very tricky screens.



You can test each screen, change the graphics with ease and even add a simple tune to the game which repeats throughout. The only downside is that you can't add a sound when your character jumps or collects an object.

Once you feel you have completed your game you can save the game to a snapshot format. The only difficult part for some is to create the game file, you need to create a basic header file to load the main game and then merge them together to create a snapshot which can be used on any Spectrum emulator.

Platform Game Designer has many plus points, its great fun to create your own game, using your own graphics or simply try to copy existing graphics in games to create perhaps a sequel to your favourite platform game from yesteryear. It has all the elements you need to make a really good platform game. Many of us back in the early 80's always wanted to create our own game and now here is your chance to create your own individual Spectrum game.

The game is available as either an image file from <http://www.cronosoft.co.uk> for £3.49 or you could buy it on tape for £4.99. Great value for money.

Overall the package is very good, it's very easy to use and hopefully people will create many new platform games for people to play.



What is a Jupiter Ace4000?

A very rare machine indeed! With only 800 reportedly¹ ever made. The reported number of Ace's sold before Jupiter Cantab closed for business was around 8,000 (MGT/SamCo only made around 7,500 Sam Coupes before they closed).

The Ace4000 has the same specification as an issue 1 / 2 Ace, with an added output socket for a monitor, a small toggle switch under the case to switch between TV and monitor output. The case is also different, being stronger, injection moulded instead of the yoghurt pot type of case the issue 1 has. The speaker / buzzer can also be seen though the grill, as it's mounted on the bottom of the pcb. The Ace4000 was destined for the USA market, probably because of the positive review it received in the USA magazine *BYTE*.



Jupiter Ace4000 or is it?

An Ace4000 turned up on eBay this summer, attracting a large number of interested parties willing to part with their cash to add the rare machine to their collections. The Jupiter-Ace archive team were also intent on securing this machine for the archive. The ace archive team asked the seller for a scans of the circuit board to confirm it as an Ace4000. Despite several requests from us we were unable to authenticate it as no

scans were forthcoming from the seller. The seller was sure it was one of the rare Ace4000, because that's what he was told when he bought it as few years ago.

¹ source Ace Users Club

By this time the auction had reached £120.00, with only a few hours to go. I became the top bidder with my £250 bid, sure to win I thought, after all it's a rare machine. Then out of the blue the archive team got an email with scans attached of the Ace4000, and then the usual out bid notice. So with only a few minutes to spare we decided to check the scans and to our disappointment it was a fake Ace4000. From the scans we could see that it was in fact an issue 1, standard Ace, inside an Ace4000 case. By this time the auction was as £323.53 to reach a final sale price of £333.53

And it didn't end there because a few days later there was another. Only this next one was boxed with an Ace4000 manual, again after requesting images of the machine it also was a standard Ace in an Ace4000 case. So, how do you spot a fake Ace4000?



Jupiter Ace with Issue 1 PCB

In the above image is an issue 1 Ace. The red circle highlights a capacitor on the pcb. In an Ace4000 this is further back on the board, also there should be the switch under the case to switch video output channels, if it's not there, it is a fake Ace4000.

What's a *Jupiter Ace 16+*? This machine was talked about just as Jupiter Cantab went out of business; it appears to be an Ace issue 1 or 2 with a 16k RAM pack. No packaging or redesign the only thing we have found is the flyers; see <http://www.jupiter-ace.co.uk/jupiterace16.html>

Emulator News

Mike Wynne has released a new version of his "EightyOne" – it emulates a number of machines including the Ace. In the latest version the Aces colour board has been supported. Get it from his site.

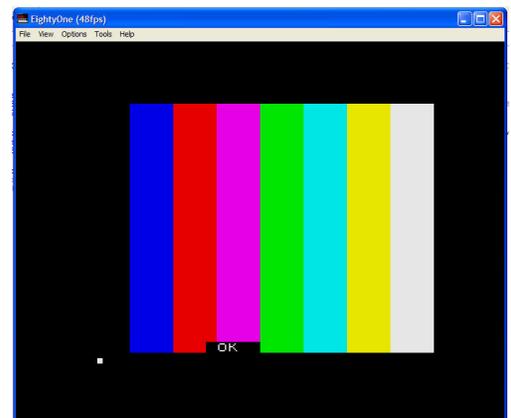
Archive updates

The Forth Bridge Book as a PDF has been added to the site. The book takes you through some of the processes of converting BASIC to FORTH. Other updates include, hardware article on the Aces colour board card, Ace software tapes as ACE snapshot files and a whole host of other items. The site is now 3 months old and we have had just over 6,500 hits. If you have anything you would like to add to the archive then just make contact with us.

<http://www.jupiter-ace.co.uk/>

<http://www.chuntey.com/eightyone/>

```
16 base c!
: colourbars
 2700 2400
do
  i 4 / 8 mod
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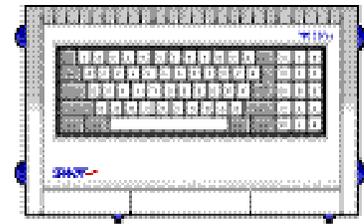


Ace colour board demo

Ace Forth's word "colourbars" to create the screen above, for more info see this article. http://www.jupiter-ace.co.uk/hardware_colour_board.html

Next time I hope to look at what Ace FORTH is, and a 96K Ram Pack Project by Edwin Blink

SAM coupé



One of the problems with an aging Sam is the fact that the keyboard membrane will fail given time, as it works on the same principle as the Spectrum. One solution is to wait until a Sam becomes available on eBay and replace the keyboard with that one, but the chances are that it also is of the same age and might be in a similar condition.

One solution to this problem has been addressed by Colin Piggot of Quazar, who produced the Sam PC keyboard interface priced at £49.99.

After a short wait the package arrived well packed in a VHS video box. Inside a professionally produced pcb with 3 chips, two of them custom programmed, with a number of coloured wires, a 14 page instruction manual, a small blue box which housed the PC PS2 socket and a number of other connectors. The manual is well set out and guides you through the installation process.

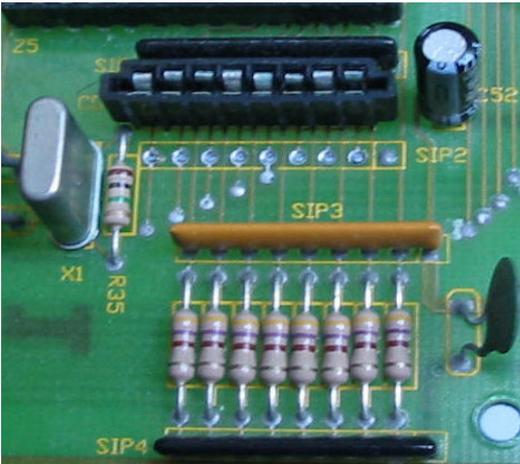
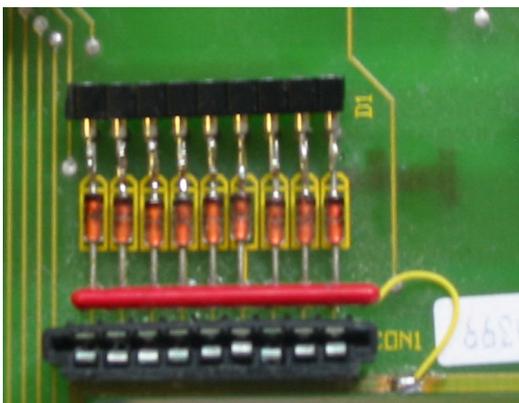


Fig 1. Connector location Sam PC keyboard pcb

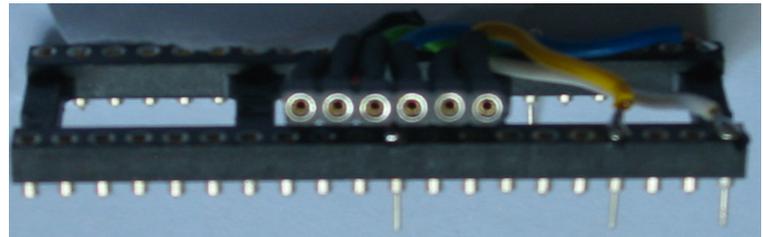


Sam PC Keyboard pcb

The first connector is to be soldered next to the current membrane connection [see fig 1]; the holes are filled with solder so this must be removed before you can fit it. The second has to be soldered to the diodes near the other membrane connector. With these in place next it's on the next part which involves soldering a set of wires already soldered to a pin connector. These wires are soldered to the CPU, take care when soldering



Fig 2 The second connector in place



My cpu IC socket connections

these. Alternately, you could do the same as I, and solder the connector to an IC

socket then, soldered the IC socked to the CPU when I had removed the unused legs on the socket.

Now with the connection points in place it's a matter of plugging the pins from the PC keyboard interface, which leaves one cable free to run out of the Sam's case into the small blue box which houses the PS2 type connector.

I didn't like this so went for my own option which was to mount it in the second floppy bay next to a CF card reader.

It's a nice solution to the problem, I have tried it with a number of keyboards and all work well, including the extra PC keys programmed to the Sam keyboards Map. I would recommend it to anyone restoring a Sam.



PS2 keyboard socket on the Sam

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