

MADE WITH PC AND ZX81 32KB (ZXPAND) FOR LOGO AND TESTING SOFT

ZX81 / TIMEX 1000 / TIMEX 1500 MAGAZINE

ISSUE 5, SPRING 2014, ADDRESS: YERZHYEY@INTERIA.PL

2014 - AND ZX81 IS STILL ALIVE WHO KNEW, HUH? WELL, THE COMMUNITY IS OK AND THE SCENE IS ACTIVE. AND EVEN THIS ISSUE OF THE MAGAZINE WOULD BE EARLIER BUT I HAD A SOUL-QUANDARY, HAHA. I WANTED TO MAKE THIS ISSUE AND TAKE IT FOR ZX81 PARTY IN GERMANY THIS YEAR BUT... THEN I WOULD NOT BE ABLE TO WRITE A TEXT ABOUT THE MEETING, HAHAH.;) SO FINALLY I DECIDED TO MAKE THIS SMALL DELAY, TO WRITE LATER SEVERAL WORDS ABOUT 2014 ZX81



PARTY IN MAHLERTS. (WHICH WAS GREAT, BY THE WAY). OK THEN, I THINK WE COULD START ANYWAY. AND JUST FOR YOUR INFORMATION: LET ME ASSURE YOU THAT \*EVERYBODY\* WHO WAS HAS NOT SENT ANY ARTICLE FOR THIS MAG - WILL SCORCH IN HELL! HAHA! HAAAAAAHAHAHAHAHAA!! (EVIL LAUGHTER NUMBER 11).

C BY YERZ

BAD NEWS FOR THE START - DR BEEP QUITS ZX!! HMM, MAYBE NOT THE BEST WAY TO INAUGURATE THE ISSUE BUT PRETTY IMPORTANT ANYWAY -DR BEEP, THE WELL-KNOWN ZX81 CODER OF THE UN-EXPANDED MACHINE - ANNOUNCED IN 20-11-2013 THAT HE STOPPED MAKING SINCLAIR SOFTWARE. WHICH IS HIGHLY CRAP NEWS. SUPPOSEDLY HE WILL BE (AND HE IS, ACTUALLY) OCCUPIED WITH... POLITICS NOW! AS FOR SOME DETAILS, THE BLOKE WROTE ON <mark>WOS</mark> FORUM: "SINCLAIR SCENE, THANK YOU ALL... BUT I WILL BE GOING ON LOW LEVEL FOR LONG TIME WITH POSSIBILITY OF LEAVING THE SCENE. NOTHING YOUR FAULT, BUT I AM LOW IN SPIRIT OF DEVELOPING FOR EITHER ZX81 AND ZX SPECTRUM (ZX SPECTRUM EVEN LONGER ALREADY). I STILL HAVE IDEAS AND UNFIN-ISHED PROJECTS BUT I AM FOCUSING ON SOMETHING ENTIRELY DIFFERENT NOW. NEXT YEAR WE HAVE LOCAL ELECTIONS IN HOLLAND AND I AM ASKED TO GET MYSELF ON THE VOTINGLIST FOR THE SOCIALIST PARTY. I AM AL-READY QUITE BUSY WITH THAT AND ALTHOUGH IT TAKES A LOT OF TIME IT IS TRULY FUNNY TO DO. I WILL BE FINISHING THE 1K GAMES DISTRIBU-TION FOR THE CANCER FOUNDATION, BUT THAT HAS SOME DELAY ALREADY". IT IS A SAD INFO, HOWEVER WE ALL HOPE HE WILL GET BACK TO ZX81, AT LEAST FROM TIME TO TIME. THAT'S SCARY ANYWAY, HOW EASILY ONE CAN TUMBLE FROM USEFUL ZX81 ACTIVITY INTO POLITICS (HAHAHA). OK, GOOD LUCK, DR BEEP! AND COME BACK CODE SOMMIT, FROM TIME TO TIME, DUDE.

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## BOBS' STUFF

BOBS PRESENTED A NEW ZX81 GAME FOR 16KB - "<mark>ZXAGON</mark>" - THAT IS AP-

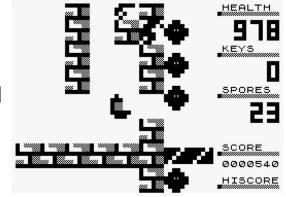


PARENTLY A CLONE OF "SUPER HEXAGON". THIS IS A FAST ARCADE GAME, WITHOUT ANY STORY, SO NOT EXACTLY MY CUP OF TEA, BUT PEOPLE SEEM TO LIKE IT AND ALSO SUP-POSEDLY IT IS A REAL 'CODER PORN'. LET'S HEAR WHAT BOBS HAS TO SAY PROG: "SUPER HEXAGON IS A SIMPLE PIECE OF SOFTWARE IN CONCEPT, BUT THE ZX81 IS A SIMPLE PIECE OF HARDWARE IN REALITY, AND WAS NEVER DESIGNED TO HANDLE FAST FULL-SCREEN GEOMETRY. ORIGINALLY, AS A TEST TO SEE WHAT IT MIGHT LOOK LIKE, I WROTE THE FOUNDATIONS OF THE GAME IN BASIC - AND IT TOOK ABOUT A MINUTE TO

DRAW A SINGLE HEXAGON! THE FINAL FRAME-RATE IS A PRETTY CONSISTENT 10FPS, AND THAT HAS TAKEN A LOT OF WORK, AND A SLIGHTLY REDUCED SCREEN SIZE (IT'S DRAWING THE MIDDLE 28 COLUMNS OF THE 32 COLUMN SCREEN, SO 2 EITHER SIDE ARE UNUSED), BUT I THINK IT WORKS WELL". CONTROLS ARE: 3 - MOVE ANTI-CLOCKWISE AND 3 - MOVE CLOCKWISE, IT CAN BE, HOWEVER, REDEFINED BY PRESSING 7 ON THE MAIN MENU. IT WOULD SEEM LIKE THE GAME HAS A ZXPAND JOYSTICK SUPPORT, USING LEFT & RIGHT TO REPLACE 5 & 8. MORE INFORMATIONS ABOUT THE GAME YOU CAN FIND HERE: HTTP://TINY.PL/QN89V AND THE GAME ITSELF

IS DOWNLOADABLE FROM HERE: HTTP://TINY.PL/QN8WQ

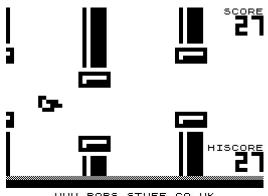
BUT ANOTHER GAME I PAID ATTENTION TO, LOOKS REALLY INTERESTING. IT DOESN'T EXIST YET, 'THOUGH, AND THERE IS ONLY A PREVIEW, OR TRAILER OR WHATEVER YOU CALL IT.;) IT WILL BE ENTITLED "PANDEMIC" AND IT WILL BE AN 'ALIEN BREED' STYLE OF A GAME. HERE WE CAN SEE A VIDEO SHOWING THE GAME: HTTP://TINY.PL/QN8WR. MOST INTERESTING, BY ALL MEANS.





FROM A LITTLE BIT OLDER STUFF FROM BOBS - 2013 - (THAT I STILL DIDN'T WRITE ABOUT) ALSO TWO MORE GAMES. ONE OF THEM ATTACK" ISOMETRIC "ANT Α ZX81 OF VERSION CLASSIC SPECTRUM THE GAME 1983. THE PROG REQUIRES RAM. LIKE BOBS HIMSELF WROTE: 'ONE LITTLE GHOST' PROVED THAT THE ZX81 WAS INDEED CAPABLE OF DOING JUSTICE TO AN ISOMETRIC GAME, AND SO I STARTED TO THINK ABOUT PUSHING FURTHER TO A GAME

WHICH HAD LAYERS OF BLOCKS - A PROPER 3D ISOMETRIC GAME. ANT ATTACK QUICKLY BECAME AN OBVIOUS CHOICE FOR THAT GAME". DOWNLOAD: HTTP://TINY.PL/QN85W AND FINALLY THE "QUACK!" GAME. IT IS A ZX81 16K VERSION OF THE "FLAPPY BIRD" GAME (PROLLY FROM MOBILE PHONES OR SOMETHING LIKE THAT). YOU JUST HAVE TO PRESS ANY KEY HERE, TO KEEP THE BIRD FLYING AND AVOID THE ONCOMING PIPES OR WHATEVER THEY ARE. IT IS A PURELY ARCADE GAME. I



KNOW THAT RALF WILL HIT MY MUG REPEATEDLY, BUT I LIKE THIS VER-SION BETTER THAN THE ZX SPECTRUM ONE. MAYBE BECAUSE IT IS A BIT SLOWER - HENCE: BETTER FOR US, OLD PEOPLE. :) DOWNLOAD: HTTP://TINY.PL/QN85K

#### SOME NEWS FROM PAUL

A VERY QUICK HACK OF WHAT WAS IMPORTANT FROM  ${f MY}$  POINT OF VIEW ONLY:

- 1) THE ZX-TEAM HAS A VERY SUCCESSFUL MEMBER, POKEMON.
- HIS **ZX81XRAM** IS A 32K RAM EXPANSION OFFERS 32K OF BASICRAM, WITHOUT THE NEED OF MODIFYING THE RAMTOP. IT PATCHES THE ROM ON BOOT TO CHECK FOR 32K INSTEAD OF 16K.
- HIS **ZX80CORE** IS A ZX80 FORMFACTOR RECONSTRUCTION WITH COLORLEDS SHOWING THE CPU STATUS AND BUILT WITH "MODERN" **TTL** PARTS. IT USES MICRO SWITCHES OR THE ZX80 MEMBRANE FROM RICH AS A KEYBOARD. ITS PCBCOLOR IS WHITE.
- THE **ZX80NMIX** IS A ADDON BOARD GIVING THE ZX80CORE THE **NMI GENERATOR** TO SWITCH IT INTO A **ZX81** (TOGETHER WITH ITS ROM). ITS SPECIALTY IS THAT IT IS OFF BY DEFAULT ENABLING ZX80 ROMS WITHOUT MOD.
- HIS <mark>ZX81CCP</mark> (CRYSTAL CLEAR PICTURE) HAS A SUCCESSOR. ITS CALLED ZX8-CCP AND WORKS FOR ZX81 AND ZX80CORE.
- 2) SOMEBODY ON EBAY SOLD <mark>HUNDREDS</mark> OF 2C210 <mark>ULAS</mark> FOR ZX81. THESE ARE WORKING AND A HELPFUL REPAIR FOR DEAD ZX81s.
- 3 FOR THE ZEDDYNET, WHICH IS SPREADING SLOWLY IN THE ZX81 COMMUNITY, NEW PCBS ARE AVAILABLE FROM MSCH. THE ZEDDYNET OFFERSETHERNET FOR THE ZX81, WITH CHAT PROGRAM, BROWSER, TNFS-CLIENT ETC. ITS COMPATIBLE TO THE SPECTRUM NET ADAPTER.
- 4) HOLMATIC DESIGNED A BRAND NEW COMPUTER. THE ZXNU, A ZX81 AND ZX80 COMPATIBLE COMPUTER WITHOUT ULA (ALL STANDARD TTL), THE BOARD IS COMPATIBLE WITH ZX81 CASES. IT OFFERS 128K OF RAM, 128K OF "INTERNAL HARDDISK" EEPROM AND A VDRIVE ADAPTER ON THE LEFT SIDE. IT HAS A "PATCHED" ZX81 ROM USING NEAR STANDARD LOAD AND SAVE ON THE VDRIVE OR INTERNAL DRIVE. AUTOBOOT PROGRAMS ARE ON THE TASKLIST FOR FUTURE EXPANSION.
- 5) <mark>SASCHA2000</mark> MADE <mark>MOUSEPADS</mark> WITH ZX80/ZX81/ZXSPECTRUM DESIGNS. THESE ARE VERY FINE AND STILL AVAILABLE ON SELL MY RETRO.
- 6) **KELLYMURTA** OFFERS HIS **JOY81** ADAPTER. IT CAN BE PROGRAMMED BY A ZX81 PROGRAM TO GIVE **ANY KEYS** OF THE KEYBOARD, SO ANY GAME WITH KEYBOARD SUPPORT WORKS WITH IT. IT OFFERS 4 OR 8 DIRECTIONS BY DEFINITION.
- 7) THE THING THAT MADE ME ABSOLUTELY MOST HAPPY WAS <mark>STEFANO BODRATOS</mark> PORT OF THE Z88DK CROSS COMPILER FOR ZX80 WHICH EVEN SUPPORTS FLICKER-FREE PROGRAMMING.

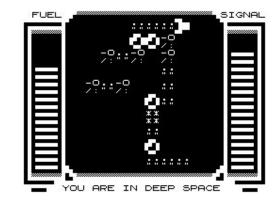
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# RESCUE80 (NO-FLIC GAME FOR ZX80!)



SEEMS LIKE WE HAVE ANOTHER NO-FLIC GAME FOR ZX80. THIS TIME IT IS "RES-CUESO" - A PROGRAM BY ZSOLT. IT'S A CONVERSION OF "INTERGALACTIC SPACE RESCUE" GAME FROM ZX SPECTRUM 16K AND ZX81 16K. SO NOW ALSO ZX80 USERS CAN ENJOY THIS REALLY GOOD AND PLAY-ABLE GAME. CONTROLS: S=UP, N=LEFT, M=RIGHT, X=DOWN, A=FIRE. THE GAME PROBABLY SHOULD USE ZONX SOUND (AND MAYBE EVEN MUSIC, YOU HAVE TO CHECK IT OUT) BUT AS FOR THE JOYSTICK - IT USES THE KEMPSTON STANDARD.

JUST IN CASE I WILL GIVE YOU TWO DOWNLOAD-LINKS BECAUSE I HAVE NO ZX80 COMPUTER AND HAVE TO TEST THE ON EMULATOR ONLY. THIS VERSION WORKED ON MY EIGHTYONE EMU-FINE: HTTP://TINY.PL/QN8FM LATOR (SOUND FX ONLY) AND THIS VERSION CONTAINS ALSO SOME ZONX MUSIC HTTP://TINY.PL/QN8FT BUT MAY RE-REAL HARDWARE, 'CAUSE QUIRE IT DIDN'T WORKED ON MY EO. ANYWAY, I CAN RECOMMEND THE GAME.



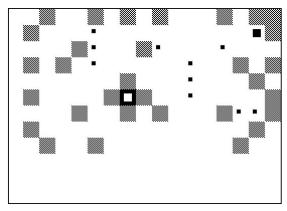
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#### MORE ZX80 GAMES

OK, LET US STAY FOR A WHILE WITH THE ZX80 PLATFORM. RWAP STARTED COLLECTING INFORMATIONS ABOUT NEW GAMES FOR THE MACHINE. HERE IS SOME SET OF THEM, FOR A DATE 04.2014.

- ADVENTURE 'A' - PLANET OF DEATH - BY ARTIC COMPUTING, CONVERTED BY STEFANO. RELEASE DATE: OCTOBER 2013. REQUIREMENTS: 16K. IT IS A CLASSIC TEXT ADVENTURE. DOWNLOAD: HTTP://TINY.PL/QN8JS

- "DTHELLO", ANOTHER GAME CONVERTED BY STEFANO INTO ZX80. IT'S A BOARD-GAME, ALSO KNOWN AS "REVERSI". REQUIRES 16KB OF RAM. DOWNLOAD: HTTP://TINY.PL/QN8PH - WOW, STEFANO MADE ALSO A CONVERSION OF THE "DEATH STAR" LOGIC GAME! YOU MIGHT KNOW IT FROM ZX81. NICE ONE. USES 16K TOO. KEYZ: QAOP, PLUS G AS QUIT, H AS RETRY AND M AS SWITCH. DOWNLOAD: HTTP://TINY.PL/QN8PT



- "REFLEX" (BY STEFANO, NO SURPRISE THERE). AN ARCADE GAME FOR 16K MACHINES. DOWNLOAD: HTTP://TINY.PL/QN8PW AND HERE YOU CAN FIND MANY SMALLER ZX80 GAMES FROM THE GUY: HTTP://TINY.PL/QN8P4

O BY YERZ

#### ZX-UNO: NEW ZX MULTIMACHINE



IT WOULD SEEM LIKE WE MIGHT HAVE ANOTHER ZX81 MODEL. THIS IT'S TIME KIND MULTIMACHINE' MORE SINCLAIR COMPUTERS IN ONE BOX (INCLUDING ZX80 AND SEVERAL ZX SPECTRUM MODELS, POSSIBLY ALSO THE SAM COUPE, WHICH IS NICE). THE COMPUTER HAS BEEN ZX-UNO. CALLED ΙT HAS THE SAME SIZE OF A RASPBERRY PI (85,60X56MM) SO IT WOULD FIT INTO A RASPI CASES. THE MA-IS FPGA CHINE VIDEO: COMPOSITE CONNECTORS: THROW RCA CONNECTOR, VIDEO RPI CASE COMPATIBLE; STEREO AUDIO THROW A 3.5MM STEREO JACK, RPI CASE COMPATIBLE; KEYBOARD: PS/2 CONNECTOR IN THE SAME PLACE OF THE ETHERNET CONNECTOR IN THE RPI CASE; POWER: REGULATED 5V THROW A MICRO-USB CONNECTOR, RPI CASE COMPATIBLE; JOYSTICK: DB9 ATARI PORT, IN THE SAME PLACE OF USB PORTS IN THE RPI CASE; STORAGE: SD CARD, RPI CASE COMPATIBLE; TAPE LOAD: 3.5MM JACK CONECTOR, NEXT TO THE JTAG/RGB CONNECTOR. NOT RPI COMPATIBLE, YOU MUST MAKE THE HOLE. PLUS SOME STUFF LIKE - EXPANSION: 3X14 MALE PIN HEADER, IN THE SAME POSITION OF THE RPI LAYOUT; JTAG AND RGB: 2X6 RIGHT ANGLE MALE PIN HEADER, IN THE SAME PLACE OF THE HDMI PORT IN THE RPI CASE. THE CONSTRUCTORS ESTIMATED THAT THE FINAL VERSION (MOUNTED AND PROGRAMMED) SHOULD COST AROUND 30 - 40 EUROS. FOR FURTHER INFORMATIONS CHECK OUT THE PROJECT'S SITE: HTTP://ZXUNO.SPECCY.ORG/

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#### NUCLEAR INVADERS!

IN 2014 KMURTA HAS RELEASED A VERY GOOD-LOOKIN' GAME FOR ZX81 16K "NUCLEAR INVADER". HE PORTED IT IMPROVED) FROM JUPITER ACE COMPUTER. THE GAME WORKS IN HI-RES MODE AND SEEMS LIKE THERE ARE TWO VERSIONS: CHR128 VERSION: 16K + 1K FOR CHR128 12288 CHARACTER GENERATOR AND WRX VERSION: 16K WITH SUPPORT. CONTROLS ARE: ENTER FIRE. (LEFT/RIGHT) AND AS SEEMS LIKE THERE'S ALSO THE ZXPAND SUPPORT AND SUPPORT, TOO. I LIKE THE PRODUCTION



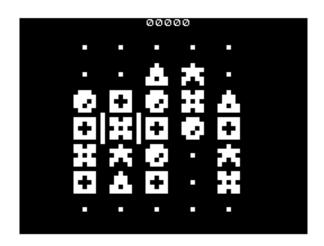
VERY MUCH, WELL DONE! LET'S READ WHAT THE AUTHOR INFORMS ABOUT: "THE SPACE INVADERS ARE BACK! IN 1977 THEY TRIED TO INVADE THE CITIES OF THE EARTH, AND FAILED. NOW THEY'RE BACK WITH AN EVIL PLAN: DESTROY NUCLEAR PLANT TO LEAVE THE PLANET UNINHABITABLE. WITH THE HELP OF OUR TANK YOU SHOULD AVOID THEM TO FULFILL THEIR OBJECTIVE. EACH LEVEL CONSISTS OF 30 INVADERS AND AS SOON AS YOU OVERCOME IT A LARGER NUCLEAR CENTER WILL ARISE AND INVADERS MUST TRAVEL LESS DISTANCE TO GET TO IT. DESTROY THE UFO THAT APPEARS AT THE TOP TO GET EXTRA POINTS". DOWNLOADS:

CHR128 VERSION: HTTP://TINY.PL/QN84P WRX VERSION: HTTP://TINY.PL/QN844

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# "<mark>SHIFTED</mark>" – FROM REVIVAL STUDIOS

OK THEN, ANOTHER GAME FROM THE RS. AS FAR AS I CAN SEE, IT I



STILL A <mark>COMMERCIAL</mark> PRODUCT, SO NO DOWNLOAD LINK THIS TIME. LET US SEE WHAT THE AUTHOR WROTE: "<mark>SHIFTED</mark> IS AN ACTION **PUZZLE** GAME THAT REQUIRES QUICK THINKING AND QUICK RESPONSES. YOU HAVE TO SHIFT COLUMNS UP AND DOWN ΤO COMBINATIONS OF GEMS ON THE CENTRE ROW. THE HIGHER THE COMBINATION, THE MORE POINTS YOU WILL EARN. HOW LONG CAN YOU KEEP SHIFTING?". THE CONTROLS ARE: O/P (LEFT/RIGHT) TO MOVE THE CURSOR, <code>Q/A</code> (UP/DOWN) TO SHIFT COLUMNS. E/I TO ROTATE THE CENTER ROW. ALSO WE CAN EXPECT THAT THE GAME HAS ZXPAND-JOYSTICK

SUPPORT AND THE AY ZONX SUPPORT. SOME MORE DATA FROM THE AUTHOR: "THE FULL GAME IS AVAILABLE ON CASSETTE TAPE AND AS DIGITAL DOWNLOAD. YOU CAN ORDER THE FULL GAME ON CASSETTE TAPE FOR: 7,99 EUROS, OR AS DIGITAL DOWNLOAD FOR: 3,99 EUROS BY EMAILING TO: SALES@REVIVAL-STUDIOS.COM. IF YOU BUY THE TAPE VERSION, YOU WILL OF COURSE GET THE DIGITAL DOWNLOAD FOR FREE". ANYWAY, CHECK OUT THIS SITE FOR MORE INFOS - AND POSSIBLY - TO PURCHASE THE PROG: HTTP://TINY.PL/H6245

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#### JOY81 - PROGRAMMABLE JOYSTICK INTERFACE

AS YOU ALL KNOW, I AM A HUGE FAN OF ZXPAND AND ALL THE RELATED

STUFF, LIKE ZXPAND-JOYSTICK FOR EXAMPLE. THERE IS A PROBLEM HOWEVER - TO USE IT WITH THE GAMES I LIKE, I HAVE TO BEG CODERS;) TO MAKE SUPPORT FOR THE DEVICE IN THE FORTHCOMING PROGS OR TO CRACK THE EXISTING ONES, FOR THE JOYSTICK'S STANDARD.

MEANWHILE - AND CONSIDERING I'M A
ZX81 GAMES FREAK - SEEMS LIKE I
COULD PUT MY DIRTY HANDS ON SOMETHING NEW, THIS TIME. THE JOY81 - A
PROGRAMMABLE JOYSTICK INTERFACE FOR
ZX81, MADE BY KMURTA. THE
CONTROLLER, LIKE THE CONSTRUCTOR
INFORMS, IS COMPATIBLE WITH ONE OR



TWO BUTTONS ATARI JOYSTICKS (SO THE STANDARD KEMPSTON PORT JOYS WE USE IN ZX SPECTRUM, FOR EXAMPLE) AND PROGRAMMING IT IS AS SIMPLE AS SETTING THE BASIC COMMANDS:

LET J#="QAOPXL"

**RAND USR 16514** 

OR EVEN EASIER, IF ONE HAS A ZXPAND INTERFACE. IN THIS CASE, THE PROGRAMMING IS BEING DONE AUTOMATICALLY BY ZXPAND COMMANDER FROM CONFIGURATION FILE **JOYCFG.TXT** STORED IN THE ROOT DIRECTORY. THE AUTHOR WRITES: "SET AN ENTRY FOR YOUR GAME IN THE JOYCFG.TXT ONCE



WHENEVER YOU AND LOAD IT COMMANDER, THE JOYSTICK MAGICALLY CONFIGURED. PLAY ANY GAME WITH THE JOYSTICK, DO NOT HAVE TO WORRY ABOUT CHANGING THE GAME CODE FOR IT ANYMORE". THE PROTOTYPE OF THE INTERFACE WAS NOT... THROUGH-CONNECT-ABLE, HAHA, OR SHOULD I CALL THIS HELL IN ENGLISH LANGUAGE. ;) IT HAD, BACK THEN, ONLY ONE ZX-BUS CONNECTOR. SO YOU WAS NOT ABLE TO CONNECT ANYTHING (AND YOU KNOW - THE ZXPAND ELSE. HAS ONLY ONE ZX-BUS TOO. SO - NO MUTUAL COOPERATION OF THOSE DEVICES FOR A REGULAR USER WAS POSSIBLE -

ONE HAD TO BUY SOMEWHERE A ZX-BUS EXTENDER, WHICH WAS AN ADDITIONAL EXPENSE). BUT LUCKILY IT'S A HISTORY, BECAUSE NOW THE JOY81 INTERFACE HAS BOTH: IN AND OUT ZX-BUS CONNECTORS! YAY! SO - HERE IS THE FORUM'S THREAD ABOUT IT, WITH ALL REQUIRES DETAILS: HTTP://TINY.PL/QNBCG THE COST IS 35 EURO (SHIPMENT INCLUDED).

C BY YERZ

## CHRIS RAYNAK STORIES (1)

I WAS "LUCKY" ENOUGH TO GET INVOLVED WITH THE ZX81 RIGHT WHEN IT WAS FIRST ANNOUNCED IN THE U.S. (1981 I THINK). AT THAT TIME I WAS ABLE TO GET ENOUGH MONEY TOGETHER TO PURCHASE THE ASSEMBLED VERSION OF THE ZX81. COMPUTERS LIKE THE IBM MODEL 1 AND APPLE WERE FINANCIALLY TOO FAR OUT OF REACH. BUT ONCE THE ZX81 ARRIVED AND WAS TURNED ON FOR THE FIRST TIME I WAS REALLY HOOKED! THE UNIT SHOWED UP WITH A NEWSLETTER CALLED "SYNTAX". IT WAS A QUARTERLY PUBLICATION, SIMILAR IN STYLE TO "MONOCHROME". THAT'S WHERE I FIRST FOUND OUT ABOUT ADD-ONS BEING AVAILABLE. LATER I HEARD ABOUT ANOTHER MAGAZINE CALLED "SYNC". SYNC MAGAZINE HAD LISTING FOR SO MANY ADD-ONS IT WAS HARD TO BELIEVE. IN THE FIRST ISSUE I RECEIVED, THERE WAS A SMALL ADVERTISEMENT FOR A COMPUTER CLUB IN MY AREA. THIS BEGAN MY JOURNEY INTO EXPLORING ALL THAT WAS "SINCLAIR"......

ABOUT THE PERIPHERALS I HAVE HAD / USED OVER THE YEARS..........
ONE OF THE REALLY GREAT THINGS ABOUT THE SINCLAIR LINE OF COMPUTERS IS MOST OF THE ADD-ONS AT THE TIME WERE CHEAP! I PURCHASED
MANY PERIPHERALS OVER THE YEARS. THE QUICKSILVA BOARDS I ADDED;
SOUND BOARD, CHRS HI-RES CHARACTER BOARD AND EXPANSION BOARDS
REALLY ADDED A LOT OF FUNCTIONALITY. I COULD BORE YOU WITH A
LIST OF ALL THE OTHER ADD-ONS I HAD IF YOU WISH, BUT NEEDLESS TO
SAY IT WAS SUCH GRAND FUN!

THE "FIRST" STORY......

OKAY, NOW THAT YOU HAVE SOME OF THE BACKSTORY, WE CAN MOVE ON. ON ONE OCCASION I HAD THE OPPORTUNITY TO PROVIDE A DEMONSTRATION OF THE SINCLAIR TO IBM. AT THE TIME, IBM HAD AN ACTIVE COMPUTER CLUB MADE UP OF ENGINEERS, MARKETING PEOPLE AND OTHERS THAT ACTIVELY GOT TOGETHER ONCE A MONTH TO NOT ONLY DISCUSS "PRODUCT" BUT TO DISCUSS THEIR OWN PERSONAL COMPUTING EXPERIENCES. IT WAS NOT UNCOMMON FOR ONE OF THEIR GROUP TO PLACE A "BULK" ORDER FOR MEMORY CHIPS, SO THAT THEY COULD POPULATE THEIR "QUADRAM" MEMORY BOARDS FOR THEIR PC1 COMPUTERS. SOMETIMES THEY WOULD INVITE OTHERS TO GIVE DEMO'S OF PROGRAMS THEY HAD WRITTEN, AND WOULD

HOW I BECAME INVOLVED WAS A PASSING COMMENT AT THE TIME FROM MY FATHER (WHO WAS A CUSTOMER SERVICE ENGINEER FOR IBM) TO ONE OF THE MARKETING FOLKS. HE MENTIONED THAT I HAD A SINCLAIR AND THEY EXPRESSED AN INTEREST IN SEEING IT.

HOOK THE PC1 TO AN OVERHEAD PROJECTOR SO THAT ALL COULD SEE.

I WENT TO THE MEETING THE FOLLOWING MONTH AND BEGAN TO THE HARD-WARE (WHICH AT THE TIME CONSISTED OF THE ZX81, A 16K RAM PACK, AND THE QS BOARDS DESCRIBED ABOVE. AS YOU CAN IMAGINE THERE WERE MANY POLITE "SNICKERS" AS THEY SAW THE HARDWARE AND REALLY WERE NOT EXPECTING TOO MUCH. DURING THE MEETING THEY WERE DEMONSTRATING A DRIVING PROGRAM. SORT OF A "FIRST PERSON VIEW" WHERE YOU HAD TO KEEP A CAR ON THE ROAD AND AVOID HITTING OBJECTS. THE GRAPHICS WERE PRETTY MUCH ON PAR WITH THE SINCLAIR'S.

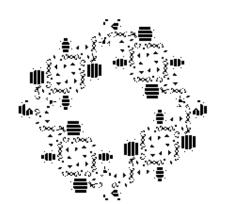
ONCE I HAD IT ALL SET UP, I ASKED IF I COULD USE THEIR OVERHEAD PROJECTOR PLUG (I HAD MODIFIED THE 81 FOR COMPOSITE OUTPUT) AND BROUGHT UP THE SCREEN, THEN STARTED TO LOAD A LITTLE PROGRAM. THE ENGINEERS WERE BUSY TINKERING WITH THEIR QUADRAM BOARDS, WITH THE OCCASIONAL GLANCE MY WAY. THERE WAS ONLY ONE GUY THAT REALLY SEEMED INTERESTED. HE WAS THE ONLY ONE INTERESTED THAT IS UNTIL THE PROGRAM LOADED.

I HAD WRITTEN A LITTLE TANK PROGRAM THAT I DECIDED TO BRING TO DEMO. NOTHING SPECIAL, BUT IT SHOWED SOME OF THE FEATURES OF THE QS BOARDS. WHEN THE PROGRAM STARTED, THERE WAS A LITTLE "MUSICAL" JINGLE AND YOU COULD HEAR THE TANK IDLING. USING THE JOYSTICK PORT ON THE QS BOARD, YOU COULD MAKE THE TANK DRIVE, TURN THE TURRET, AND EVEN FIRE A ROUND OR TWO! BOY DID THAT GET THEIR AT-

TENTION. APPARENTLY THAT WAS BEYOND OR VERY HARD TO DO WITH THE PC 1, AND THE ZX81 WAS DOING IT WITH EASE. SUDDENLY I HAD LOADS OF QUESTIONS. WHAT ADD-ONS COULD YOU BUY? HOW MUCH WAS THE SINCLAIR? WHERE COULD THEY GET ONE? HOW WAS IT THAT THIS COMPUTER COULD DO ALL THESE THINGS AND THE PC 1 COULD NOT? MY DAD JUST SAT BACK AND LAUGHED......

@ BY CHRIS RAYNAK

#### MACROLIFE ANIMATOR



IN 2014 GCHARDER HAS RELEASED (WRX) PROGRAM FOR ZX81 48KB (WELL, NOT SO SEE OF OFTEN ΤO THAT AMOUNT PAM HERE ;) ) . CALLED IT'S ANIMATOR". LIKE THE AUTHOR "BASI-SAYS

CALLY, THIS
PROGRAM WILL
RUN THE MACROLIFE ALGORITHM
ON A PRE-LOADED
BMP IMAGE,
CREATING SIX
FRAMES THAT CAN

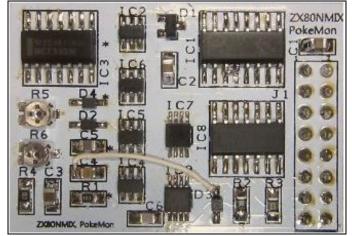
BE ANIMATED. DEPENDING ON THE IMAGE THE RESULT CAN BE QUITE FASCINATING TO
WATCH". THERE ARE ALSO INCLUDED IN THE
PROGRAM SOME PROPERLY FORMATTED BMP
FILES FOR USERS TO WATCH. DETAILED INFO
AND INSTRUCTIONS IN THE INTRO.P FILE.



YOU CAN DOWNLOAD THE PROGRAM FROM HERE: HTTP://TINY.PL/@KX8K

C BY YERZ

# ZX80NMIX - SLOW MODE ADAPTER FOR ZX80CORE



THE ZX80NMIX IS AN ADDITIONAL MODULE FOR THE ZX80 REPLICA ZX80CORE. IT ADDS AN ADDITIONAL NMI CIRCUIT WHICH IS USED BY THE THIS MODULE SUPPORTS ZX81 ROM. THE SLOW MODE OF THE ZX81 ROM WHEN USED IN ZX80CORE INSTEAD OF THE FAST MODE ONLY (WITHOUT ZX80NMIX). THIS MODULE CAN FITTED EASILY BY ATTACHING USING THE CONNECTOR J96 OF ZX80CORE. THIS MODULE IS READY USE AND CALIBRATED WHEN BUT DELIVERED COULD BE READJUSTED IN THE ZX80CORE FOR A

BETTER STABLE PICTURE.

THE BOARD HAS TWO TRIMMERS, R6. R5 ALLOWS ADJUSTMENT OF THE LEFT MARGIN OF THE VERY FIRST VISIBLE PIXEL ROW AND R6 ADJUSTS SCANLINE COUNTER DEFINES THE PIXEL ROW TO WITH. FOR THIS ADJUSTMENT A SMALL TEST PROGRAM IS NECESSARY THE WHOLE CHARACTERS. THERE SHOULD BE GRAPHICAL CHARACTERS USED AS WELL (INVERSE LETTERS) AND R6 SHOULD



BE ADJUSTED THAT INVERTED CHARACTERS ARE VERTICAL CENTERED AND

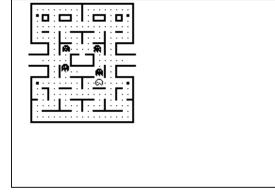
SHOW A BLACK PIXEL LINE ABOVE AND BELOW THE CHARACTER IMAGE. RS ADJUSTS THE FIRST PIXEL ROW WHICH SHOULD BE LEFT AND RIGHT BOUND TO THE REST OF SCREEN LINES.

THE ADJUSTMENT SHOULD BE DONE IN ENTER MODE ONLY, WHEN IT IS POSSIBLE TO ENTER COMMANDS (LIKE IN THE PICTURE AFTER ERROR 5/10, SCREEN FULL). DURING RUNNING PROGRAMS THE ADJUSTMENT OF R6 HAS NO EFFECT.

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## MORE NEW GAMES (YESSSSSS!) 1K, 16K AND MORE

LET'S DESCRIBE SOME MORE NEW GAMES HERE. "<mark>MICROMAN</mark>" BY <mark>STEFANO</mark>. A PAC-MAN STYLE ARCADE GAME IN HI-RES. THE AUTHOR INFORM "THIS IS A GAME I WROTE US: ΤO THE DEMONSTRATE THE CAPABILITIES OF STANDARD MONOCHROME GRAPHICS LIBRARY. PERFORMANCES BETTER THAN BASIC BUT NOT SO ENTHUSIASTIC, BUT DON'T BLAME THE COMPILER KIT.. THE GAME RELIES ONTO PORTABLE FUNCTIONS, WHICH MAY NOT BE (YET) OPTIMIZED FOR SPEED BUT THIS PERMITS A LOT OF FLEXIBILITY: IT CAN BE RUN ON A WIDE VARIETY OF TARGETS,



GRAPHICS SIZE CAN BE DETERMINED AT COMPILE TIME, AND SO ON. GAME KEYS ARE **0,0,0,0**". THE GAME APPEARED IN SEVERAL VERSIONS OF HIRES GRAPHIC THAT IS FOLLOWED BY VARIOUS SPEED. ENJOY: HTTP://TINY.PL/QKX6M

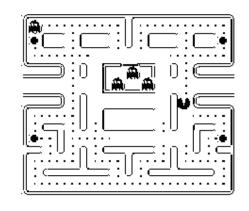
"MAZE-K" BY DANCRESP. IT'S A LABYRINTH GAME BUT IT IS VERY SLOW, I HAVE TO WARN YOU. HOWEVER - IT WORKS ON UNEXPANDED ZX81 MA-CHINES. SEVERAL WORDS FROM THE AUTHOR: "THE OBJECT OF THE GAME IS TO GET OUT OF A MAZE THAT HAS A SIZE OF 9X9 = 81 SQUARES. EACH GRID CAN DISPLAY BETWEEN 1 AND 4 WAYS, AND WE WILL MOVE WITH THE CURSOR KEYS 5, 6, 7 AND 8. THE "+" SIGN JUST TO THE RIGHT OF THE MAZE INDICATES THE DEPTH AT WHICH WE FIND OURSELVES. THE INITIAL POSITION IS RANDOM, AND LEAVING THE NUMBER OF MOVEMENTS PERFORMED IS SHOWN". DOWNLOAD THE FINAL VERSION: HTTP://TINY.PL/QKMXG

"MINESWEEP 1K" (AKA MINE-FIELD) BY DANCRESP AND DONKEYSOFT. ANOTHER 1K GAME. IT'S A "MINE SWEEPER" CLONE. DOWNLOAD: http://tiny.pl/@kmxc

"<mark>LIGHTS-OUT 1K</mark>", ALSO BY <mark>DANCRESP</mark>. DOWNLOAD: HTTP://TINY.PL/QKMXJ

"16K HIRES PACMAN" BY CHANCANASTA.

ANOTHER HI-RES PACMAN, THIS TIME FOR FULL-SCREEN. THE GAME IS VERY NICE BUT SOMEHOW THE SCREEN IS KIND OF DISTORTED ON MY EMULATOR. I HAD NO TIME TO CHECK IT OUT ON THE REAL ZX81 YET, SO IT IS POSSIBLE IT WORKS FINE THERE. DOWNLOAD: HTTP://TINY.PL/QKMX2



"<mark>VOYAGE OF PERIL</mark>" A RELEASE BY <mark>GCHARDER</mark> (ACHTUNG! ONE OF THE VER-SIONS REQUIRES EVEN 64KB OF RAM!). DOWNLOAD: HTTP://TINY.PL/QKMMK ANOTHER PROGRAM OF HIS - "<mark>ARENA</mark>" - THIS TIME FOR ZX81 16K ONLY. DOWNLOAD: HTTP://TINY.PL/QKMM6

AND FINALLY AN OLD GAME BUT NEW FINDING ;) MADE BY SIRMORRIS - A ZX81 VERSION OF "<mark>JETPAC</mark>" FROM 1982. FIRST SIRMORRIS NOTICED IT ON THE YOUTUBE: HTTP://TINY.PL/QKM3R AND THEN RWAP POSTED THE GAME ITSELF, THAT IS HERE: HTTP://TINY.PL/QKM39 PLEASE NOTE THAT YOU HAVE TO START THE GAME WITH COMMAND RUN 8000.

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## ZX81 PARTY 2014 (GERMANY)

SO, THERE WAS ANOTHER ZX81 MEETING IN MAHLERTS, IN 4-6 OF APRIL 2014. I HESITATED WHETHER TO RELEASE THIS MAGAZINE FOR THE PARTY BUT THEN I WOULDN'T BE ABLE TO DESCRIBE THE MEETING HERE, HEHE. I DECIDED TO WAIT THEN, TO RELEASE THIS ISSUE AFTER THE PARTY - WITH THIS ARTICLE INSIDE.;)



AS USUAL WE DEPARTED ONLY WITH MY BROTHER BECAUSE ZX SPECTRUM PEOPLE FROM DEMOSCENE (LIKE OUR CODER HELLBOJ) ARE TOO LAZY TO MOVE THEIR ARSE ANYWHERE FARTHER THAN TO THE TOILET.

THIS YEAR I HAVEN'T GOT ANY TICKET FROM SPEEDING, SO THAT'S THE FIRST BIG PLUS, HAHA. USUAL 10 HOURS TRIP WASN'T ANYTHING NICE BUT THIS TIME WE LEFT HOME MUCH EARLIER, SO MANAGED TO COME TO MAHLERTS IN A VERY REASONABLE HOUR, IN THE EVENING. PETER (THE



ORGANIZER) POINTED US A PLACE TO DECOMPRESS ;) OUR STUFF. IT SEEMS THIS TIME PEOPLE LIKE WITH SPECTRUMS HAVE BEEN SEPARATED, HA-HAHA, TO MAKE LESS NOISE OR AT LEAST - TO MAKE IT IN OWN ROOM. ;) I TOOK WITH ME THE SPECCY2010 ZX CLONE, UKRAINIAN DESIGN, AND HANDY, SMALL WITH BOARD/MOUSE ON PS/2 PORTS, VGA VIDEO, 2×AY SOUND, REASONABLE RAM (1024 KB CAN BE SET, IF RE-QUIRED), MASS-STORAGE ON SD CARD AND STRONG (OPTIONAL) CPU. THE MACHINE HAS BEEN BROUGHT PEOPLE TO TAKE A LOOK BUT ALSO THE

FIRST PART OF MY SATURDAY PRESENTATION ABOUT ZX MUSIC MAKING HAS BEEN SHOWN USING THIS MACHINE (AND PEOPLE THOUGHT IT WAS AN EMU-

LATOR, HAHA - SO WHAT WAS THE POINT IN MY ATTEMPTS TO BE OLDSCHOOL AND AVOIDING EMULATORS WHILE PRESENTATION! ;) ). ANYWAY, WE WERE NOT ABLE TO OPEN THE MACHINE'S CASE PEOPLE INTERESTED IN HARDWARE BECAUSE WE HAD TO GLUE THE STUFF WHILE PUTTING IT INTO THE BOX, HAHA. ;) INSTEAD OF THIS, I TOOK WITH ME ALSO A BOARD OF LOTHAREK'S SPECCY2010 VERSION (A PROTOTYPE). SUPPOSEDLY WILL BE CALLED SPECCY2020. SO PEOPLE WERE ABLE TO TAKE A LOOK AFTER ALL. AND THIS EVENING (TO THE LATE NIGHT)



WAS MOSTLY ABOUT DRINKING BEER AND CHATTING WITH GUYS, WATCHING NEWS IN SOFTWARE AND HARDWARE OF ZX81/ZX80 WORLD. PLUS SOME STUFF FOR SAM COUPE, ZX SPECTRUM AND SINCLAIR QL (THAT WAS CELEBRATING ANNIVERSARY IN THAT TIME; THE QL USERS HAD EVEN A BOTTLE OF CHAMPAGNE, HAHA! :) ).

THE SATURDAY WAS BASED ON PRESENTATIONS MOSTLY. PEOPLE SAW MANY THEM. INCLUDING THE MENTIONED SINCLAIR QL DEMONSTRATION SOME SORT, ALSO SOME MOVIES PRESENTATION BY JENS, AND SO ON. WATCHING THEM TOO ALTHOUGH YOU KNOW MY GERMAN LANGUAGE IS LIMITED TO "ACHTUNG" (SHAME ON ME!!), SO I CAN'T TELL YOU ANY REASONABLE DETAILS ABOUT THEM. ;) LIKE I MENTIONED, MY PRESENTA-TION WAS REFERRING TO THE MUSIC-MAKING SUBJECT. AND – TO BE EXACT MUSIC-MAKING ON SINCLAIR MACHINES. I FOCUSED ON YM/AY CHIP BE-CAUSE ONLY THIS ONE IS MUTUAL FOR ZX SPECTRUM AND ZX81/ZX80. SHOWED SOME MUSIC-EDITORS (TRACKERS MOSTLY), SOME SYNTHETIC AND DIGITAL SONGS AND ALSO SOME VIDEOS FROM CONCERTS OF MY MUSIC-BAND AY-RIDERS (WE PLAY MUSIC ON ZX SPECTRUM COMPUTERS).

SATURDAY ALSO, IN THE THOSE TOTALLY INSANE ZX81 PEOPLE ORGANIZED SKIPPING-ROPE COMPO!!! =8-D CAN YOU BELIEVE THAT?!? :) (YES, IT IS THE PHOTO!!!! ;) ). --> ANYWAYS. I HAVE SEEN INTERESTING OR EUEN **ASTONISHING** THERE, THAT THERE IS NO ENOUGH PLACE HERE IN THE MAG,  $T \cap$ THEM. NEW INTERESTING PROGRAMS, MACHINES (A ZX80 CLONE FOR INSTANCE, MENTIONED IN THIS CONVERSATIONS ISSUE ALREADY), AND MANY SINCLAIR-FANS AND OF COURSE - BEER AGAIN.



THIS PARTY-FACTOR SIMPLY MUST APPEAR. ;) THE ONLY SAD THING WAS THIS TIME ZX81 GUYZ FROM UK DIDN'T MANAGE TO COME (A PITYYYYY!!).

ESPECIALLY THAT TWO DS MACHINES WERE AVAILABLE AND ALL THE PEOPLE DROVE THE VEHICLES AS CRAZY. :) I'M SURPRISED THEY DIDN'T DESTROY THEM FINALLY.;) AS YOU CAN EASILY GUESS, I WAS LITERALLY THE ONLY PERSON ON THE MEETING WHO WAS TOTALLY UNABLE TO FORCE THE DAMN HELLISH MACHINES TO WORK AND DRIVE. SO I FINALLY RESIGNED. ESPECIALLY THAT I DON'T DRIVE WHEN I DRINK. AND I ALWAYS DRINK, SO I NEVER DRIVE.

WELL, IN GENERAL - IT WAS A GREAT MEETING, AS USUAL, EVERYTHING WAS EXCELLENT, AND BY THE WAY, I WOULD LIKE TO THANK A LOT TO WHOLE ZX COMMUNITY FOR HELPING US TO COME TO MAHLERTS THIS YEAR AND SAY A FEW WORDS ON THE PRESENTATION. I HOPE IT WASN'T BORING TOO MUCH.



ZX-81 IS LIKE THE TARDIS: MAYBE IT IS SMALL ON THE OUTSIDE, BUT ON THE INSIDE – IT'S GREAT!!!!