

# MICRO'S GAZETTE

ISSUE :- 003  
MAY/JUNE 1989  
\$5.00 AUST

Registered by Australia Post, Publication No. TBH 1099

FOR SPECTRAVIDEO AND MSX COMPUTERS

- This months issue includes
- Beyond Basic (Part 5)
  - 512 Colours on the X'Press
  - Last part to Lords of Time
  - Make your own RAM cartridges
  - Your letters answered



MSX II+ Hands on Review

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## EDITORIAL

Welcome to another fantastic issue of Micro's Gazette. We also most caught up this issue, but due circumstances beyond our control (Tony had to have his Wisdom teeth removed in a hurry) we got behind schedule. This was just as well, as the MSX 2+ review arrived at the very last minute. We have also received a fair bit of technical information from different subscribers and will hopefully use this for more informative articles.

Well thats enough of the introductions and now onto what we have for you this issue.

Alan Crawford returns with his adventure column this issue, concluding Lords of Time and making a start on Adventure Quest.

Tony's Beyond Basic continues with sprite collision detection routines as well as conversions for Spectravideo 318/328 owners. Tony also hints of a Machine Code for Beginners column coming your way soon!

The exciting introduction of our shareware software, which allows to get hold of an unbelievable amount of software for your computer (Sorry SVI owners, this ones only for MSX users). Also our new data base program, written entirely in machine code, is almost finished! (This will be available for SVI owners)

Your letters are answered in our rapidly growing letter column. All I can say is keep'em coming, the more you send the more we will answer and hopefully solve those problems hard and easy that have been bothering you

No news about Hard Disk or Disk drive controllers unfortunately, but we are still hanging in there and we have managed to secure disk drives for even cheaper prices (Including 5 1/4" drives). Also we have blank disks for \$30.00 per box of ten and 64K RAM cartridges. Those people out there that only have 32k machines can now increase the software available to them with this great cards. As well, for people who want to build their own, but do not know where to get the parts we have made a kit, so you can build your own and save yourself money.

On another note, we wish to point out that this magazine is a part time venture on our parts and we go to work during the day, just like most people. This means it is no use calling before 6.00pm as we will not be there! It is cheaper to dial after 6.00pm anyway! Also, orders are processed on the weekends and sent on Mondays, this means that depending when your order arrives it could take ten days from arrival to be sent (We also occasionally, have weekend off!). We enjoy doing the magazine, but we have to live as well, so please allow us a bit of leeway.

Well looks like I've waffled for long enough this issue. Happy computing!

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# MSX II+ REVIEW

by Craig Hursey

The SANYO PHC-70FD MSX2+ computer looks rather like something out of Star Trek, as it has no square edges and more lights than your local disco. The keyboard at first looks small and awkward due to the fact that three or more characters are displayed on each key, but in reality it is larger and also has a numeric keypad to the right. This does take a little getting used to as spotting the key you want takes a lot of concentration at first. Behind the keyboard (from left to right) are 2 MSX cartridge slots, the LED's for power, KANJI (Japanese characters) and CAPS, then (on a built up console) comes the Rensha controller with flashing LED, Pause button and finally the Double Sided disk drive. The positioning of the disk drive is good as (because it is front mounted) it allows a printer to be placed on the right or left hand sides of the unit without upsetting disc access. This does cause one problem, as while putting in a disc it is possible to press a key.

On the right hand side end there are the two joystick inputs, RESET button (which was found by accident) and the cassette port. Along the back (moving left to right) there is an MSX printer port, RGB, RF, audio and video outputs. The power switch is located on the right hand side end when viewed from the rear, and by the way, it is finished in black.

Some useful features are the caps lock toggle which when shift is pressed changes from capitals to lower case, or lower case to capitals depending on which is currently in operation (this is similar to the BBC computer).

The built in Disc drive is a major plus as it is double sided and allows 720k for disk storage rather than the 360k available with single sided drives. Unlike the X'Press, this disc drive stops within a second after loading is completed and is also very quiet in operation. To keep compatibility with MSX 1, the format command allows a selection of single or double sided discs and can be called from Basic or MSX-DOS. A noticeable difference is the time taken to save a file, this is because the MSX 2+ verifies all programs after it saves them (Hint: Disk BIOS call 2E turns this off - Ed).

The MSX 2+ has a number of features which have been updated from the MSX 1 and 2 models, these include extra resolution, life like FM sound (as standard), internal memory expandable from the standard 64k to a massive 256k, and of course MSX BASIC Version 3.0 which has all the MSX 1 and 2 commands (some of which have been updated) as well as another 26 new ones.

The way this machine displays its characters is also impressive, with five different sizes of double height (similar to the BBC's double height which are used to represent Japanese characters) and 80 columns in BASIC. The double height is great for entering BASIC programs, as the characters are very high resolution and very large, and still allow a 64 column display.

Although the manuals are in Japanese, we were still able to work out all but 4 Basic commands, and we hope to compile our own manuals shortly. The Basic demos which come with the SANYO were very impressive, they include digitized pictures in more colours than you would even imagine, FM MUSIC which allows 64 voices including Piano, Flute, Oboe, Guitar, Snare Drum, Organ, Trumpet, Hard Rock and another 56 more! There was also a demonstration of the Basic compiler, which does a loop to 1000 in about a fifth of the normal time.

For those who are more into the game side of things rather than writing their own programs, the few that we have would make any Amiga/Atari user convert to this new standard. These games range from \$18.00 to \$80.00 and are well worth the money. We also have a disk magazine called DISC STATION which has demonstrations of FM sound, digitized pictures etc. and is available for around \$20.00 per double sided disk.

There are also a few features which I have not fully mentioned, these include the built in RAM-DISK, capability to have four basic programs in memory at the same time (without using the RAM Disk!), Rensha Turbo which gives automatic auto repeat for all games and of course the PAUSE button which stops all computer functions including disk I/O. For around \$1100 this machine is very good value for money, and for the more dedicated user it will prove to be a good investment.

## Specifications for MSX 2+ SANYO

**CPU:** Z80A (running at 3.58 MHz)

**ROM:** 128k (48k Basic, 16k Disk Basic, 16k Basic Compiler, 16k KANJI ROM, 16 JIS 1)

**RAM:** 64k (Incorporates RAM-DISK)

**VRAM:** 128k

**GRAPHICS:** The following graphics modes are available.

### MSX 1 Screens

Screen 0: 40 by 24 Text in two colours

Screen 1: 32 by 24 Text in 16 colours (Limited to table)

Screen 2: 256 by 192, table mapped, 16 out of 512 colours

### MSX 2 Screens

Screen 3: 80 by 24 Text, 4 out of 512 colours  
Screen 4: 256 by 192, table mapped, 16 out of 512 colours

Screen 5: 512 by 212, bit mapped, 4 out of 512 colours

Screen 6: 256 by 212, bit mapped, 16 out of 512 colours

Screen 7: 512 by 212, bit mapped, 16 out of 512 colours

Screen 8: 256 by 212, bit mapped, 256 colours

### MSX 2+ Screens

Screen 9: Reserved for Korean models only

Screen 10-11: 256 by 212, bit mapped, 12499 out of 19268 colours

Screen 12: 256 by 212, bit mapped, 19268 colours at once!

\* Screen modes 4 and onwards use sprite mode 2

Sprite Mode 1: 32 Sprites, 4 per line, One colour per sprite

Sprite Mode 2: 32 Sprites, 8 per line, One colour per line of sprite

## High Scores

Send in your high score and receive a free Record Breaker sew on patch. Make sure you get a witness to sign your score and we will mail you your badge straight away.

Antartic Adventure	Damon Burn	67,660
Athletic Land	Jared Hyland	122,600
Battleship Clapton	Jason Vespa	70,400
Beam Rider	Richard Johnson	81,112
Buck Rogers	Jason Vespa	149,000
Circus Charlie	Damon Burn	24,340
Dungeon Advent.	Philip Brouwer	Level 3
Dorodon	John Knight	45,540
Exa Innova	Sean Davidson	75,160
Golf	Damon Burn	6 Under
Green Beret	Peter Cotter	116,300
H.E.R.O	Tony Cruise	128,000
Hyper Sports	P. Quinn	475,000
Kings Valley I	Peter Cotter	49,300
Knight Tyme	Craig Hursey	95%
Le Mans	Matthew Hyland	35,250
Lode Runner	Peter Cotter	279,575
Manic Miner	Kevin Tate	66,663
Mouser	John Knight	35,900
Pinball	B. Rankin	870,450
Pitfall II	P.J. Christie	199,000
Raid on Bungling	P.J. Christie	112,030
Road Fighter	Craig Hursey	190,235
River Raid	D. Olson	56,650
Scion	John Knight	131,400
Super Cobra	Jared Hyland	113,440
Sweet Acorn	Jason Vespa	174,380
Track & Field I	Peter Cotter	704,630
Wizards Lair	Damon Burn	94495 46%
Xroid	Brian Leonard	870,000
Zaxxon	John Knight	52,200

# LETTERS

## Info Wanted

Hello Again

Questions

1. The 'ROM' for the 738 X'Press - Has anyone tried to use it in a SV-328? What result??
2. Where can I contact 'Elektor Electronics' to subscribe??
3. Anyone interested in swapping public domain programs (CPM or Basic)
4. Where can I get in touch with "SMcNee", who is the gent that wrote a 'Custom' doublesided 'BIOS' for CP/M??
5. Has anyone pursued the 64180 (Z80 Superchip) and if so is it possible to use the SV as a 'Terminal' for it??

Now Some Info:

1. SMUG of Montreal is not putting out a newsletter as such - They have a 'BBS' instead.
2. The West German SV Users have a rewritten BIOS for the SV that has more memory and more features.
3. 'FOG' (Daly City, California) 'The Primo' source for CP/M is in financial trouble and needs more members and donations.

Write to: FOG

BOX 3474

DALY CITY, CALIF, 94015

U.S.A.

A Years membership = \$30 + \$18 [AIR] (US Dollars)

In issue 002, one of your adds refers to a 'Mitsubishi Standard' disk drive - I was under the impression that any 180k or 360k 48TPI drive that was 'IBM' compatible was usable on the 328 etc.

Matter of fact, I used several different brands as replacements for those troublesome SV drives, and, by tying a 1.5k (or 1k) resistor from 5V+ to pin 32 on a 360k drive, you force it into thinking as if it was a single side 180k drive!

The cheapest (USA) and also quietest I have found is the MITSUMI, it is very reliable and seems to stay clean longer

I have added the mini 12V fan (one each to SV328 and SV605) from Radio Shack (Tandy) and no more dippy problems after 12 hours of operation.

All for now...Keep up the good work

Your U.S.A. Booster... (Am I the only one?).

John Rudzinski

36227 Lamarra

Sterling Heights, Michigan 48310

U. S. A.

**Its nice to hear from you again! The answers to your questions are as follows:**

**1. The 'ROM' would not work in the SV-328 as the port addresses accessed in the chip are not the same as in the SV-328 (Also most software addresses the ports directly, so you could modify the chips so you could use MSX Basic software but little else). Plus the chip we have available so far only replaces the Disk and RS232 routines. The new chips which should be available shortly will require the MSX II video chip which only the X'Press has.**

**2. For subscriptions to Elektor Electronics write to**

**Elektor Electronics**

**Worldwide Subscription Service Ltd**

**Rose Hill, Ticehurst**

**East Sussex TN5 7AJ**

**England**

**3. Anyone interested in swapping software with John write to the address below (John can read SVI-318/328 Basic & CP/M with Single or Double sided Disks)**

**4. The last known address of Steve McNamie is 5/15 Stuckey Road**

**Clayfield 4011**

**5. I've heard of the new chip, but do not know any more (Can anyone out there help?)**

**I think the person in the add was referring to a non IBM compatible drive (Yes! there are some). For people wanting replacement**

**or extra drives for their SVI-328 turn to our mail order section.**

**Note:- John also sent some more CP/M and Basic public domain software which we hopefully will have ready soon. Once again thanks John!**

## Music Questions

Dear Sir,

I have several questions about the music writing operation of the CX5 which I have been unable to work out for myself from the rather basic manual which came with the computer. Would you or any other subscriber be able to help me with these, or know of any books which would explain them?

1. Can the music keyboard be played while using the FM Music Composer Software (ie to try out something before actually writing the notes on screen)?

2. Can a complete score be played from a point in the composition without having to go back to the beginning each time? (it is possible to play an individual part this way)

3. Is there a way to write portamento or glissando into a composition?

4. Why is there a midi input socket if this facility cannot be used?

5. Is there a disk drive available for use with the CX5 and does it need some type of adapter to connect it?

6. Is there a RAM cartridge available to store programs for quick access, ie for a phone index?

7. I would like to catalogue my cassette and record collection. Do you have or know of a program which will enable me to do this.

Tony Morgan

Valley Heights NSW

**Unfortunately we here at Micro's Gazette are not very musically inclined, so can anyone out there help Tony with questions one to four (Also any offers for a music column would be greatly appreciated!)**

**5. At the moment we can get disk drives for around \$200, but to use them on any other machine than a SVI-738 X'Press you need a controller cartridge. We are waiting for a response from our contact in Japan on a controller card after finding that to make one locally is at this stage not feasible.**

**6. Our latest project started last issue was**

for a 32/64k RAM expansion cartridge and we are looking at a version that would have battery backed RAM as well as some ROM software like Notebook, dairy

7. Due to be released at the end of July (Disk version - Tape version the end of August) is our Data Base. This will allow you to store lists of items, sort on any item, search for an item and print them out to a printer. It is written in machine code for greater speed and memory control.

### Saving Problems

Dear Sir,

I have an SVI-328 and I am using Justwrite Jr as a word processor and I am unable to save to tape or if it does save I am unable to return it to the computer. Another problem is that I bought a program on disk from public domain called Typing Tutor formatted Xerox S201L I get a listing of the directory but am unable to load the program. Could anyone help me with these problems. Thank you for Micro's Gazette

Helga Eder

Chetwynd VIC

The only thing we can think of that might be causing your tape recorder problems, is that the tape recorder is not saving correctly (tape recorders need regular cleaning, at least once a month). Also when you save the data file it is an idea to press play and record on the tape recorder first and allow the tape to run for at least two counts before pressing [ENTER].

We really need more information on what files are listed on the Xerox disk. Basically try running any file with an extension of .COM, but first format a disk using your CPM disk and then transfer all of the files using a file copy routine (not COPY or ICOPY) such as FCOPY or if you have two drives PIP. If this does not work you can send the disk in to us and we will try and transfer the files onto the correct format disk. (Please include return postage)

### Change of Meeting Time

Dear Sir,

I wish to note that the Melbourne MSX and SpectraVideo User's Group Inc meets at the Nunawading Library on the second Saturday afternoon of each month.

There seems to be some concern from some members of our club that they have missed one edition when the magazine was transferred to you.

Is it being produced 6 times a year? Also one member who suggested to you to print the Elektor articles did not see your thank you note as you stopped his subscription when he thought he had another copy to come.

John Halford

BLACKBURN SOUTH VIC

Thank you for the information on the Melbourne Users Group, it has been added to the User Group list.

The magazine is printed every two months (six times a year) and when we took over the magazine we were sent the subscription forms and a program on disk. The data files on the disk in most cases did not match the paper records, with even some of the paper records being missed out altogether! (Especially overseas subscriptions) So we wrote our own data base and re-entered the subscriptions from the paper records, calculating the number of issues remaining from the starting issue listed. This showed that they had made the mistake of listing quite a few people with one more issue than they were due. For an example a subscription started at Vol 2 No 3 was stated as expiring at Vol 3 no 3, this adds up to thirteen issues not twelve!

### MSX 2+

Dear Sir/Madam,

I read the 'NEWS' section of edition 001 of Micro's Gazette on the MSX2+ and boy does this computer sound good.

I would be very interested in getting one of these machines but as we know, money does not grow on trees so it could be a while.

They do however sound very good and could easily be compared with Amigas or the Atari ST's in every aspect.

I at present own an MSX1 but all the good software seems to be coming out on the MSX2 and because of this I would like to upgrade.

The new magazine is great, keep those software reviews coming and good luck in the future.

Troy Thompson

HORNSBY NSW

Since you are interested in the MSX2+ make sure you read our hands on review in our news section this issue! Also for more great MSX1 software turn to the software section where we start the shareware sec-

tion of MSX games that we cannot get supplies of any more.

### More SpectraVideo Support

Dear Sir,

First of all I would like to thank you for taking over the obligations of Computer Forum Magazine. With all the problems of finding software and hardware support for our computers it is good to have a magazine to rely on. Your past three issues show a high quality and I hope you may be able to maintain it for many years.

How ever like many people I would like to see a few more things in your magazine.

As the owner of a SPECTRAVIDEO 328 I would like to see a bit more on the early non MSX systems. It is understandable that MSX should take up most of your time being the system with the largest number of computers, however could you supply an SVI equivalent machine language program in your beyond basic series or an equivalent series.

Is it possible to give an SVI adaptation to the addons series. Note that the MSX adaptations in Elektor numbered 1 and 4 could possibly be modified to SVI as the signals used are the same as those used by MSX in these projects.

Would it be possible to do a series on the SPECTRAVIDEO and MSX systems going into detail as to the technical aspects of the system and it's peripherals down to the circuit board art work and adjustments, so that any one with a fault could go to a local repair man and use the information to help repair his system.

SPECTRAVIDEO has a technical manual however I feel that this does not go far enough and only covers the computer it's self and not the peripherals.

I have a SVI 902 disk drive currently under repair at Greensborough Computers Melbourne. The main problem at the moment is spare parts. Would you know of any places where they could be obtained.

I would also like to obtain the following for my system and the cost of each item.

- 80 Column Card (For 601 Expander)
- MSX Emulator
- Modem Software 802? 601
- RS232 card and it's operation
- Book on SpectraVideo Sprites

The SpectraVideo manuals give a listing of what all the pins in the expansion port do, however no information is given on the cartridge port. Does any one know what these pins do.

Thank you for your letter, we are trying to cover the SVI-318/328 computers as much as we can, but the simple fact is that we receive more articles for the MSX machines. Your question about the conversions for Beyond Basic were timed perfectly as Tony presents the conversions in this issue. Also about the addons section, at the moment we are just printing the projects straight from the Elektor Electronics articles, but we have been sent a project for a speech synthesizer for the SVI-318/328 computers and will print it after the next Elektor article. At the moment we do not even have a copy of the Spectravideo technical manual (Hint Hint!), but the thought of a hardware guide for both machines has crossed our minds. Unfortunately time has not been on our side, with the running of the magazine, all our new hardware products and the new Data Base program. After the Data Base is finished (that includes a SVI-328 version) we are going to work on a Word Processor and a few more games. Now since these are all written in machine code you will understand how much time and effort they take! As we have said before all help is muchly appreciated.

With your lack of an 80 column card you might as well join the que as they are a

very rare item, now if we had the circuit diagram we might be able to make some up (Yet another hint!)

The MSX Emulator is available in our software section, but be warned it only emulates MSX Basic and will only run machine code programs that only call the ROM and do not use any PORT statements i.e. BLAGGER (which is hardly any).

RS232 cards are still available from LPG software, but we do not have any modem software with instructions to go with them.

We are unsure about the availability of the Spectravideo Sprites book as it was last sold through the previous owners of the magazine.

For the expansion port details we must ask our readers for help, if you know please help out and send in a letter.

(Phew! that was a big one)

### Reset Switch

Greetings to MSX & SVI Users

For MSX-Users

Have you ever wondered about putting a reset button in your MSX. Well with most of my programs being on disk I found out that some of them will not load, so I got fed up with them and started to delete them. Then I saw a diagram of a reset switch in a Computer Forum magazine. So I

pulled my computer apart and put one in and tested it out fully. Some programs load into memory and then freeze, well what they need is 'A kick in the back side' by pushing the reset button and causing a warm boot 'Just like leaving your car running for a while'. After doing this the computer in a way switches it self off and displays the MSX-Logo and then boots up the program and you should be able to use it.

This mostly works with files containing .COM extensions on them but if any one has any other information about a reset switch, you might want to send in some information to the magazine. Lives pretty straight without a reset button.

Any MSX users interested in software swapping, then you can phone me, or write to the address below, and don't forget to send a list of the software that you have got.

I am a %100 swapper.

To all of the crew at Micro's Gazette keep up the good work as I know when I first started all I had was the disks that came in the box.

Brian Leonard

3 Elliott Street

Queenstown TAS 7467

PH (004) 71-1336

**Thanks for your letter Brian. I am sure all those people out there with disk drives will benefit from this information (Brian has a Spectravideo 738 X'Press).**

## ADVENTURERS ANONYMOUS

By Alan Crawford

Welcome once again to ADVENTURES ANONYMOUS. This month I conclude LORDS OF TIME and start ADVENTURE QUEST. But before I start there was a misprint in (MG 001) TIME ZONE 7. The SILVER COIN is swapped for a GALACTIC GROAT not a MILKY WAY. The GALACTIC GROAT is in turn used to gain entry to the SPORTS CENTRE.

### TIME ZONE 8

Take with you :- FIREFLY, PHIAL and DRINKING HORN

From where you enter zone 8, head North to the FORUM. Here you will find a BREAD STALL (West), VEGIE STALL (Northwest), TREASURY (North), BUTCHERS SHOP (Northeast), and a

TAVERN (East). The only place you are interested in is the TREASURY, where you find the GOLDEN BUCKLE. When you try to get the GOLDEN BUCKLE a GLADIATOR grabs it and runs South to the AMPHITHEATRE. You should then go South to the junction and West to the Temple steps, then go INto the TEMPLE. Here you should kneel and PRAY to get a pair of WINGED SHOES. Go OUT and East to the Junction, then Northeast to the Road Junction and East to the SPARTAN BARRACKS to find the LOCKER, go IN the LOCKER to find a NET and a TRIDENT, then its back to the Junction and South twice to the AMPHITHEATRE. Wear the WINGED SHOES and go into the AMPHITHEATRE. The WINGED SHOES allow you to leave the AMPHITHEATRE once inside. Here you will find the GLADIATOR and a LION, you will need to THROW NET and

then THROW TRIDENT to pin the NET over the LION. Get the GOLDEN BUCKLE and return to the road junction where you go Northeast to the CALDRUM, if you have water in the DRINKING HORN then go East to the HOT BATHS, if you needed some water to fill the DRINKING HORN then go Northeast to the STONE DOLPHIN where you find some water, fill the HORN and go South to the HOT BATHS. The exit South from the HOT BATHS is blocked by a GRATE, just PULL GRATE to remove it and go South into the HYPERCAUST. You will need to drink from the HORN at some stage inside the HYPERCAUST. To get through and back to the clock is S, W, W and S.

### TIME ZONE 9

Take with you :- FIREFLY, PHIAL, SHOVEL, MILESTONE, BUNCH of KEYS and all the INGREDIENTS that you currently have.

We have now reached the final time zone and we are ready to take on the evil TIME LORDS. But be cautious if you stay to long in one place you will be attacked and killed by various deadly creatures including a SCORPION and a SKELETON.

A FIELD of FLOWERS is where we begin the final

saga. Go South to an ARCHWAY, where you must DROP the MILESTONE. Continue South to a DEEP CRACK and DOWN to the BOTTOM of a PIT. Go West to the MAZE and South to the PUTRID CHAMBER, you will need to DIG a couple of times to find a BOTTLE. Then back to the PIT and South to the SQUARE WHITE ROOM, where you must UNLOCK the CAGES that you find to release the captives. Go South again to the WORSE LAB and UNLOCK BARS to release even more captives, this time you will be rewarded for your efforts with the BOX (EVIL EYE), which is the final INGREDIENT. Then its East to a junction and East again to the PLANT ROOM where you find a PLANT. Go IN the PLANT and South three times to the TANGLED ROOTS. Then its East twice to the END of TUNNEL and Up three times to the TOP of STAIRS. Here you will find a TRAPDOOR and a CLOAK (of INVISIBILITY). Wear the CLOAK and OPEN the DOOR and go UP to find yourself under a table. Go Up again to the TIMELORDS LAIR. East takes you to the MISTS of TIME and the CAULDRON. But remember if you stay too long you are DEAD MEAT. So throw the three remaining INGREDIENTS into the CAULDRON to destroy the TIMELORDS and complete the game!

## ADVENTURE QUEST

I've decided to split this game into six stages. Not of equal length but where it is advised to do a saved game. The stages are as follows:-1. From the START to the SNOWCAVE

2. From the SNOWCAVE to the GRAVEL BEACH
3. From the GRAVEL BEACH to the SOUTH DOOR
4. From the SOUTH DOOR to the DRAGON
5. From the DRAGON to the STONE BRIDGE
6. From the STONE BRIDGE to the END

During the game you will find four white DOTS and later four black DOTS. The black DOTS are above doors and by entering that door you transport yourself back through the game to the location with the corresponding white DOT. I do not recommend doing this however, as you may not now have an object which enables you to progress to that stage of the game.

As in many of the early LEVEL 9 Adventure games we start out by a Small Building in which we find a BOTTLE, BUNCH of KEYS, some FRUIT, a small SLING, a TABLE and one of the above mentioned white DOTS. During this stage of the game you will be persistently pursued by a pack of hounds, just throw something to get rid of them. First we take the TABLE and head South to the Sloping Gully where there is an ORCHID just out of reach. DROP and CLIMB on the TABLE to get the ORCHID. Then its North, North and East to the East Side of the Valley, here you find an ONION (Actually its garlic). You will need to eat it at some stage during the game. Go North to the Woodland where you will find the UNICORN, give the ORCHID to the UNICORN and follow it North to the Woodland Clearing where you find the MEDALLION and PAN PIPES. Return to the East

side of the Valley and go East to the Stone Pinnacle, climb Up to the top to find a SCROLL (READ it for directions) and a STICK (DROP it to produce FRUIT). EATING the FRUIT will warm you slightly when you are on the BLEAK MOOR towards the end of the game, but its not of any great importance. Then its back to the Small Building. From here go West three times and South twice to the Oak Tree. You will find a SILVER BALL here. To get back through the dense forest go North, North, East and then two Norths back to the Small Building.

We are now ready to tackle the TRACKLESS DESERT. This is a little tricky as you get very thirsty between the point where you enter the DESERT and the base of the MOUNTAIN, so you will need to have the BOTTLE filled with water with you at all times. From the Small Building go North twice to the Edge of the Fertile Land, and to get across the DESERT go North three times and then WEST and NORTH to the trackless desert above the CANYON, then three West's to the Rocky Outcrop. Just before you reach the Rocky Outcrop you will come across the SPHINX and the PYRAMID, the SPHINX guards the PYRAMID and must be destroyed to gain access to the PYRAMID. As you cross this part of the DESERT you will be followed by a giant WORM to your advantage here, by getting it to destroy the SPHINX. This is done by the following moves from the Edge of the Fertile Land (N, N, N, W, N, LOOK, E, E and E). When you CLIMB the steps of the PYRAMID you will be confronted by the SNAKES which guard the TEMPLE. PLAY the PIPES to get rid of the SNAKES and go IN to the TEMPLE where you find a RUBY. The Priestess in the TEMPLE will ask you for the SUN-DIAL and in return will give you the RUBY. So go back to the Rocky Outcrop and then its North to the Sheltered Wadi and three West's to a Stone Slab in the dry Eastwest CANYON. To OPEN the STONE try what Ali Baba said, inside the Treasure Cave you find the SUN-DIAL which you take to the Priestess to get the RUBY. Two West's from the Sheltered Wadi is the Dry Canyon and South takes you to the Oasis and the DJINN who blocks the way South. To get past him you need the BAG which is in the Black Tower up the Mountain.

From the Sheltered Wadi go East to the Base of the Mountain. Four North's take you to the Wide Stone Staircase with an exit West and an exit North. The North exit takes you to the South door of the Tower but access to the Black Tower is through the North door. So go West twice to the Climbing Path where you are confronted by a GIANT. If you have the SLING and SILVER BALL then SWING SLING to dispose of the GIANT and continue West and Up to the Stone Steps above the Tower. North of here is a pile of rocks which are used to kill the ORC'S that guard the Tower, to do this you must go up the mountain to the Snowfield where the SNOWMAN is chained up. UNLOCK the SNOWMAN and take him down to the Rock pile. When you PUSH the rocks the SNOWMAN will help you and the ORC'S will be destroyed. Go back down the mountain and South through the Tower until you reach the South Tower Room. East takes you to the Small Room with the ROPE, then West and Up three times to the small door. Go IN to the

Gloomy Room and THROW the RUBY, then North to the Aclove and the EMERALD EYE and LEATHER BAG. Take the BAG back to where you found the DJINN and OPEN BAG (its a bag of wind). Go South to find a LAMP and South again to find the TRIDENT. When you have taken all the objects needed to the Snowcave, fill the BOTTLE with OIL from the Sheltered Wadi and return to the Snowcave. TIE the ROPE to the Stalagmite and THROW the ROPE, which falls down the back of the cave. Then you must throw all the objects that you need, these fall into the river below and will be washed up on the Gravel Beach. The objects to throw are, the BOTTLE (of oil), BUNCH of KEYS, BAG of WIND, MEDALLION, TRIDENT, EMERALD EYE and finally the LAMP. This concludes STAGE 1. Save game before CLIMBing ROPE.

ADVENTURE QUEST continues next issue. If you need any help with an adventure that you are stuck on just drop a line to-ALAN CRAWFORD

9132 HUCKLE STREET

TUART HILL, PERTH 6060

Remember to include a S.A.E. This address is for help in adventure games ONLY, and any other correspondence should be addressed to the magazine. Till next time, bye for now, ALAN.

CONTINUED FROM PAGE 2

**Graphics Chip Commands:** High Speed Move (Blitter), Logical Move, Line, Search, Pset, Point (MSX 2+ Blitter has been improved for horizontal scrolling) The blitter allows the total of the Video RAM to be used for one big screen up to 1024 pixels high with a small window being displayed at one time

**STORAGE:** 3.5inch Double Sided Disk Drive (720k Formatted)

**SOUND:** PSG + FM Sound Generator(MSX-MUSIC)

PSG: 3 tone generators in up to 8 octaves with noise mixer

FM: 8 octaves with 9 tone generators or 9 octaves with 6 tones and 5 rythm generators, both with 64 voices (Instruments)

**I/O:** 2 MSX Cartridge Slots, Cassette Interface, RGB (analogue), RF, Audio and Video(B&W) outputs, MSX printer interface, two joystick ports

**MANUALS:** Japanese only!

**PRICE:** With Air Freight, 24% customs duty and power converter \$1100 (Using Surface Air lifted freight saves \$50.00 and Sea Freight saves \$100.00). These prices are approximate due the changing exchange rates. Most of the time the price ends up at least \$100.00 cheaper due to discounts

**AVAILABILITY:** You want one we will get you one. Firm prices at time of application.

# BEYOND BASIC

(Part 5) By Tony Cruise

This issue I will start to detail the collision detection routines to go with the automatic sprite routines from last issue. But first here is a list of the conversions from SVI-318/328 to MSX.

## Part 1

The SVI-318/328 use the port 8C to change slots. So to change between the RAM and ROM slots use.

ROM to RAM	RAM to ROM
LD A,0FH	LD A,(FE64H)
OUT(88H),A	OUT(8CH),A
IN A,(90H)	
LD (FE64H),A	
AND FDH	
OUT(8CH),A	

## Parts 2 Onwards

Here is a list of ROM calls, RAM locations and HOOK addresses to use instead of the MSX values.

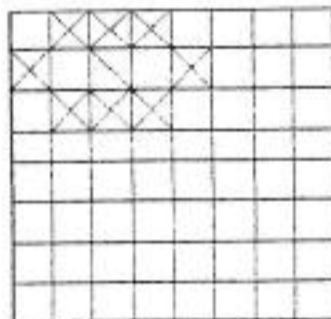
HGONE = FF57H, HTIMI = FF5AH, SCRMOD = FE3AH

SETWRT = 373CH, SETRD = 3747H

Change the following port calls to  
 OUT(98H),A becomes OUT(80H),A  
 IN A,(98H) becomes IN A,(84H)

This list will be expanded if necessary, each issue. Now onto this months routine.

Our routine will test the collision of one sprite (you specify) with all 31 others. A table of flags will be used to show which sprites the one specified is colliding with. The size each sprite will be specified by a X and Y width from 0 to 15 (There is no zero width, work out the real value and subtract one). For the routine to work effectively, your sprite shapes should be drawn from the top left hand corner of the sprite shape pattern.



eg. X width 5, Y width 2

To make the routine easier to understand I have split it into two sections. The section I will show this issue is the actual test routine, that test whether two specified sprites are colliding and setting the carry flag if so. The values of the registers on entry are:

HL points to sprite 1 VRAM table location  
 DE points to sprite 2 VRAM table location  
 B lower 4 bits, y width and top 4 bits, x width, for sprite 1  
 C lower 4 bits, y width and top 4 bits, x width, for sprite 2

## Machine Code Listing

	1 ; Subroutine to test the collision of two sprites
	2 ;
C0FA E5	3 ;
	4 ;
	5 ; Label settings
	6 ;
	7 SETRD EQU 0050H ; Video read
	8 ;
C0FA E5	9 START PUSH HL ; Save registers
C0FB D5	10 PUSH DE ;
C0FC C5	11 PUSH BC ;

C0FD 78	12	LD A,B	; Get Y velocity 1
C0FE E60F	13	AND 15	;
C100 47	14	LD B,A	;
C101 79	15	LD A,C	; Get Y velocity 2
C102 E60F	16	AND 15	;
C104 4F	17	LD C,A	;
C105 CD55C1	18	CALL RDVRM	; Get Y1 value
C108 80	19	ADD A,B	; Add velocity
C109 47	20	LD B,A	;
C10A EB	21	EX DE,HL	; Get Y2 value
C10B CD55C1	22	CALL RDVRM	;
C10E EB	23	EX DE,HL	;
C10F B8	24	CP B	; Hit?
C110 3040	25	JR NC,NOHIT	; No - Exit loop
C112 EB	26	EX DE,HL	; Get Y2 value
C113 CD55C1	27	CALL RDVRM	;
C116 EB	28	EX DE,HL	;
C117 81	29	ADD A,C	; Add velocity
C118 4F	30	LD C,A	;
C119 CD55C1	31	CALL RDVRM	; Get Y1 velocity
C11C B9	32	CP C	; Hit?
C11D 3033	33	JR NC,NOHIT	; No - Exit loop
C11F C1	34	POP BC	; Restore BC
C120 C5	35	PUSH BC	; Resave BC
C121 23	36	INC HL	; Increment pointers
C122 13	37	INC DE	;
C123 CB38	38	SRL B	; Get X velocity 1
C125 CB38	39	SRL B	;
C127 CB38	40	SRL B	;
C129 CB38	41	SRL B	;
C12B CB39	42	SRL C	; Get X velocity 2
C12D CB39	43	SRL C	;
C12F CB39	44	SRL C	;
C131 CB39	45	SRL C	;
C133 CD55C1	46	CALL RDVRM	; Get Y1 value
C136 80	47	ADD A,B	; Add velocity
C137 47	48	LD B,A	;
C138 EB	49	EX DE,HL	; Get Y2 velocity
C139 CD55C1	50	CALL RDVRM	;
C13C EB	51	EX DE,HL	;
C13D B8	52	CP B	; Hit?
C13E 3012	53	JR NC,NOHIT	; No - Exit loop
C140 EB	54	EX DE,HL	; Get Y2 value
C141 CD55C1	55	CALL RDVRM	;
C144 EB	56	EX DE,HL	;
C145 81	57	ADD A,C	; Add velocity
C146 4F	58	LD C,A	;
C147 CD55C1	59	CALL RDVRM	; Get Y1 value
C14A B9	60	CP C	; Hit?
C14B 3005	61	JR NC,NOHIT	; No - Exit loop
C14D 37	62	SCF	; Set carry flag
C14E C1	62 EXIT	POP BC	; Restore registers
C14F D1	63	POP DE	;
C150 E1	61	POP HL	;
C151 C9	62	RET	; Return from routine
C152 AF	63 NOHIT	XOR A	; Clear Flags
C153 18F9	64	JR EXIT	; Go yo EXIT
C155	65 ;		
C155	66 ;		Subroutine to read a byte from VRAM
C155	67 ;		
C155 CD5000	68 RDVRM	CALL SETRD	; Set screen location
C158 DB98	69	IN A,(98H)	; Get value
C15A C9	70	RET	;
C15B	71		
	72 END		



# ADDONS

## 64K RAM Expansion Cartridge

Reprinted from Elektor Electronics September 1988.

Here is the final part to this project and a new one will start next issue. Don't forget a full kit is available in our software section.

### Parts List

#### Resistors (+ 5%)

R1:R2 = 1K

#### Capacitors:

C1:C2 = 100n

C3 = 100u; 16V; axial

#### Semiconductors:

T1 = BS170 or BS170P (see text)

IC1: IC2 = 43256 or 62256 32k x 8 static RAM

IC3 = 74HCT32

#### Miscellaneous:

S1 = miniature slide switch.

PCB (See Software Section)

For test listing turn to the listing section

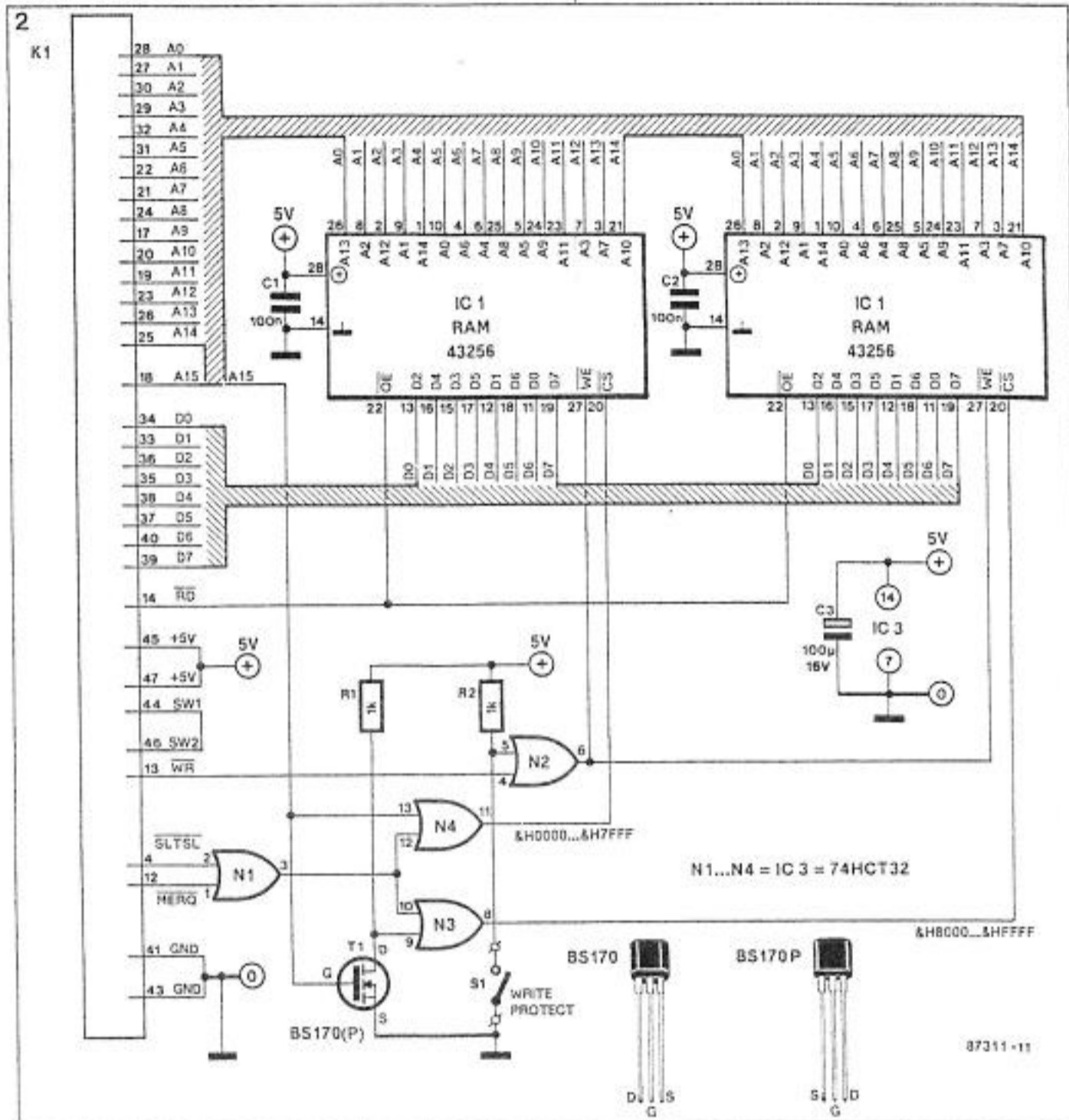
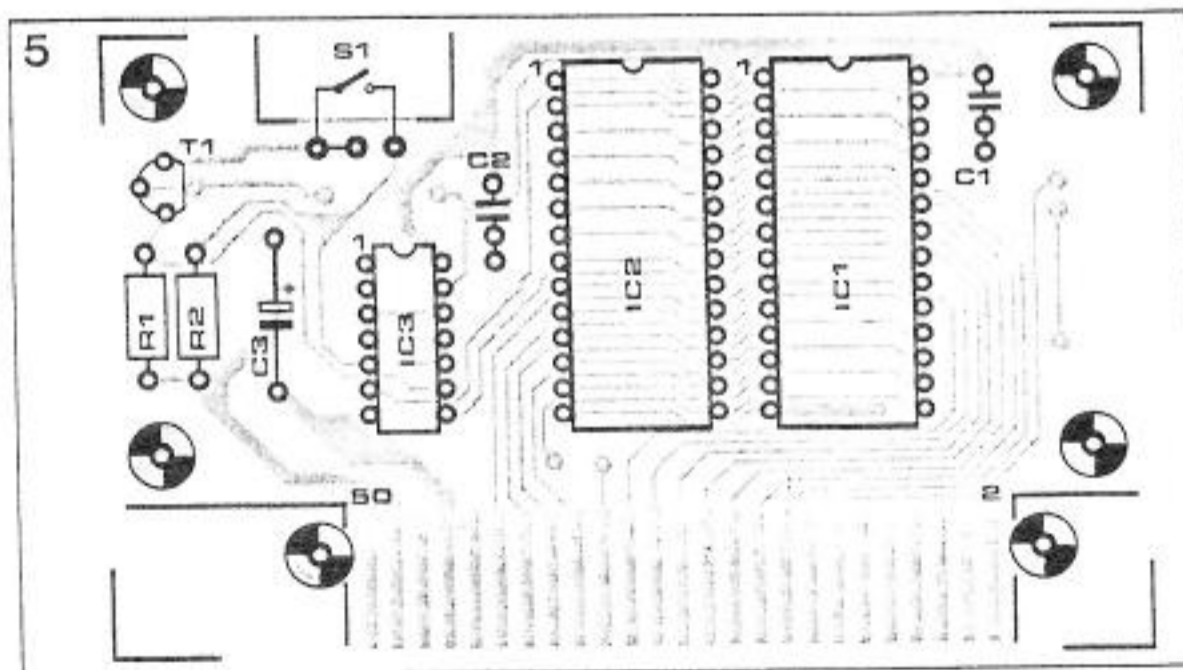


Fig. 2. Circuit diagram of the 32 Kbyte or 64 Kbyte RAM extension for MSX computers.



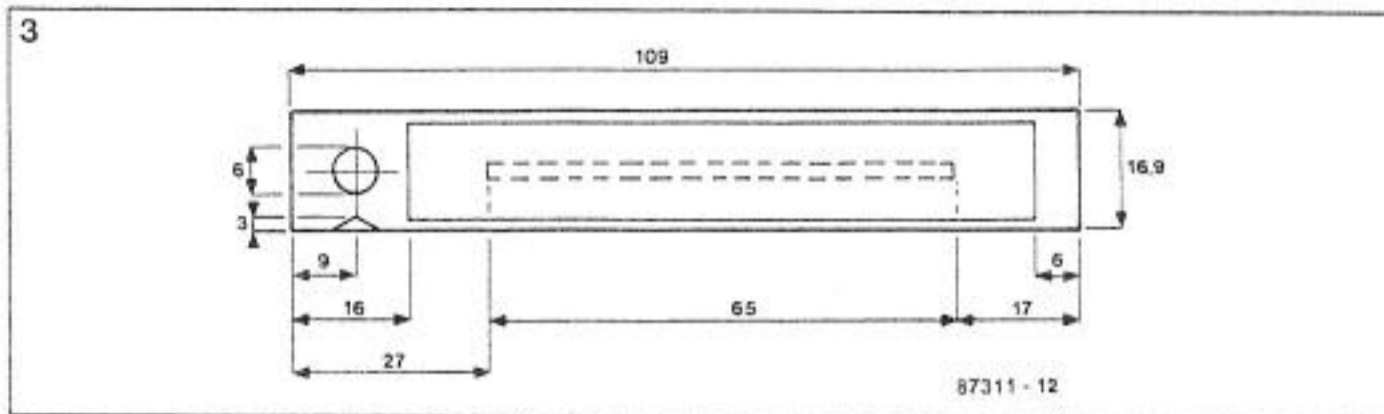
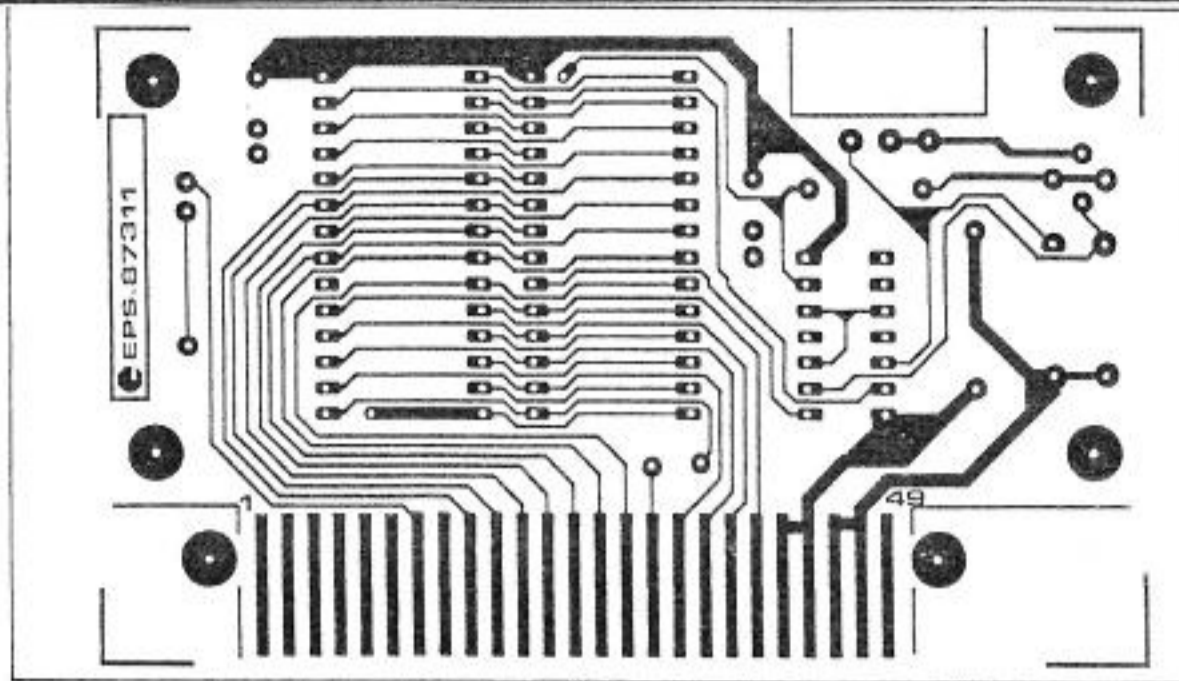


Fig. 3. Cutting and drilling details for the music cassette box.

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## **Program Pack I (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Lunar Lander** - You are in command of a lunar landing module trying to make a safe landing on the moon, but boy are some of those landing pads in strange places.

**Galactic Assault** - The alien invaders are coming to attack Earth, try and destroy them as they break formation and attack. For 1 or 2 players.

**Road Racer** - Try and survive on the road as long as possible without crashing into the other cars.

**Sprite Definer** - Design sprites to use in your own programs, with this useful utility. It caters for both sprite sizes and can rotate your shapes for you.

## **Program Pack II (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Hopper** - Help the frogs find their way home past a busy highway, a croc infested river and deadly snakes.

**Space War** - Two players fight it out in the space arena, the first player to hit the other ten times wins the game.

**Othello Challenger** - Play the computer or another player in this classic mind game where you must out flank your opponent to capture his pieces.

**Painter** - Explore the flexibility of your computers colours with this on screen paint brush.

## **Program Pack III (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Dungeon Adventure** - Are you brave enough to explore the deep and dangerous dungeon, where many monsters lurk, but the gains are great. Dungeons and Dragons style game, where you have to build up your character to succeed and capture the Great Orb on the fourth level.

**Bomb Scare** - Quick! you have to defuse the five bombs in a factory before they explode. Unfortunately some of the machinery has been left on, making your job very dangerous indeed!

## **Program Pack IV (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Explorer** - Watch out for the **Pitfalls** of this game as you search through the fifty screens for the gold bars, dodging crocs, scorpions, rolling logs and quick sand.

**Parachute** - Catch the paratroopers in your boat as they jump from a helicopter into a shark-infested lagoon. The more you catch, the faster they jump.

**Android Alert** - Move around the rooms collecting treasures and finding the key to the next level, but watch out for the killer androids.

## **Program Pack V (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Space Invaders** - Shoot the aliens before they invade your planet. Move your ship left and shoot missiles at the aliens. Shoot the mothership which passes over head for bonus points.

**Sub Hunt** - Drop depth charges on the attacking subs, while avoiding their missiles. The deeper the sub you hit, the more points you score

**Chicken** - Dodge the peak hour traffic with your chicken in this hectic game.

## **Program Pack VI (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Demon Attack** - Shoot the demon attackers as they swoop in to attack you, but look out for their rain of fire. What's this! they seem to be invincible until fully formed.

**Sea Diver** - Dive to the bottom of the river to collect the sunken treasure as scores of under water creatures try and attack you.

**Death City** - Battle it out in a maze of death against the computer in this fast paced game.

## **Program Pack VII (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Lunar Rescue** - Rescue the astronauts stranded on the surface of the moon in an asteroid shower. Drop defenseless to the surface, dodging the asteroids and pick up each man. You can now blast your way through as you slowly climb back to the rescue ship.

**Sky Base** - Shoot the kamakasi aliens as they swirl around the screen. Wipe out two waves, dock your ship and with your added fire power move on to attack the giant mothership.

**Quasimodo** - Jump and dodge the guards and traps as you try to ring the bell at the right of each screen. Great fun with six different screens and multiple levels.

## **Program Pack VIII (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Munch Man** - Race Munch Man around the maze dodging the nasty ghosts and eating the dots. Grab a power pill and revenge yourself for a short time.

**Escape from Planet Beta** - Can you escape from the Planet Beta before the planet explodes. Puzzle your way through this text adventure where you instruct the computer with two word commands light SHOOT GUN, GO NORTH.

## **Program Pack IX (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Artillery Fire** - Two players take turns at firing there artillery pieces at each other over a mountain range. The first one to hit the other ten times wins.

**Tennis** - This is a version of the classic Pong tennis game.

**Number Puzzle** - Slide the puzzle pieces around to get them in order in the least number of moves.

**Towers of Hanoi** - Try and move the different size disks from one of the three towers to the other in the least number of moves. A very challenging puzzle.

## **Program Pack X (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Gold Rush** - Collect all the gold nuggets scattered all over the screen, but to get to each one you have to get past dissolving platforms, radioactive plants and bouncing balls.

**Pyramid** - Find the fabled gem hidden in a pyramid lost deep in a desert. Another challenging text adventure game where you command the computer with two word commands like DRINK WATER, THROW STICK.

## **Program Pack XI (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Missile Command** - Stop the missiles from hitting your cities with your anti missiles. Be careful how many you use as you only have a small supply.

**Master Mind** - Try and guess the hidden colour code the computer has chosen with clues the computer gives you.

**Leaky Roof** - Quick! Catch the rain drops in your bucket before the room is filled to overflowing with water, but make sure you empty your bucket out of the windows.

## **Program Pack XII (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Mini Golf** - Play alone or with a friend on this mini golf course where you have to putt the ball around obstacles and into the hole.

**BlackJack** - Build up your money total as you pit your skills and luck against the computer banker

**Break Out** - Bust down the brick wall with your bat and ball, but look out it's harder than you think.

## **Program Pack XIII (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Space Fighter** - Shoot the alien attackers as they race attack you in formation.

**3D-Maze** - See if you can find your way out of this maze which is displayed on the screen in 3D.

**Surround** - Play against an opponent trying to surround them with your moving wall.

#### **Program Pack XIV (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Crazy Kong** - Jump the barrels as you make your way up the screen to rescue the girl. Next dodge moving platforms and girders and then finally collect all the bolts holding the Crazy Kong in place at the top of the screen.

**Star Base I** - Be amazed at the number of aliens and bullets that move about the screen in this very difficult space game.

**Lunar Lander II** - A brilliant sequel to the original Lunar Landing game which allows you to design your own landscapes to try and land your craft on.

#### **Program Pack XV (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Twister** - Like a two dimensional Rubiks cube, this game displays nine different coloured squares each containing four smaller squares. These 36 squares are then jumbled around on the screen and you must rebuild the original display. Its very simple and very addictive.

**Reverse** - Your task is to arrange the ten jumbled numbers into ascending order by reversing some or all of them. Check it out - its not easy!

**Fox and Geese** - Can you as the Fox penetrate the line of advancing geese and get to the other side of the board before they corner you.

#### **Program Pack XVI (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Grand Prix** - You are in the drivers seat in a race to the chequered flag while avoiding slower cars. Hitting another car or two wheels off the track will slow you down and lose points.

**Substrike** - Drop depth charges on the enemy below. The deeper or faster the target the more points you will score.

**Snake** - Move the snake around to eat the diamonds, but mind you do not cross your own tail.

#### **Program Pack XVII (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**City Bomber** - You must destroy the towering buildings of the city before you can land safely.

**Spectra Derby** - Place your bets and have a day at the races. Even if you lose its painless.

**Bug Catcher** - Two players move around the garden and the one with the most bugs caught - wins. Great for younger children.

#### **Program Pack XVIII (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Spectra Kong** - Win the lady's heart by getting to the top of the screen - but watch out for the falling barrels

**Tennis** - A colour version of the original black and white TV game.

**Musical Keyboard** - This program turns your computer keyboard into a musical keyboard and allows you to select note length and octave.

#### **Program Pack XIX (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Bombs Away** - Destroy targets in the ravine below. Be warned - it gets harder the more targets you hit.

**Mirkwood Forest** - Graphics adventure where you must escape from the forest by finding four keys, eating food to maintain energy, while avoiding spiders. This one will really test your adventure gaming ability.

**Chopper Pilot** - The fourteen levels of this game make it very compelling. Keeping clear of canyon walls, fly your helicopter to do battle with the enemy fighters, bombers, missiles and UFO's. Great skills required

#### **Program Pack XX (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Jumping Cowboy** - A 'platform' game of nine screens where you must collect all the opals to get to the next screen

**Super Smasher** - Move the bat to smash the ball through the two brick walls. Has three levels of difficulty.

**Fruit Catcher** - Catch falling fruit in your cart. As you catch more, the types of fruit will change and fall at a faster rate.

#### **Program Pack XXI (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Pro Golf** - Play a round of golf on this eighteen hole golf course with a selection of clubs.

**Astro Fighter** - Zap those alien invaders as they try and take over the Earth.

**Asteroid Shower** - Dodge the asteroids as they hurtle towards you down the screen.

#### **Edu-Pack I (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Copy Cat** - How long can you survive as you try and repeat the coloured sequences back that the computer plays to you.

**Memory** - Based on the card game memory, you have to try and collect more pairs than the computer can.

#### **Edu-Pack II (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Monkey Maths** - Help the monkey climb the tree and get the coconut by answering the maths sums correctly. Fifteen levels of play are available.

**Missing Letters** - Fill in the missing letters in the words the computer gives you. Over 300 stored words and the ability for you to enter more make this an excellent program

#### **Edu-Pack III (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**Table Invaders** - Shoot the invaders as they try and attack the Earth, but what's this! Your gun only seems to fire when you answer a tables problem correctly

**Hangman** - Try and guess the word before the man is fully hanged. Great version of a classic game

#### **Edu-Pack IV (MSX/SVI \$10.00 Tape \$15.00 Disk)**

**OZMap** - You must drive the car around Australia finding the places required as quickly as you can.

**OZQuiz** - Answer general knowledge questions about Australia and her people.

**Math Duel** - Makes practising maths fun! Has 4 levels of addition and subtraction maths.

#### **U.F.O (MSX Tape Only \$10.00)**

In this machine code game, you are under attack from UFO's. Watch out for the alien unit moving across the bottom of the screen - this will fire smart bombs. Watch out for the meteor shower and refuel when the truck appears on the screen. Requires 16k of RAM and has smooth scrolling, fast response with good sound effects.

#### **Meteor Swarm & Birds of Orion (MSX/SVI \$15.00 Tape, \$20.00 Disk)**

Two machine code games on one tape/disk! Meteor Swarm has you stuck in a meteor belt and you must blast your way out. Other ships are caught in the belt and will try and shoot you if you do not shoot them first. In Birds of Orion you must defend your Galaxy and against the alien invaders, but what's this! They look like birds.

#### **Munch Mania (MSX/SVI \$15.00 Tape, \$20.00 Disk)**

Race munchy around the screen chomping the pills and dodging the ghosts. Grab a power pill and get your revenge against the ghosts. Four different speed levels, written completely in machine code.

#### **Pyxidix (MSX/SVI \$15.00 Tape, \$20.00 Disk)**

Fast, action packed vertically scrolling shoot-em-up with three completely different screens, two speed levels, extra weapons and challenge stages. Written in machine code and using MSX/SVI graphics to the fullest.

#### **Video Graffiti (MSX/SVI \$20.00 Tape, MSX \$25.00 Disk)**

Draw colourful pictures with this easy to use painting package. It uses pull down menus and includes a zoom function for you to get the most out of your MSX/SVI computer. Written in BASIC and machine code.

### **Stranded (MSX/SVI \$15.00 Tape, \$20.00 Disk)**

Your have been shipwrecked on a deserted island and have to find a way the leave before night falls. This is a text adventure where you instruct the computer with two word commands like GO NORTH, CLIMB ROPE (Requires Extra Memory on the SVI-318)

### **Spectra-trivia & Compu-Trivia (MSX/SVI \$10.00 Tape)**

The famous trivia game now on your computer. These are trivia quiz games for up to four players. The computer rolls the dice and each player moves in turn. At certain points you will be asked questions. There is a provision for you to create your own question and answer file

### **Lethe Castle (MSX Only \$15.00 Tape)**

Try and solve the mystery of Lethe Castle in this graphics adventure of high standard.

### **Best of the Basics I (MSX/SVI Disk \$60.00)**

Super Basic Compilation including - Sprite Designer, Lunar Lander, Road Racer, Galactic Assault, Hopper, Space War, Othello Challenger, Painter, Dungeon Adventurer, Bomb Scare, Pitfall, Android Alert, Parachute, Space Invaders, Sea Diver, Memory, Copy Cat

### **Best of the Basics II (MSX/SVI Disk \$60.00)**

Super Basic Compilation including - Death City, Lunar Rescue, Sky Base, Quasimodo, Munch Man, Escape from Planet Beta, Artillery Fire, Tennis, Number Puzzle, Towers of Hanoi, Gold Rush, Pyramid, Monkey Mathematics, Missing Letters

### **Best of the Basics III (MSX/SVI Disk \$60.00)**

Missile Command, Master Mind, Leaky Roof, Mini Golf, Black Jack, Break Out, Space Fighter, 3D-Maze, Surround, Crazy Kong, Star Base I, Lunar Lander II, Table Invaders, Hangman

## **Hardware**

**X'press ROM version 1.2 (\$40.00)** - Eliminates the need for the disk patch and allows you to use double sided 3 1/2" disk drives externally or internally. Comes complete with full installation instructions

**MSX Printer cable (\$50.00)** - Full 2 metres long allowing you to connect up to any Centronics compatible printer.

**Add on Double Sided 3 1/2" Disk Drive (\$220.00)** - Connects up to your X'press computer letting you store and extra 720k of data. Or install the drive inside your computer and use the cable to use the single drive already in the machine. Please note you require ROM version 1.2 to use these drives. (Internal mounting brackets are \$10.00)

**Internal Double Sided 3 1/2" Disk Drive (\$200.00)** - Bare drive that replaces the single sided drive currently in the machine letting you store 720k on each disk instead of 360k. Includes a new set of mounting brackets. Please note you require ROM version 1.2 to use these drives.

**MSX Cassette Cable (\$15.00)** - Connect your MSX up to standard tape recorders.

**Box of 10 Blank 3 1/2" Disk (\$30.00)** - Double sided, double density disks. (Will fit single sided drives as well)

## **CPM Software (All \$10.00)**

ORMATS AVAILABLE - SVI-318/328 SINGLE SIDED 5 1/4", MSX SINGLE SIDED 3 1/5", MSX DOUBLE SIDED 5 1/4"

**Z80 Assembler**

**Z80 Disassembler**

**Fast Full Screen Text Editor**

**Utilities Disk 1-** Includes FCOPY, NULU, NULUDOC, MFT, NSWP2, CLS

**Utilities Disk 2-** Includes ADM3, ADM3A, NULU12, CPMADR, CPMCALC, CPMPOWER, MEM24, MEM32, MEM6, MEM8, SORTDIR, SS/DR-B, SUPERZAP, SURVEY, WASH, XDIR5 (Supplied by John Rudzinski)

Please note that some of these Utilities are SVI-318/328 specific.

**Advent80** - The original 128k adventure game

**Zork I** - Part one of the famous INFOCOM adventure

**Hitch Hikers Guide to the Galaxy** - Humourous adventure game based on the popular book by Douglas Adams.

## **SHAREWARE (MSX ONLY)**

This is our new addition to the software section. The following titles are comercial MSX I games that are no longer possible to buy in Australia as originals. This is totally a non profit offer, all programs are only \$5.00 each plus either \$5.00 for disk or \$2.00 for tape. Each disk can hold up to six programs and each tape can hold two. When you order your order must come to more than \$10.00 eg if you order your software on tape you must buy at least two programs, making it \$12.00 for your order. Please note, this software will only work on full 64k MSX machines, if you wish to get this software and your machine only has 32K RAM then you will need to buy one of the memory expansion cartridges. Please state your machine brand and number when you order.

### **Shoot-em-ups**

Battleship Clapton II  
H.E.R.O  
Scion  
Star Blazer  
Galaga  
Galaxia  
Super Cross Force  
Beam Rider  
Army Moves (Part 1)  
Army Moves (Part 2)  
River Raid  
Exerion  
Guardic  
Zexas  
Trantor  
Buck Rogers  
Space Walk  
Polar Star  
Sky Jaguar (\*)  
Alpharoid (\*)  
Time Pilot (\*)  
Exa Innova (\*)  
Adonis (\*)  
Jet Bomber (\*)  
Volguard (\*)  
Green Beret (\*)  
Space Busters (\*)  
Hydride (\*)  
Car Fight (\*)  
Battle Cross (\*)  
Choplifter (\*)

### **Action**

Hunchback  
Panel Panic  
Raster Scan  
Boulder  
Pyramid Warp  
Vacuumania  
Skate Dragon  
Outroyd  
Boulder Dash I

Boulder Dash II (\*)  
Sweet Acorn  
KraK Out  
Blagger  
Mutant Monty  
Mr Do's Wild Ride  
Chiller  
Gun Fright  
Turmoil  
Pinball  
Antartic Adventure (\*)  
Ghostbusters (\*)  
Athletic Land (\*)  
Xyzolog (\*)  
Chimachi (\*)  
Mac Attack (\*)  
Magical Tree (\*)  
L.C.E (\*)  
Warroid (\*)  
Arkanoid (\*)  
Mouser (\*)  
Alibaba and the Forty Thieves (\*)  
Boogaboo the Flea (\*)

### **Racing Action**

Formula #1 Simulator  
Speed King  
Grand Prix  
Hyper Rally (\*)  
Le Mans (\*)  
Road Fighter (\*)  
Hang On (\*)

### **Action Adventures**

Spy vs Spy II  
Pitfall II  
Wizards Lair  
Avenger  
Mutant Monty  
Knight Tyne  
Future Knight  
Batman  
Lode Runner I (\*)

Lode Runner II  
 Dota  
 Terminus  
 Star Quake  
 Alien 8  
 Nightshade (\*)  
 Cosmo Explorer (\*)  
 Raid on Bungling Bay (\*)

**Strategy**

Spectra Trader  
 Spitfire 40  
 Ocean Conqueror  
 Minder  
 Kuma Chess  
 Cluedo  
 Cyrus II Chess (\*)  
 Traffic Controller (\*)

**Sports**

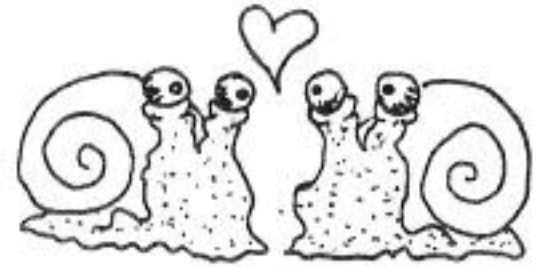
Baseball  
 Decathlon  
 3D-Golf  
 Draughts  
 MSX-21  
 Steve Davis Snooker  
 Samantha Fox Strip Poker  
 7 Card Stud Poker  
 Tenth Frame Ten Pin Bowling  
 Billiards (\*)  
 Ping Pong (\*)

Hyper Sports I (\*)  
 Hyper Sports III (\*)  
 Hyper Olympics I (\*)  
 Hyper Olympics II (\*)

**Martial Arts**

International Karate  
 Kungfu Master  
 Ninja I (\*)  
 Ninja II (\*)  
 Yie Ar Kungfu I (\*)  
 Yie Ar Kungfu II (\*)

(\*) INDICATES TITLE IS ONLY AVAILABLE ON DISK AND WILL NOT AT THIS STAGE WORK FROM TAPE.



# ORDER FORM

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# LISTINGS

## Entering Listings

The listings in each issue have to be printed, most of the time for the two different machines. When this happens the complete listing for MSX owners will be printed and then the lines you should replace for the program to work on SVI-318/328 machines. This way space is not wasted by printing the same line twice, since the two machines only have slight differences.

You will notice each new line of a listing has two letters to the left of the line. If you are typing in a listing and not using the program INPUT (explained next) **DO NOT TYPE THESE IN** as the computer will not understand. Also when you enter listings be careful not to get the letter 'O' and the number '0' mixed up. The number '0' is now printed with a slash '/' across it to help you recognise it.

The only errors that can be in our listings are either ones that were in the original program and mistakes made when you type them in. Each listing is taken straight from the computer using a listing program and pasted into the magazine.

## Program Input

Program Input allows you to enter the listings using the two letter checksum at the start of each line. After you have typed in a line, the program will tell you if you have made any mistakes and let you correct them. Only the spaces marked by the small triangles are counted (usually in PRINT statements) by the program, so you can leave out all other spaces if you want. Basic does not really care where you put spaces except if they are in the middle of a statement e.g LOCATE not LO CATE

The line must be exactly the same otherwise the program will not accept it. We will update the INPUT program gradually so it becomes easier to use.

To use the program, type it in slowly making sure you do not make any mistakes. Save it to a tape (as detailed below) and then type RUN and press the [ENTER] key. Now the program will ask you if you want to load a program you have been working on previously. Just press 'N' if you are starting a new program. The screen will now clear and details of which line you are on and where the cursor is on the screen are shown at the top of the screen. You can now type in one of the listings, make sure you have a blank tape handy to save the program on.

If you are editing a program you have been working on previously insert the tape or disk you saved the program on and follow the instructions on screen. This feature allows you to type the program in over several sessions instead of all in one go.

## Saving Programs to Cassette

After typing in a program type **MOTOR ON** and press the [ENTER] key

You can now position your tape to the place you want to save your program. As a general rule, leave at least two counts on your tape counter at the start of each new tape.

To save your program type,

## CSAVE"NAME"

(NAME should be the name of the program you are saving e.g SKI-JUMP) and press the **PLAY** and **RECORD** buttons on your tape recorder. Let the tape wind for a couple of seconds and then press [ENTER]

After a period of time, which depends on the length of the program the Ok prompt will come up on the screen. Your program is now saved to cassette. But how do you know it was saved correctly? Easy you can check by doing the following.

Type **MOTOR ON** and press the [ENTER] key.

You can now rewind your tape to where you saved the program.

Now type **CLOAD?** and press the **PLAY** button on your tape recorder and then press the [ENTER] key.

After a couple of seconds the computer should print **FOUND:NAME** and then after a short while the Ok prompt will appear.

If the computer printed up **DEVICE I/O ERROR** or **VERIFY ERROR** you know that the program has not saved to the tape correctly. If this happens, try saving the program one more time. If the error happens again and in the same place, the tape you are using is damaged and you should use another. If you get an error but in a different place on the tape your tape recorder may need cleaning.

## Saving Programs to Disk

To save a program to disk use the following command.

**SAVE "NAME"** for MSX machines

**SAVE "1:NAME"** for SVI-318/328 machines

## Reloading Programs

To load a program that you have type in using program input from tape, insert the tape you were using, positioning the tape to the spot where you recorded the program and type.

**LOAD"CAS:"** and press the [ENTER] key

You can now save the program using **CSAVE** so it loads quicker and uses less tape.

To load a program that you have typed in using program input from disk, insert the disk you were using and type.

**LOAD"1:NAME"** for SVI-318/328 users

**LOAD"NAME"** for MSX users

Once loaded your program can be saved normally so it takes up less disk space.

To load a program from tape that you have saved using the **CSAVE** command just insert you tape, positioning the tape to the spot you saved the program at and type.

**CLOAD"NAME"** and press the [ENTER] key

To a load a program from disk that you have saved using the **SAVE** command just insert your disk and typr.

**LOAD"1:NAME"** for SVI-318/328 users

**LOAD"NAME"** for MSX users

## Balloon Rescue (MSX and SVI-318/328)

Originally published in the September 1985 issue of MSX Computing by D. Phillpott. In the game you have to pilot your balloon to the top of a building to rescue a trapped man. The only control you have of the balloon is the heat jet which heats up the air inside making you rise. To move left and right you have to position the balloon in one of the air currents shown by the moving clouds. To make the game even harder, you have to land the balloon right on the landing pad while dodging a low flying plane. This game is worth the type! Use the spacebar to control the heat jet.

### MSX LISTING

```
CP 10 REM ** BALOON RESCUE **
AN 20 REM ** BY D.PHILLPOTT**
AH 30 REM ** SEPTEMBER 1985**
CK 40 OPEN"GRP:" AS#1:GOSUB 1040
AN 50 COLOR1,5,1:SCREEN2,2,0
AO 60 GOSUB 880
EF 70 SOUND 7,60
AO 80 PLAY"V12T17004D2.C#DFA#2.A#AA05C04A#AA#DFA2.", "V10T17003DR.
    2C#R2FR202A#R203FR2ER2FR2CR2"
EA 90 BL=5:GOSUB 700
DO 100 C1%=220:C2%=40:P1%=250
HM 110 P2%=0:KBX=0:BX%=45
DB 120 BY%=152:X1=0:Y1=0
DB 130 PUTSPRITE6,(129,17),10,5
BB 140 SPRITE ON
DD 150 IF STRIG(0)=-1 THEN U=-.2:SOUND7,51:SOUND 6,31:SOUND 8,10:
    KBX=KBX+1:IF KBX>950 THEN KBX=950
FB 160 IF STRIG(0)=0 THEN U=.2:SOUND8,0
DN 170 Y1=Y1+U
EN 180 BY%=BY%+Y1
DL 190 IF BY%>12 AND BY%<36 THEN F=-.2ELSEIF BY%>58 AND BY%<84 T
    HEN F=.2ELSE F=0
GH 200 IF F=0 AND X1>0 THEN X1=X1-.2 ELSE IF F=0 AND X1<0 THEN X1
    =X1+.2
FG 210 X1=X1+F:IF X1>3 THEN X1=3
DB 220 IF X1<-3 THEN X1=-3
FC 230 BX%=BX%+X1
AI 240 FORN=1TO25:NEXT
JI 250 IF BY%<-5 OR BY%>160 THEN 470
CD 260 IF BX%<5THEN BX%=250
DE 270 IF BX%>250 THEN BX%=5
CL 280 PUT SPRITE 5,(BX%,BY%),11,4
CK 290 PUT SPRITE 4,(C1%,24),15,3
CK 300 PUT SPRITE 3,(C2%,70),14,3
AC 310 C1%=C1%-3:C2%=C2%+3
CI 320 IF C1%<5 THEN C1%=250
CH 330 PUT SPRITE 2,(P1%,144),10,2
DN 340 IF SC>1500 THEN PUT SPRITE 1,(P2%,105),15,1
BH 350 P1%=P1%-4:IF P1%<0 THEN P1%=255
CA 360 P2%=P2%+2:IF P2%>250 THEN P2%=5
AK 370 ON SPRITE GOSUB 420
AP 380 SPRITE ON
CD 390 IF M<>1 THEN GOTO 150
AA 400 IF BY%>152 AND BY%<156 AND BX%<211 AND BX%>199 THEN 550
AK 410 GOTO 150
DI 420 SPRITE OFF
KB 430 IF BY%>133 AND BY%<153 AND BX%+10>P1% AND BX%<P1%+10 THEN
    470
LI 440 IF BX%<134 AND BX%>119 AND BY%>1 AND BY%<11 THEN PUT SPRIT
    E 6,,0:M=1
BG 450 IF BY%>93 AND BY%<115 AND BX%+10>P2% AND BX%<P2%+10 THEN 4
    70
BO 460 RETURN
AJ 470 SOUND8,0:SOUND1,15:SOUND6,4:SOUND7,54:SOUND8,16:SOUND12,12
    :SOUND13,0:FORN=1TO200:NEXT
CA 480 SOUND 8,0:PUT SPRITE5,(BX%,BY%),11,6
AN 490 BL=BL-1:IF BL=0 THEN SC=0:GOTO 640
FL 500 PRESET(85,180)
FC 510 COLOR2,2:PRINT#1,SC$
FF 520 PRESET(89,180)
BE 530 COLOR1,5:PRINT#1,BL
CF 540 FORQ=1TO500:NEXTQ:GOTO 100
BO 550 SC=SC+1000-KB%
CH 560 PRESET(195,180)
CD 570 COLOR 2,2
DG 580 PRINT#1,SC$
CE 590 PRESET(195,180)
CN 600 COLOR 1,5
AK 610 PRINT#1,SC
CD 620 FORQ=1TO500:NEXT
AF 630 GOTO 100
CK 640 PRESET(30,50)
AA 650 PRINT#1,"GAME_OVER"
CM 660 PRESET(20,66)
AM 670 PRINT#1,"PLAY_AGAIN_?.....(Y/N)"
KO 680 A$=INPUT$(1):IFA$=""THEN680ELSEA=INSTR("YyNn",A$):IFA<3THE
    NRUN
FK 690 KEY ON:SCREEN,,1:COLOR15,4,4:END
DB 700 REM BACKGROUND
EC 710 LINE(0,176)-(255,191),2,BF
BD 720 CIRCLE(200,40),10,9,,1,4
EP 730 PAINT(200,40),9,9
BF 740 LINE(120,26)-(144,176),1,BF
AD 750 FORN=0TO24 STEP 6
BN 760 FORM=0TO148 STEP10
BK 770 LINE(120+N,26)-(120+N,176),14
CD 780 LINE(120,26+M)-(144,26+M),14
EO 790 NEXTM,N
CI 800 LINE(48,170)-(56,176),6,BF
EP 810 LINE(206,170)-(218,176),6,BF
FC 820 PRESET(18,180)
AN 830 PRINT#1,"BALOONS_":BL
CL 840 PRESET(150,180)
BC 850 PRINT#1,"SCORE"
AP 860 SC$=STRING$(6,CHR$(219))
CB 870 RETURN
DL 880 REM SET UP SPRITES
BM 890 RESTORE:FOR SP=1 TO 6
CN 900 SP$=""
CL 910 FOR N=1 TO 32
AN 920 READ 0$
GF 930 SP$=SP$+CHR$(VAL("&H"+0$))
CI 940 NEXT
AH 950 SPRITE$(SP)=SP$
```

SVI-318/328 Conversions

```

CE 440 IFPOINT(Z,V+8)<>13ORPOINT(Z+8,V+8)<>13THEN480
BE 450 IFT>1THEN480
FH 460 COLOR4:LINE(0,0)-(120,16),1,BF:PRESET(0,0):PRINT#1,"YOU_HA
    VE_LANDED"
HI 465 PLAY"06M12564I255ACEG#"
AE 470 GOTO510
IJ 480 COLOR8:LINE(0,0)-(120,16),1,BF:PRESET(0,0):PRINT#1,"YOU_HA
    VE_CRASHED.."
KF 485 PLAY"0IT255M550AADA"
CH 490 PUTSPRITE0,(Z,V),8,1
AK 500 L=0
IL 510 COLOR11:PRESET(0,8):PRINT#1,"...ANOTHER_TRY...?"
BP 520 SOUND10,0
AM 530 A$=INPUT$(1):IF A$="" THEN530
CI 540 A=INSTR("YyNn",A$):IFA=0THEN530ELSEIFA<3THEN150ELSECOLOR15
    ,4,5:SCREEN0:END
AG 570 DATA 18,18,3C,3C,3C,7E,42,E7
DA 580 DATA 1E,3A,EE,5C,8C,19,98,0E
AA 585 DATA 18,18,3C,3C,3C,18,18,00
BL 590 RESTORE870:RETURN
BD 610 RESTORE880:RETURN
BG 630 RESTORE890:RETURN
AO 650 RESTORE900:RETURN
BB 670 RESTORE910:RETURN
BF 690 RESTORE930:RETURN
AO 710 RESTORE950:RETURN
AM 730 L=1
BE 740 RESTORE870:RETURN
CC 760 F=F-1
CI 770 IFF<0THEN860
CB 780 IFD=1THENF=F-1:Q=Q-.5*.15:SOUND10,0
HB 790 IFD=3THENZ=Z+1
HF 800 IFD=7THENZ=Z-1
DP 810 IFD=5THENF=F-1:Q=Q+.5*.15
IC 820 IFD=2THENF=F-1:Z=Z+1:Q=Q-.5*.15
HJ 830 IFD=8THENF=F-1:Z=Z-1:Q=Q-.5*.15
IA 840 IFD=4THENF=F-1:Z=Z+1:Q=Q+.5*.15
HL 850 IFD=6THENF=F-1:Z=Z-1:Q=Q+.5*.15
HH 855 IFD=8ORD=1ORD=2THENPUTSPRITE2,(Z,V+Q+5),8,2
CC 860 RETURN
CO 870 DATA 3,40,168,48,179,256,179
BH 880 DATA 9,24,184,56,168,88,168,96,176,120,176,136,168,176,160
    ,256,160,256,160,56,160
BH 890 DATA 11,8,168,24,160,56,176,88,160,112,168,136,168,160,184
    ,176,184,192,152,32,152,256,160
EA 900 DATA 8,64,64,104,32,104,40,114,40,136,128,168,128,192,120,
    256,144
AE 910 DATA 16,8,168,15,168,48,16,64,56,64,72,48,38,48,104,64,104
    ,72,112,38,104
BH 920 DATA 88,88,80,80,104,72,112,72,128,80,256,96
CN 930 DATA 14,16,168,40,8,112,16,192,96,232,120,208,120,168,96,1
    04,144,104,152,130,152,176,128,216,160,224,144
BG 940 DATA 256,152
EC 950 DATA 25,0,24,32,16,56,10,240,40,240,158,224,152,224,112,20
    8,80,168,80
DN 960 DATA 144,104,144,136,128,160,88,155,38,176,104,176,128,184
    ,168,160,168,144,176,112,192,96
EB 970 DATA 200,112,192,128,192,176,208,168,256,192
    
```

```

EP 60 SCREEN1,0
EF 460 COLOR4:LINE(0,0)-(120,16),1,BF:LOCATE0,0:PRINT"YOU_HAVE_LA
    NDED"
HL 480 COLOR8:LINE(0,0)-(120,16),1,BF:LOCATE0,0:PRINT"YOU_HAVE_CR
    ASHED.."
HN 510 COLOR11:LOCATE0,8:PRINT"...ANOTHER_TRY...?"
    
```

Program Input (MSX Listing)

```

GF 10 CLEAR0000:DEFINTA-Z:COLOR15,4,5:SCREEN0:WIDTH39:DIML$(100
    :H$="A":ALPHA$="ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz-/_"
JC 20 CLS:LOCATE5,2:PRINT"PROGRAM_INPUT":LOCATE2,4:PRINT"LOAD_WK
    RK_FILE_[Y/N]..?";
AF 30 A$=INPUT$(1):A=INSTR("YyNn",A$):IFA=0THEN30ELSEPRINTA$:IF
    >2THENL=1:GOTO110
IP 40 LOCATE2,6:PRINT"LOAD_FROM_":PRINT"...[1]_DISK":PRINT"...
    [2]_TAPE":PRINT"...YOUR_CHOICE_[1_or_2]..?";
EI 50 A$=INPUT$(1):IFA$<"1"ORA$>"2"THEN50ELSEPRINTA$:IFA$="1"THE
    NF$=H$ELSEF$="CAS:"
DO 60 LOCATE2,10:PRINT"FILE_NAME:":P=0:N$=STRING$(8,32)
GP 70 LOCATE12,10:PRINTN$:LOCATE12+P,10:A$=INPUT$(1):IFA$=CHR$(8
    )THENIFP=0THENBEEP:GOTO70ELSEMID$(N$,P,1)="_":P=P-1:GOTO70
EG 80 IFA$<>CHR$(13)THENIFINSTR(ALPHA$,A$)=0THENBEEP:GOTO70ELSEI
    FP=8THENBEEP:GOTO70ELSEP=P+1:MID$(N$,P,1)=A$:GOTO70
FM 90 LOCATE2,12:PRINT"LOADING..":F$=F$+N$:OPENF$FORINPUTAS#1:L=
    1
OP 100 LINEINPUT#1,L$(L):IFNOTEOF(1)THENLOCATE10,12:PRINTUSING"#
    #":L=L+1:GOTO100ELSECLOSE:L=L+1:FORA=1TOL-1:IFLEN(L$(A))
    <245THENL$(A)=L$(A)+STRING$(245-LEN(L$(A)),32):NEXTELSENEX
    T
AC 110 CLS:IFL$(L)=""THENL$(L)=STRING$(245,32)
EM 120 PX=0:PY=0:F=0:LOCATE11,0:PRINTUSING"FREE_###K":FRE(""):LO
    CATE25,0:PRINT"INSERT_OFF":LOCATE1,1:PRINTUSING"LINE_#":L
EM 130 FORA=0TO6:LOCATE1,A+2:PRINTMID$(L$(L),A*35+1,35):NEXT
FL 140 LOCATE1,0:PRINTUSING"X:##_Y:##":PX,PY:LOCATE1,2+PY:PRINTMI
    D$(L$(L),PY*35+1,35):LOCATE1+PX,2+PY:A$=INPUT$(1):IFA$=CHR
    $(8)THENPX=PX-1:GOSUB1000:MID$(L$(L),PY*35+PX+1,1)="_":GOT
    O140
DA 150 IFA$=CHR$(28)THENPX=PX+1:GOSUB1000:GOTO140
CO 160 IFA$=CHR$(29)THENPX=PX-1:GOSUB1000:GOTO140
CD 170 IFA$=CHR$(30)THENPY=PY-1:GOSUB1000:GOTO140
CF 180 IFA$=CHR$(31)THENPY=PY+1:GOSUB1000:GOTO140
DM 190 IFA$=CHR$(127)THENIFPX=35ANDPY=6THENBEEP:GOTO140ELSEIFPX=0
    ANDPY=0THENL$(L)=RIGHT$(L$(L),244)+"_":GOTO130ELSEL$(L)=LE
    FT$(L$(L),PX+PY*35)+RIGHT$(L$(L),244-(PX+PY*35))+"_":GOTO1
    30
BD 195 IFA$=CHR$(18)THENIFF=0THENF=1:LOCATE32,0:PRINT"ON_":GOTO14
    0ELSEF=0:LOCATE32,0:PRINT"OFF":GOTO140
AM 200 IFA$<>CHR$(13)THENIFF=0THENMID$(L$(L),PX+PY*35+1,1)=A$:PX=
    PX+1:GOSUB1000:GOTO130ELSEIFPX+PY=0THENL$(L)=A$+LEFT$(L$(L
    ),244):GOTO130ELSEL$(L)=LEFT$(L$(L),PX+PY*35)+A$+MID$(L$(L
    ),PX+PY*35+1,244-(PX+PY*35)):PX=PX+1:GOSUB1000:GOTO130
    
```

```

CG 960 NEXT
CC 970 RETURN
BP 980 DATA0,0,0,0,0,0,43,FF,47,0,0,0,0,0,0,0,0,FF,20,FB,
    C4,C4,FC,78,0,0,0,0 ' COPTER
GF 990 DATA0,0,0,0,1F,1F,8A,BF,FF,BF,88,1C,0B,0,0,0,0,0,0,0,0,80,6,
    E,FE,FC,E0,10,0,0,0,0,0 ' PLANE
JK 1000 DATA0,0,0,0,1F,3F,7F,FF,FF,7F,7F,1F,3,0,0,0,0,0,0,0,0,F8
    ,FC,FE,FF,FE,F8,F0,C0,0,0 ' CLOUD
PE 1010 DATA3,7,F,F,F,F,F,7,7,7,3,3,0,0,3,3,80,C0,E0,E0,E0,E0,C
    0,C0,C0,80,80,0,0,80,80 ' BALOON
PB 1020 DATA10,38,92,7C,38,38,28,28,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
    0,0,0,0,0,0,0,0 ' MAN
CB 1030 DATA9,4,42,11,52,C,C,7,7,7,3,3,2,7,3,1,80,8,80,24,28,60,40
    ,C0,C0,C0,80,80,0,0,80,0 ' POPPED BALOON
DL 1040 REM OPENING SCREEN
DN 1050 KEYOFF:SCREEN0:COLOR1,5
AN 1060 LOCATE10,5
GO 1070 PRINT"BALLOON,_RESCUE";
AH 1080 LOCATE 10,7
GH 1090 PRINT"BY,_D._PHILPOTT";
BH 1100 LOCATE5,11
CC 1110 PRINT"PRESS,(I) _FOR _INSTRUCTIONS";
BH 1120 LOCATE5,13
IE 1130 PRINT"PRESS,(P) _TO _PLAY";
FL 1140 A$=INPUT$(1):IFA$=""THEN1140ELSEA=INSTR("iIp",A$):IFA>2TH
    EN50
BI 1150 SCREEN0:COLOR 1,5
BP 1160 LOCATE10,1:PRINT"BALLOON,_RESCUE"
EO 1170 LOCATE 0,5
KE 1180 PRINT"You _have _to _rescue _the _man _by _flying _the _balloon _nea
    r _to _him."
HH 1190 PRINT"then _land _the _balloon _on _the _right- _hand _base _to _sc
    ore _points."
FJ 1200 PRINT:PRINT"To _gain _height _press _the _spacebar."
GG 1210 PRINT:PRINT"To _lose _height _release _the _spacebar."
KK 1220 PRINT:PRINT"To _move _across _the _screen, _fly _into _one _of _th
    e _airstreams _indicated _by _the _clouds."
FE 1230 PRINT:PRINT"Don't _fly _too _high!"
DC 1240 PRINT:PRINT".....PRESS _ANY _KEY _TO _PLAY":A$=INPUT$(1):G
    OTO50

```

### SVI-318/328 Conversions

```

DH 40 GOSUB 1040
AJ 50 COLOR1,5,1:SCREEN2,2
CB 500 LOCATE85,180
AI 510 COLOR2,2:PRINTSC$
CD 520 LOCATE89,180
EG 530 COLOR1,5:PRINTBL
AJ 560 LOCATE195,180
BE 580 PRINTSC$
AM 590 LOCATE195,180
AI 610 PRINTSC
AG 640 LOCATE30,50
BK 650 PRINT"GAME _OVER"
AM 660 LOCATE20,66
BC 670 PRINT"PLAY _AGAIN,? _.....(Y/N)"
DK 690 SCREEN0,1:COLOR15,4,4:END

```

```

CM 820 LOCATE18,180
AF 830 PRINT"BALOONS,":BL
AD 840 LOCATE150,180
CI 850 PRINT"SCORE"
BN 1050 SCREEN0,0:COLOR1,5

```

### LuneY (MSX and SVI-318/328)

Another program from the good old days when the SVI-318 was first released written by Geoff Dickson this program has previously been printed in the December 1983 issue of the Spectravideo Computer Users Group of Tasmania. It appears here with a few minor modifications.

In the game you have to land your lunar module on the moon. You move the ship left and right using the joystick or cursor keys and to fire the rocket motor press the space bar or the joystick fire button. You must land on a level section a terrain large enough to hold the lunar module. There are eight landing zones for you to test your skills. goodluck!

### MSX LISTING

```

AC 10 REM *** LUNEY ***
AC 20 REM Written by Geoffrey Dickson
IF 30 REM December 1983
FO 40 REM
CI 50 COLOR15,1,1:SOUND7,8
BP 60 SCREEN2,0:OPEN"GRP:"AS#1
LO 70 FORA=0TO2:S$="":FORI=1TO8:READA$:S$=S$+CHR$(VAL("&H"+A$)):
    NEXT:SPRITE$(A)=S$:NEXT
BF 150 F=800
AD 160 V=0:Z=20
HE 170 CLS:VPOKE6912,209:VPOKE6916,209
AH 180 FORI=1TO20:PSET(RND(9)*250,RND(9)*140),RND(9)*13+2:NEXT
BN 190 CIRCLE(150,40),14,11,....9
AF 200 PAINT(150,40),11
DA 210 L=L+1
DF 220 ONLGOSUB590,610,650,670,690,710,730
CJ 230 READN
BG 240 Q=0
AO 250 OX=0:OY=176
DD 260 FORI=1TON
GE 270 READ X,Y
IJ 280 LINE(OX,OY)-(X,Y),13
BD 290 OX=X:OY=Y
CG 300 NEXT
DP 310 PAINT(1,177),13
CG 320 PUTSPRITE1,(Z,V),3,0
FJ 330 VPOKE6920,209:D=STICK(0)+STICK(1):IFD<>1THENSOUND10,0
AA 340 IFD>0THENGOSUB760
OP 350 T=V
AD 360 Q=Q+.5*.05
GJ 370 V=V+Q
GJ 380 T=V-T
AC 390 IFPOINT(Z,V+8)=13ORPOINT(Z+8,V+8)=13THEN440
GL 400 IFPOINT(Z+4,V)=13THEN480
HF 410 IFPOINT(Z+3,V+5)=13THEN480
HI 420 IFPOINT(Z+5,V+5)=13THEN480
AD 430 GOTO320

```

## MSX 64K RAM Card Tester

```
MC 210 C1$=LEFT$(L$(L),1):C2$=MID$(L$(L),2,1):IF INSTR(LEFT$(ALPHA
$,54),C1$)=0ORINSTR(LEFT$(ALPHA$,54),C2$)=0THENLOCATE1,10:
PRINT"CHECK_CODE_INCORRECT_-_PRESS_ANY_KEY":A$=INPUT$(1):G
OTO110
FF 220 LOCATE1,8:PRINT"WAIT...":F=0:I1=1:F1=0:FORI=3TOLEN(L$(L)):
C=ASC(MID$(L$(L),I,1)):IFC=34THENIFF1=0THENF1=1ELSEF1=0
CE 230 IFC=32ANDF1=0THEN250ELSEIF11/2=I1\2THENF=F+CEELSEF=F-C
BF 240 I1=I1+1
NI 250 NEXTI:F=ABS(F)MOD256:F1=F\16+65:F2=FMOD16+65:IFC1$(<)CHR$(F
1)ORC2$(<)CHR$(F2)THENLOCATE1,10:PRINT"LINE_INCORRECT_-_PRES
S_ANY_KEY":A$=INPUT$(1):GOTO110
NG 260 LOCATE1,10:PRINT"LINE_CORRECT":LOCATE2,12:PRINT"[1]_GOTO_N
EXT_LINE":LOCATE2,13:PRINT"[2]_GOTO_PREVIOUS_LINE":LOCATE2
,14:PRINT"[3]_EXIT_AND_SAVE":LOCATE2,15:PRINT"YOUR_CHOICE_
[1-3]_..?":
DF 270 A$=INPUT$(1):IFA$<"1"ORAS$>"3"THEN270ELSEPRINTA$:IFA$="1"TH
ENL=L+1:GOTO110ELSEIFA$="2"THENIFL=1THENBEEP:GOTO270ELSEL=
L-1:GOTO110
KN 280 CLS:LOCATE2,6:PRINT"LOAD_FROM_-":PRINT"....[1]_DISK":PRINT
"....[2]_TAPE":PRINT"__YOUR_CHOICE_[1_or_2]_?":
JC 290 A$=INPUT$(1):IFA$<"1"ORAS$>"2"THEN290ELSEPRINTA$:IFA$="1"TH
ENF$=H$ELSEF$="CAS:"
AF 300 LOCATE2,10:PRINT"FILE_NAME:":F=0:N$=STRING$(8,32)
GI 310 LOCATE12,10:PRINTN$:LOCATE12+P,10:A$=INPUT$(1):IFA$=CHR$(8
)THENIFF=0THENBEEP:GOTO310ELSEMID$(N$,P,1)="_":P=P-1:GOTO3
10
DG 320 IFA$(<)CHR$(13)THENIFINSTR(ALPHA$,A$)=0THENBEEP:GOTO310ELSE
IFF=0THENBEEP:GOTO310ELSEP=P+1:MID$(N$,P,1)=A$:GOTO310
GF 330 LOCATE2,12:PRINT"CONDENSING..":FORA=1TO500:IFL$(A)<"_""THEN
FORB=245TO1STEP-1:IFMID$(L$(A),B,1)="_"THENNEXTB:L$(A)="_E
LSEL$(A)=MID$(L$(A),3,B-2):NEXTA
AF 340 LOCATE2,12:PRINT"SAVING.....":F$=F$+N$:OPENF$FOROUTPUTAS#
1:FORA=1TO500:IFL$(A)="_""THENCLOSE:END
BL 350 PRINT#1,RIGHT$(L$(A),241):LOCATE10,12:PRINTUSING"###":A:NE
XT:CLOSE:END
AG 1000 IFPX<0THENPX=35:PY=PY-1ELSEIFPX>35THENPX=0:PY=PY+1
BJ 1010 IFPY<0THENPY=6ELSEIFPY>6THENPY=0
BD 1020 RETURN
```

## SVI-318/328 Conversions

```
HF 10 CLEAR0000:DEFINTA-Z:COLOR15,4,5:SCREEN0:WIDTH39:DIML$(100)
:H$="1":ALPHA$="ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz-/_"
```

```
BN 200 CLEAR200,6H5000:POKE&HB170,1
DL 210 POKE&HFBB0,1
CB 220 CLS:LOCATE7,0:PRINT"Busy_"
CD 230 GOSUB260
BK 240 LOCATE5,1
AO 250 END
CC 260 RESTORE
EA 270 FORI=0TO8H16
AM 280 C=0
BN 290 FORK=0TO15
BH 300 READA$:B=VAL("&H"+A$)
AM 310 POKE&HB000+I*16+K,B
CP 320 C=C+B
CD 330 NEXT
EH 340 READA$:IFC=VAL("&H"+A$)THEN360
AH 350 PRINT"DATA_ERROR_IN_LINE":J30+I*10:END
CA 360 NEXT
FF 370 DEFUSR0=&HB000:A=USR(0)
BL 380 RETURN
CF 390 DATA 21,00,00,39,EB,21,00,BA,F9,D5,21,00,00,11,00,00,420
CB 400 DATA CD,31,B1,3A,70,B1,CD,14,00,2C,20,F1,24,7C,FE,C0,786
EH 410 DATA 20,EB,CD,31,B1,DB,A8,F5,E6,3F,47,3A,70,B1,CB,0F,8D3
BO 420 DATA CB,0F,B0,F3,D3,A8,3E,00,77,F1,D3,A8,FB,2C,20,E2,942
DE 430 DATA 24,7C,FE,00,20,DC,21,00,00,3A,70,B1,CD,31,B1,CD,692
CO 440 DATA 0C,00,FE,00,20,3A,11,FF,00,3A,70,B1,CD,14,00,2C,40C
AO 450 DATA 20,E7,24,7C,32,FD,AF,FE,C0,20,DE,CD,31,B1,DB,A8,973
AF 460 DATA F5,E6,3F,47,3A,70,B1,CB,0F,CB,0F,B0,F3,D3,A8,7E,90C
AF 470 DATA FE,00,20,78,3E,FF,77,F1,D3,A8,FB,2C,20,DD,18,02,7F4
AJ 480 DATA 18,71,24,7C,FE,00,20,D3,21,FF,FF,CD,31,B1,DB,A8,86B
AC 490 DATA F5,E6,3F,47,3A,70,B1,CB,0F,CB,0F,B0,F3,D3,A8,7E,90C
DB 500 DATA FE,FF,20,48,3E,00,77,F1,D3,A8,FB,2D,20,DD,25,7C,84C
BA 510 DATA FE,BF,20,07,21,FF,BF,3A,70,B1,CD,31,B1,CD,0C,00,876
DH 520 DATA FE,FF,20,2F,11,00,00,3A,70,B1,CD,14,00,2D,7D,FE,641
AI 530 DATA FF,20,E4,25,7C,FE,FF,20,DE,11,26,B1,21,07,00,06,6B5
CC 540 DATA 09,1A,CD,4D,00,23,13,05,20,F7,18,1A,32,FC,AF,F1,58F
BF 550 DATA D3,A8,FB,11,19,B1,21,07,00,06,0D,1A,CD,4D,00,23,4E3
AO 560 DATA 13,05,20,F7,18,00,E1,F9,C9,4D,45,4D,4F,52,59,20,5E3
CK 570 DATA 4E,4F,54,20,4F,4B,4D,45,4D,4F,52,59,20,4F,4B,00,43E
AJ 580 DATA 00,C5,05,E5,F5,22,2F,B1,21,2F,B1,11,05,00,3E,00,5CB
AE 590 DATA 06,01,0E,01,ED,67,F5,FE,0A,38,02,C6,07,C6,30,EB,64F
DG 600 DATA CD,4D,00,EB,F1,1B,05,28,EB,ED,67,23,06,01,0D,28,5DC
BL 610 DATA E3,F1,E1,D1,C1,C9,00,00,00,00,00,00,00,00,00,510
```

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