

MICRODRIVE EXCHANGE

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* WARNING: The game DECATHELOON is guaranteed to ruin keyboards *
* or joysticks since the game depends on you pressing two keys *
* alternatively as fast as you can. This game should carry a *
* Spectrum health warning! (MOST tape players CANNOT load game)*

PROBLEMS IF BASIC TOO LONG

With some programs Block Moving can cause problems as the Basic part of the program is in the way. This can usually be cured by ensuring that after the Move, the last three numbers in the DATA line doing the Move contains a 195,x,y with x,y being the start (RANDOMIZE USR) value. This does NOT always work. Alternative & method necessary with some games is to shorten the Basic. This is done by ensuring that only necessary Basic is present in the machine! An example of this is in the transferring of the Psions BACKGAMMON. With this program the main game is in a section "c" CODE 24000,8767 and a small section called "b" CODE 23296,250. Transfer the two sections to microdrive by:

1. LOAD "b" CODE 23296: SAVE*"m";1;"BG1" CODE 23296
2. LOAD "c" CODE 30000: SAVE*"m";1;"BG2" CODE 30000

Part "c" we've relocated into 30000. A Basic loader using the MOVDEL from MDX5, after we've derived the values for A,B,C, etc, would look like this (for clarity I've not VAled the numbers):

```
10 LOAD*"m";1;"BG1" CODE 23296: LOAD*"m";1;"BG2" CODE 30000
9010 DATA 33,240,92,17,182,92,195,229,25: FOR X=65000 TO 65008:
      READ Z: POKE X,Z: NEXT X: RANDOMIZE USR 65000
9020 DATA 33,48,117,17,192,93,1,63,34,237,176,201: FOR X=65009
      TO 65020: READ Z: POKE X,Z: NEXT X: RANDOMIZE USR 65009
9999 RANDOMIZE USR 24000
```

This Loads the Bytes, reclaims map area, Block Moves, then starts game by RANDOMIZE USR 24000. (It wouldn't work). BUT. BUT. BUT. This Basic could be split into two parts. The first part being as above but WITHOUT any of the RANDOMIZES. Line 9999 being used instead to Load the second half which would do the RANDOMIZES & then start the game. The TWO basics used as the new loader are;

BASIC ONE. (Save this as "BG" LINE 10)

```
10 LOAD*"m";1;"BG1" CODE 23296: LOAD*"m";1;"BG2" CODE 30000
9010 DATA 33,240,92,17,182,92,195,229,25: FOR X=65000 TO 65008:
      READ Z: POKE X,Z: NEXT X:
9020 DATA 33,48,117,17,192,93,1,63,34,237,176,201: FOR X=65009
      TO 65020: READ Z: POKE X,Z: NEXT X:
9999 LOAD*"m";1;"BG3"
```

BASIC TWO. (Save this as "BG3" LINE 10)

```
10 RANDOMIZE USR 65000: RANDOMIZE USR 65009: RANDOMIZE USR 24000
```

The full action is now as follows:

LOAD*"m";1;"BG" will Load in Basic ONE program which Loads in the Bytes BG1 & BG2, the lines 9010 & 9020 just POKE the DATA in to the memory without running them. Next line Loads in Basic TWO. At this point in time the ONLY Bytes occupying the Basic area is that of the short Basic TWO program. The DATA Bytes are still in memory waiting to do their action when Basic TWO runs.

PHILIP M MOUNTJOY of GLOS, Sent in a method of transferring this game by simply using the Block Mover but at the end added 195, 192,93 instead of the 201 (which normally returns to Basic). It

would work, but this method outlines a technique possibly better for members not familiar with machine-code.

DEATHCHASE TO MICRODRIVE by D.HALL of Stowmarket, Suffolk.

The Headerless-File at the end is the actual game. This has a start of 16384 and length of 16200 Bytes. A "False Header" can be used to Load this into a higher location for Saving.

1. Enter SAVE "F" CODE 30000,16200 then save just the Header to a blank tape. This means stopping the tape after first tone
2. Load this "Header" just made by; LOAD "" CODE 30000 then play in all the Headerless-File of Deathchase. When all loaded Save to drive by; SAVE*"m";1;"D/CHASEc" CODE 30000,16200

Note that this False Header loads in the File AND moves it to be in 30000 onwards at same time.

3. Enter this loader;

```
10 LOAD*"m";1;"D/CHASEc" CODE 30000
```

```
20 DATA 033,048,117,017,000,064,001,072,063,237,176,201:
```

```
FOR X=50000 TO 50011: READ Z: POKE X,Z: NEXT X:
```

```
RANDOMIZE USR 50000
```

Save to M/driver by; SAVE*"m";1;"D/CHASE" LINE 10

PINBALL to Microdrive by MARK PAINTER of SOMERSET.

PINBALL by Sagittarius has code start of 16384 and length 16128. It would appear that simply relocating then Block Moving would transfer it easily. MARK found that the only way to make it run was to relocate it, do a Block Move back to correct location AND then JUMP to 27392 to start game running. Note that we DON'T need to reclaim the M/D map area and that it's NEVER necessary to do so if a program is being Block Moved over the system and map area. It wouldn't make any difference if we did reclaim area and if you have (you should have) MOVDEL saved onto a cartridge, it is easier to simply use it BUT in this case modify the second DATA statement to include the JUMP to the game by adding in the 195,0,107 and note that the FOR loop is now longer by two. Transfer PINBALL by entering the following then playing the tape

```
LOAD "" CODE 36384: SAVE*"m";1;"PINBALLc" CODE 36384,16128
```

Use the following basic loader:

```
10 LOAD*"m";1;"PINBALLc" CODE 36384
```

```
20 DATA 33,32,142,17,0,64,1,0,63,237,176,195,0,107:
```

```
FOR X=65009 TO 65022: READ Z: POKE X,Z:
```

```
NEXT X: RANDOMIZE USR 65000
```

Save to Microdrive by; SAVE*"m";1;"PINBALL" LINE 10

STOP THE EXPRESS TO MICRODRIVE

Both T.HILL of WOTTON-U-EDGE,GLOS, and KEVIN ALLEN of BENFLEET, ESSEX solved this one. T.HILL explained that in original program the Code loads in BELOW the CLEAR value and this affects "STACK" (this holds the RETURNS from routines). By checking these values the RANDOMIZE to start the game was found to be 48096.

Enter the following, then play in the long block of code;

```
CLEAR 30000: LOAD "" CODE 32722 when all loaded in, Save by;
SAVE*"m";1;"EXPRESSc" CODE 32722,15392
```

Make up and Save the following loader;

```
10 CLEAR 30000: LOAD*"m";1;"EXPRESSc" CODE 32722
```

```
20 RANDOMIZE USR 48096
```

Save this to Microdrive by; SAVE*"m";1;"EXPRESS" LINE 10

KONOTONI WILF to MICRODRIVE

TONY HILL of WOTTON-U-EDGE, GLOS (again) sent in a routine just after I'd spent ages fiddling about with this game. By combining the two the final method was derived to be shorter than either! Main part of the program is at twice normal baud rate, but the Loader for it is a normal speed Bytes program. We can use Loader to Load, but not run, the fast saved parts. There is also a part at the end called "top" which is required. This is a normal baud rate program so transfers easily.

1. Set tape to be just after the short Basic. Enter the following then play the tape: CLEAR 24100: LOAD "load" CODE 65100
2. When Loaded, enter RADOMIZE USR 65100 then play in next parts

- Actually, the SCREEN\$ and main part will Load in at fast rate
When Loaded, most of screen clears & the O.K. message appears
3. Save main part to a TAPE by; SAVE "MAIN" CODE 24101,39998
 4. Clear Spectrum by doing a RUN USR 0 then enter CLEAR 64000
then play in and Save last part of tape to microdrive by;
LOAD "top" CODE 64100: SAVE*"m";1;"WILF2" CODE 64100,1435
 5. Clear Spectrum again by a RUN USR 0 then enter;
LOAD "MAIN" CODE 25530: SAVE*"m";1;"WILF1" CODE 25530,39998
Then play in the tape you made. This will load it into 25530
onwards, then Saves it to Microdrive.
 6. Enter & save this loader by; SAVE*"m";1;"WILF" LINE 10
10 CLEAR 25529: LOAD*"m";1;"WILF1" CODE 25530
20 LOAD*"m";1;"WILF2" CODE 64100
30 DATA 033,036,094,034,178,092,033,186,099,017,037,094,
001,062,156,237,176,195,240,160: FOR J=23296 to 23315:
READ A: POKE J,A: NEXT J: RANDOMIZE USR 23296

The DATA line starts by setting RAMTOP which in this case is the equivalent to doing a CLEAR 24100. It then Block Moves the main part of program to correct location of 24101. Finally it does a Jump to location 41200 which starts the game.

CHANGING MESSAGES IN GAMES by K.ALDRIDGE of NEWMARKET,SUFFOLK

This is a fascinating new use for TASWORD. Provided that the machine-code section of a game does not exceed 20480 Bytes, simply Load the main section of the game as a FILE in TASWORD. TASWORD will display rubbish if pure machine-code, BUT, it'll display the messages in the game clearly. These can be changed by usual method of changing letters in TASWORD. NOTE: It is essential that you do NOT add or remove any Bytes. To delete or shorten a message substitute spaces. When done, Save as a FILE as usual. When reloaded into correct location for the game, the new messages will appear.

Multipart programs Saved on drive 1 can't be loaded from drive 2 BUT, if you change the loader to be LOAD*"m";PEEK 23766;"name" then program can be loaded from any of your 8 drives. (Peasants, like me, only have one). Location 23766 holds the number of the drive original program was saved from. This useful tip is from T.HILL of WOTTON-U-EDGE, GLOS.

STANDARD PROGRAM WHICH RUN ON BBC, SPECTRUM, ETC

At 5.55am on Saturday & Sunday, the BBC transmits "Basicode" programs on the Medium Wave. This ONE transmission will run on a wide range of computers provided that you have a cassette called "Basicode2+", written by Dr Ian Logan. I presume this is sold by Radio Times magazine? RAY BRADLEY of MARLOW, BUCKS, has supplied this info with instructions on how to transfer the tape to m/d: Change lines 1020 & 2010 to be;

```
1020 BORDER 1: PAPER 1: INK 7: PRINT AT 11,7; FLASH 1;
      " STILL LOADING "'': LOAD*"m";1;"bcodeCODE " CODE 64000
2010 SAVE*"m";1;"Bcode2+" LINE 1: SAVE*"m";1;"bcodeCODE " CODE
      64000,1000
```

Now all you need do is to get up at 5.55am at the weekend!
Ray has tried his EP44 printer on a borrowed QL with no problems except that the QUILL word processor is so slow it occasionally locks off the keyboard so that it can catch up with you!
Several members have requested a SCREEN copy program for use with dot matrix printers. Anyone done this? (Major problem is to make one suitable for most dot matrix printers).

SUPER TASWORD TIP from ? (Please let me know)

You cannot put a BORDER in TASWORD and this makes it difficult to judge edge of print area. In first line you can put BRIGHT 1 which solves the problem by making the paper area brighter. This must surely be the simplest, but most useful tip for TASWORD.

THE NEW SPECTRUM+

Whilst I like the idea of having the option of a Spectrum with a real keyboard, the new Spectrum+ is NOT using real keys, but uses

the QL type keyboard which is moving keys again over a "ZX81" type membrane. The Spectrum problem is that under this are sharp raised pips of plastic to ensure the rubber keys give positive action. In reality these pips do eventually bite thro membrane & keys stop working.

My spare Spectrum has been fitted, along with the power supply INSIDE a Fuller FDS keyboard. For LESS than the new Spectrum+ I have a better and REAL keyboard with a proper space bar plus the single key action for cursor controls, comma, full stop, E-mode and additional shift keys so that I no longer need the finger span of E.T.

The power supply inside the case is a neater arrangement but as there are several versions the fitting and connecting of the power to keyboard and main PCB is not that simple, but is well worth the effort.

I took the opportunity to fit a RESET switch on rear panel. Pressing this connects RESET to negative rail via a 10K resistor. This means I can restart without having to power off/on. RESET is the 15th pin from the slot on the bottom of rear edge connector. By following the PCB track from this pin, a suitable hole in the board to solder onto can be found.

JOE MASETTI of OXFORD pointed out that in response to the query on transferring DUNGEON BUILDER that it is straight transfer and no relocating required, BUT you MUST do a CLEAR 29999 first and MUST put CLEAR 29999 at start of Loader. Program is 35535 Bytes in length & starts at 30000. ANY program which goes upto RAMTOP must always have a CLEAR included in it.

CORRECTIONS

Sorry, but there was a few errors in the early prints of MDX6. In LORDS OF MIDNIGHT, the DATA line 40 should read:

40 DATA 049,053,092,033,000,064,017,176,92,001,
184,011,237,176,195,117,096

In FIGHTER PILOT (old version) on page 2, the DATA line 20 is;

20 DATA 17,0,92,33,136,111,1,0,132,237,176,201

Also the program actually has original code start of 23552.

Note: There are THREE versions of Fighter Pilot. Another short version has main Code called fp4. Hopefully same technique, but allowing for possible difference length, will work.

I am finalising a supplementary copier to 007SPY. This will let you make copies of HYPER-LOAD games at fast or normal speed (so could transfer to Microdrive). Will also copy Decathlon types.

FURTHER NOTES ON FULL THROTTLE

Two major points to note:

1. In note 1 of transfer: You MUST load in the False-Header by CLS#: LOAD "" (This ensures the POKes later are correct).
 2. In note 3 of transfer: After doing the LOAD "" CODE 60018, you MUST immediately do a SAVE""m";1;"FTCODE1" CODE 60018,260
- Being an expert motor-cyclist, I've always achieved 40th place!

EXERCISE

In next issue I will be explaining the Block Move in detail & as an exercise look thro the character set in your Sinclair Manual to check how 237,176 in a DATA statement is really EDB0 Hex. One clue; if you don't find the 237, look at 176. Explained in MDX8.

In next issue: TLL & WAR OF WORLDS to Microdrive..Still haven't done Ant Attack. Also start of Machine-Code explained plus short program to generate "False Headers" easier than manual way.

Overseas members please note: A tape to Europe goes at 100 gram rate for 53p. Airmail elsewhere is approx £1.60. The "rip-off" companies charge extra £1 to Europe! Mail to Europe ALWAYS is by fastest method, not necessarily by Air (AIRMAIL labels not req.)

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