

Spectrum Projects
Presents

64K DASK MEMORY

64K DISK UTILITIES

40K

Now there is a way to utilize some of the otherwise unused ram of a 64k Color Computer (for BASIC or machine language programs.). 40k relocates the Extended BASIC ROM from \$8000 to \$0800, leaving 8k more RAM free for your programs! 40k will operate with Color Computers equipped with Color BASIC 1.1 & 1.2, Extended BASIC 1.0 & 1.1, and Disk Extended BASIC 1.0 & 1.1 ROMS.

To use 40k use the following instructions.

To use 40k from Cassette Type:

```
CLOADM"40K"<ENTER>
```

When the Ready prompt appears type:

```
EXEC<ENTER>
```

To use 40k from Disk type:

```
RUN"40K"<ENTER>
```

Once 40k is executed a PRINT MEM command returns 31015 with 4 pages reserved for graphics and 2k reserved for disk buffer space. Be careful, ROM has been copied into RAM. This gives an experienced programmer the ability to patch and modify the BASIC ROMS which are now in RAM. Poking into the ROM area may damage your program in memory! Please make backup copies of any software which will try to poke into ROM. A machine language program may also replace the ROM BASIC and have the full 64k available!

***** WARNING! => Pressing reset will erase any program in memory!!

***** NOTE => 40k and SPOOL64 cannot be used at the same time!!

***** NOTE => SPECTRUM PROJECTS assumes no responsibility to any software or hardware damaged directly or indirectly by use of this product.

ROM-FAC TO DISK CONVERTER

Any person with the color disk system who uses ROM-FAC software knows that constant plugging and unplugging of the disk controller can damage the contacts on the computer and on the controller. A solution to this problem is to place the ROM-FAC software on disk. No knowledge of Machine Language or Basic is necessary to use this program. First, save the ROM on cassette by placing a small piece of adhesive tape over pin 7 of the ROM PAC to prevent it from auto starting. Pin 7 is seventh from the left on the top side of the connector. Next, turn off your computer and remove a cartridge while the computer is on! Next, have a cassette in the recorder and press play and record. Type `CSAVEM"ROMFAC", &HC000,&HE000,HC000 (ENTER)`. The ROM has now been saved on cassette. Turn off the computer and plug the disk controller in. Turn it on and type `LOAD"ROMCRACK" (ENTER)`; have the cassette player ready to load the ROM and type `RUN (ENTER)`. Give the filename of the program to save on disk and the program will save the converted ROM on disk. You can now use the ROM-FAC by typing `LOADM"FILENAME" EXEC (ENTER)`. The only programs that this will not work for are MEGA-BUG and the ones which use memory such as SPECTACULATOR.

SOFTWARE PRINT SPOOLER

Most computers can output data to a printer or device much faster than the device can receive it; because of this, the operator must wait for the device to catch up with the computer. With the software print spooler, you can output the data to a RAM buffer at high speed and then go back to programming while your data is being printed simultaneously on your printer! The print spooler uses the unused 32K in a 64K color computer as a print buffer. After filling th buffer, you can do any operation you would normally do on your computer. The only thing that will stop the buffer from emptying is the 60 Hz interrupt being shut off such as during cassette I/O.

WARNING: Do not try to run the 40K program and the spooler at the same time, the results are unpredictable!!! For those of you with slower printers, (e.g. printers that run at 600 baud or less), there is a special spooler program named SLOWSP64 which was written for these printers. If your printer can run at 1200 baud or faster, use the SFOOL64 program, instead. To run the spooler place the utilities disk in DRIVE 0 and type `RUN"SFOOL64" (ENTER)` or `RUN"SLOWSP64" (ENTER)` or those with slow printers. The program will then prompt you for a baud rate; enter the baud rate that your printer runs at and the spooler is now in operation. NOTE: If your printer runs at 1200 baud or greater, you can use the SLOWSP64 but not vice-versa. The spooler is hooked through BASIC's outout character routine and will only work with basic programs of machine language programs which will call the routine by a JSR (A000).