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SOLIDISK DDFS 1.9 ROM.
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Solidisk DDFS 1.9 is the definitive 8K ROM version for both the DDFS and DFDC boards.

If you are in possession of one of the previous releases, replacement is free - simply return it with a stamped addressed envelope and covering note.

The main differences are:

1- The new version number (DDFS 1.9) printed on the screen.
2- The new ROM will not come up on the screen until the DDFS or DFDC board is correctly fitted (and selected in the case of the DFDC).
3- If used together with Acorn DNFS, the latter must be installed immediately to the left of the DDFS 1.9 ROM. Both ROMs can be fitted in any successive ROM sockets.
4- It is recommended to all DFDC users to replace both DDFS 1.9 and Acorn DNFS by a Solidisk DDFS 2.0 ROM. This will free one ROM socket for other use.

4- ENHANCED PERFORMANCE.

The new ROM has all reported 'bugs' cured and some extra facilities added. Mainly:

a) TRACK TO TRACK STEPPING TIME:
Users of slow drives (which are usually more than 2 years old) can set the keyboard switches to increase stepping time.

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S3    S4        STEPPING RATE:
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OFF   OFF       6 ms (Normal setting)    ------------
OFF   ON        12 ms (Req. soldering)   . . . . . .
ON    OFF       20 ms (Req. soldering)   . . . . . .
ON    ON        30 ms (Req. soldering)   S1 S2 S3 S4 S5 S6
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Setting a longer stepping rate for fast disk drives will cause the drives to be noisy and will shorten their lives. So if you have an old disk drive, try with 12ms then with 20 ms before setting for 30 ms.

b) *ENABLE 80: this command, entered only once, allows the use of 40 track diskettes in an 80 track disk drive.

c) *ENABLE 40: this command, entered once, disables the automatic 40/80 track double stepping of the DDFS. This allows the use of a mixture of 40 track drive and 80 track drives.

d) *ENABLE S: Enables Single Density before formatting (*F40 of *F80).

e) *ENABLE D: Enables Double Density before formatting.

f) *ENABLE V: Enables Verify before formatting or before backup. Suppose you want to format and verify a 40 track single density diskette in your 80 track Mitsubishi drive, you should enter:

*ENABLE
80<RETURN> *ENABLE
S RETURN> *ENABLE
V <RETURN> *F40
<RETURN>

g) READ AFTER WRITE AND AUTOMATIC ERROR CORRECTION:

The DDFS 1.9 has automatic error correction: This feature is of course unique to Solidisk: You may notice that saving to disk takes slightly longer than loading as the DDFS 1:9 reads back systematically all sectors used and correct them if need be.

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THE NEW 2.0 ROM.
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The DDFS 1:9 ROM already has better specifications than ANY other DFS or DDFS, the 2.0 ROM is however even better.
It is required when using a second processor in your BBC computer system.
It will replace both the 8271 DFS and the 1.9 DDFS.
It has unlimited filenames and filelength.
It has numerous repair, copy, transfer utilities such as Tape to Disc which can cope with locked files, Read Track which work even with non BBC disks, Disk Copy non standard format, MZAP for fast memory display and editing, DZAP for disk sector editing etc.
It also- has a file joining facility. You can extend file A by file B, then by file C etc:: A, B and C can be on any drives:

To order the 2:0 ROM, send a stamped, addressed envelope, old ROM safely packaged and £10 to Solidisk.
If you have BARCLAY or ACCESS card, DO NOT SEND anything, ring us, we will forward to you the 2:0 ROM. You then return to us the old one.

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NOTE: Solidisk now has more than 70 local experts covering England, Scotland and Wales who can do free fitting.

If you experience any difficulty, RING US FIRST.
Do not bring your computer to your local dealer, as we will not entertain any repair bill.

Ring Southend (0702) 354 674 between 3.30 PM and 5.30 PM.

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INSTALLING THE DFDC BOARD
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You can fit the SOLIDISK DFDC whether or not you already have an ACORN
DFS fitted - it will still work. If you do have an ACORN DFS installed
in your computer this board will enable you to switch between the ACORN
DFS and the SOLIDISK DFS, allowing you to take advantage of the
facilities provided by both.

First read Section 1 (Installation Procedure) of the DFS Manual. This
will give you a general idea of the dismantling procedure of the BBC
and the IC locations.

To install the DFDC board remove the 8271 FDC which is located in
position IC 78 (see para 1.2.4.1.). Plug the 8271 into the blue socket
on the DFDC board with the notch close to the white dot at the top.

Now insert the DFDC board in the empty socket making sure that the board
is orientated with the NORTH end towards the rear of the BBC. This may
entail removing the keyboard connector (see para 1.2.4:2.).

Now locate IC86 and 87 (see 1:2.3:1 and 1.2.3:2). Once this is done
connect the green wire from the DFDC board to pin 1 of IC86 and the
yellow wire from the DFDC board to pin 9 of IC87. These wires can either
be soldered direct to the pins of the ICs or the ICs can be removed
from their sockets and the wire then pushed into the appropriate hole
and the ICs reinserted.

Install IC79 and IC80 (see para

The STL DDFS ROM should now be installed in the Rom Socket IMMEDIATELY
TO THE RIGHT of the ACORN DFS chip. This may involve having to move the
Acorn chip to another socket. Reconnect the keyboard, if previously
disconnected, making sure that it is properly aligned.

Now POWER ON.

Depending on the position of the switch attached to the DFDC board the
monitor will show:

BBC Computer 32K   BBC Computer 32K

DDFS 1.8   OR   ACORN DFS

BASIC   BASIC
>   >

Reversing the position of the switch and pushing BREAK will give you the
opposite DFS. You may have to push BREAK twice if change over is not
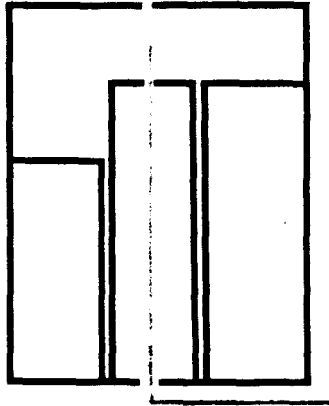immediate.

If the DFDC does not work as shown check all connections: Make sure that there are no bent pins on the underside of the DFDC board.

IC 87
Connect Raw Data line (yellow)
to pin 9.
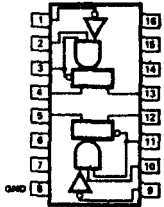
74123, 74LS123
Dual retriggerable
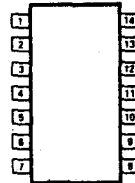monostable
multivibrator

IC 78 DFDC BOARD (North)

IC86
Connect Clock
line (green)
to pin 1

(Keyboard connector)

(IC 79)   (IC 80)

74LS393
Dual 4-bit binary
ripple counter

If all is well replace the keyboard and screw it down. Then replace the top cover with the switch protruding through the cutout at the back of the BBC. Now any time you wish to use the alternate DFS simply change the position of the switch and press BREAK.

PLEASE NOTE:

The Rom will not come up on the screen until all the components have been installed.