SD2BBC USER GUIDE   thefuturewas8bit.com

OVERVIEW

In order to get your SD2BBC up and running, this is what you need to do. Each of these tasks are explained in more detail below

1. Make sure the X2 mains suppression capacitors in your power supply have been replaced
2. Install the Smart SPI ROM
3. Connect the SD2BBC
4. Prepare an SD card with BEEB.MMB file

## 1 - MAKE SURE THE X2 MAINS SUPPRESSION CAPACITORS HAVE BEEN REPLACED

Before we go any further, it is important to check that the two Rifa brand X2 class mains suppression capacitors in the BBC power supply unit have been replaced. These dry out and crack over time, and then have a tendency to fail shortly after power is applied. The last thing you need when you have just dug your BBC out of the loft is to have a room full of smoke. You have been warned.

2 - INSTALL THE SMART SPI ROM

The SD2BBC is supplied with a 16K ROM containing the Smart SPI filing system by Duikkie. This needs to be installed in one of the spare ROM sockets in the BBC. The BBC has an MOS ROM and up to 16 additional ROMs. These can be filing system, language or utility ROMs. The language and filing system in the highest priority slots are selected at boot (there is more control of this on the BBC Master - see below). The language is usually BASIC, but the filing system depends on the disk controller fitted to your machine. If there is no disk controller, or you no longer have a floppy drive, or don't plan to use one anymore, you can remove any DFS or ADFS ROMs, or move them to a lower priority slot. The filing system choice will not be affected by language ROMs such as BASIC, Wordwise, View etc. Remember to obverse sensible anti-static measures when installing the ROM chip.

BBC MODEL B

The Model B has five ROM sockets on the bottom right hand side of the board. These are under the keyboard, so you need to remove the keyboard to install the ROM (remember to reconnect the keyboard even to test as the BBC will not boot without it). The leftmost socket always contains the OS ROM the Smart SPI ROM should be installed in the closest available socket.
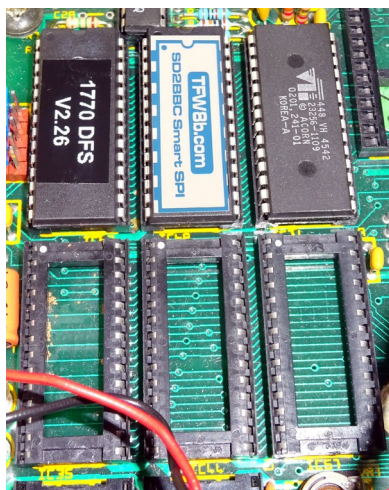
BBC MODEL B+

The B+ has six ROM sockets on the top left of the board. The combined OS and BASIC ROM needs to be top left of this group, and the Smart SPI ROM should be installed in the closest available socket to that.

BBC MASTER / COMPACT

There are four ROM sockets on the right hand side of the BBC Master board, five on the BBC Master Compact. The third one down is usually the choice for the Smart SPI ROM in both cases. If that is in use, one of the others should be used, but these need to be enabled by jumpers - refer to the BBC Master User Guide.

3 - CONNECT THE SD2BBC

BBC MODEL B / B+ / MASTER

The SD2BBC has a 20 way connector on the end, this will fit in the User Port slot underneath the machine. The notch on the connector should line up with the slot in the machine, facing towards the machine. The clips on the side of the connector are used to lock it in place. The cable can be run out to either side or to the back.

BBC MASTER COMPACT

Plug the cable from the SD2BBC into the joystick port on the back of the Master Compact.

4 - PREPARE AN SD CARD WITH BEEB.MMB FILE

The SD2BBC accesses a single file on the SD card. It is best to start with a new or formatted card and dedicate its use to the SD2BBC. The file BEEB.MMB should be the only file on the card. This file contains up to 512 disk images. Pre-populated BEEB.MMB files are available to download from various sites on the internet, a blank one is available in the TFW8b download pack (we cannot supply the full version due to copyright issues).

COMMANDS

If all is well, you will see your normal boot screen, with the line Smart SPI added.

BBC B / B+

If you have downloaded a pre-built BEEB.MMB file, then all you need to do is use SHIFT+BREAK to boot the menu on the first disk.

BBC MASTER / COMPACT

The main system ROM on the BBC Master ragne comes with DFS and ADFS built in, with ADFS selected by default. When you boot up, you will probably see ADFS on the boot screen. If you type `*ROMS` this will show the list of installed ROMs. On that list should be the entry for the Smart SPI ROM (listed as 'SPI'), usually showing as number 8 if you have used the socket advised. To select this filing system at boot type `*CONFIGURE FILE 8` (Change 8 to match the number found above if different). If you have downloaded a pre-built BEEB.MMB file, then all you need to do is use CTRL+SHIFT+BREAK to boot the menu on the first disk or type `*MENU`

MULTIPLE FILING SYSTEMS

If you have multiple filing systems installed in your BBC and it boots up to DFS or ADFS, you can use the command `*CARD` This will switch to the Smart SPI filing systems. Use the command `*DIN 0` to select the first disk image and then run as normal with `*MENU`

DISK ACCESS COMMANDS

At bootup, the first disk image is automatically selected, and you can access this like a normal DFS disk, using *. etc.

`*DCAT` - this will list all the disk images stored in the BEEM.MMB file

`*DIN n` - this will select disk image *n* from the list

`*HELP DUTILS` - this will list the other disk commands available

TROUBLESHOOTING

If you do not see `Smart SPI`, check the ROM installation.

If you see DFS or ADFS, you can use *CARD to switch to the SD card device, or rearrange your filing system ROMs so Smart SPI is the highest priority filing system.

If you see `Card ?` check your connections and your SD card - you may need to use the SD card formatter utility if your SD card has been used elsewhere. If you still have problems, try an older / slower / smaller SD card.

ACKNOWLEDGEMENTS

SD2BBC is compatible with MMBEEB and other similar BBC micro SD card readers, other than TurboMMC.
Smart SPI is written by Duikkie and has been published as freeware.