Support Group Application Note
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Acorn

Master Series Configuration Guidelines

After the Master series have had either their batteries or EEPROM replaced it will normally be necessary to perform some sort of re configuration. This document describes all the configuration options available and what the default settings are when the computer is supplied by Acorn.

Applicable Hardware : BBC Master 128
BBC Master ET
BBC Master Compact

Related Application Notes:

Support Group
Acorn Computers Limited
Acorn House
Vision Park
Histon
Cambridge CB4 4AE

***CONFIGURE Baud <0 - 8>**

Description : Sets the speed of the RS232 serial interface.

Options :

0	9600
1	75
2	150
3	300
4	1200
5	2400
6	4800
7	9600
8	12000

Default : 4 (1200)

***CONFIGURE Caps / NoCaps**

Description : Sets the keyboard caps lock.

Options : Caps
NoCaps

Default : Caps

*CONFIGURE Data <0 - 7>

Description : Specifies the data format used by the RS232 interface according to the specified value.

Options :

Value	Word Length	Parity	Stop Bits
0	7	even	2
1	7	odd	2
2	7	even	1
3	7	odd	1
4	8	none	2
5	8	none	1
6	8	even	1
7	8	odd	1

Default : 4

***CONFIGURE Delay <0 - 255>**

Description : Sets the keyboard auto-repeat delay to the specified number of hundredths of a second.

Default : 30

***CONFIGURE FDrive <0 - 7>**

Description : The computer is fitted with either a WD1770 or a WD1772 disc controller. FDrive defines the step time and, for ADFS, use of precompensation.

Options :

Value	track to track step time		precompensation (ADFS ADFS only)
	WD1770	WD1772	
0 or 4	6ms	6ms	yes
1 or 5	6ms	6ms	no
2 or 6	30ms	3ms	yes
3 or 7	30ms	3ms	no

Most drives require 6ms step time. Older drives may need the 30ms step time; modern drives may be able to operate at 3ms - consult your disc drive documentation.

Default : 0

***CONFIGURE File <0 - 15)**

Description : Defines the default filing system by means of its ROM socket number.

Options : Standard Master 128.

ROM F TERMINAL 01
ROM E VIEW 04
ROM D Acorn ADFS 50
ROM C BASIC 04
ROM B Edit 01
ROM A ViewSheet 02
ROM 9 DFS 79
ROM 8 ?
ROM 7 ?
ROM 6 ?
ROM 5 ?
ROM 4 ?
ROM 3 ?
ROM 2 ?
ROM 1 ?
ROM 0 ?

The ROM numbers A - F are in HEX and correspond to Decimal 10 - 15.

Default : ADFS = &D (14)

***CONFIGURE Hard / Floppy**

Description : If the system has both floppy disc(s) and a Winchester disc connected, *CONFIGURE FLOPPY causes ADFS to initialise with drive 4 (floppy discs) selected. If the system has both floppy disc(s) and a Winchester disc connected, *CONFIGURE HARD causes ADFS to initialise with drive 0 (Winchester) selected.

Default : Floppy

***CONFIGURE Ignore <0 - 255>**

Description : Defines the 'printer ignore character' (ie the character which is not to be directed to the printer), by means of its ASCII code. If the character code is omitted, all characters are sent to the printer when enabled.

Default : 0

***CONFIGURE InTube / ExTube**

Description : Causes either an internal or external TUBE to be selected in preference to the other.

Options : InTube
ExTube

Default : InTube

***CONFIGURE Lang <0 -15>**

Description : Defines the default language by means of its ROM socket number.

Options : Standard Master 128.

ROM F TERMINAL 01
ROM E VIEW 04
ROM D Acorn ADFS 50
ROM C BASIC 04
ROM B Edit 01
ROM A ViewSheet 02
ROM 9 DFS 79
ROM 8 ?
ROM 7 ?
ROM 6 ?
ROM 5 ?
ROM 4 ?
ROM 3 ?
ROM 2 ?
ROM 1 ?
ROM 0 ?

The ROM numbers A - F are in HEX and correspond to Decimal 10 - 15.

Default : BASIC = &C (13)

***CONFIGURE Quiet / Loud**

Description : Sets the BELL (CTRL G) Volume.

Options : Quiet
Loud

Default : Quiet

***CONFIGURE Mode <0 - 7> or <128 - 135>**

Description : Defines the default MODE setting. MODEs <0 - 7> non Shadow screen modes. MODEs <128 - 135> Shadow screen modes.

Options :

Mode	Text Rows	Text Columns	Character Set	Graphic Pixels	Colours
0 (128)	32	80	ASCII	640 x 256	2
1 (129)	32	40	ASCII	320 x 256	4
2 (130)	32	20	ASCII	160 x 256	16
3 (131)	25	80	ASCII	-	2
4 (132)	32	40	ASCII	320 X 256	2
5 (133)	32	20	ASCII	160 X 256	4
6 (134)	25	40	ASCII	-	2
7 (135)	25	40	TELETEXT	-	-

DEFAULT : 7

***CONFIGURE BOOT / NOBOOT**

Description : Set the Boot action of the machine on switch on. Boot tells the machine to attempt to run the !Boot file on a disc on switch on or CTRL BREAK. NOBOOT reverses the action of BOOT.

Options : BOOT
NOBOOT

Default : NOBOOT

***CONFIGURE NODIR / DIR**

Description : Causes ADFS to initialise with a directory selected (either the root or, if ADFS has been since power on, the previously selected directory).

Options : DIR
NODIR

Default : NODIR

***CONFIGURE NOSCROLL / SCROLL**

Description : NOSCROLL enables the scroll protect option (ie prevents hard screen scrolling if a character is placed in the last character position of the bottom screen line, depending on the current mode.

Options : SCROLL
NOSCROLL

Default : SCROLL

***CONFIGURE Print <0 - 4>**

Description : Defines the printer output port according to the value specified.

Options :

0 Sink (No output printed)
1 Centronics (Parallel) port
2 RS232 (Serial) port
3 user printer driver
4 Econet (network printer) port

Default : Sink (0)

***CONFIGURE Repeat <0 - 255>**

Description : Sets the keyboard repeat rate to the specified number of hundredths of a second.

Default : 8

***CONFIGURE Tube**

Description : Check for the presence of an internal or external co-processor and, if fitted, take the action specified by either the INTUBE or EXTUBE option.

Options : TUBE
NOTUBE

Default : NOTUBE

***CONFIGURE TV <0 - 255>,[<0 - 1>]**

Description : Alter the vertical screen alignment and set or reset the interlace option. The first parameter is interpreted as a signal byte ie. 1 means a movement of 1 line up and 255 (-1) means a movement of one line down. If parameter is 0 no adjustment is made to the vertical screen alignment. If the second parameter is 0 the screen interlace option is switched ON; if it is 1, the screen parameter is omitted the value zero is assumed.

Default : 0,1

The following options only apply to systems fitted with the ANFS (Advanced Network Filing System) ROM.

***CONFIGURE FS <x.xxx> or <Name>**

Description : Used to selected the default fileserver for logging onto.

Options : FS Number
FS Name

eg.

*CONFIGURE FS 0.254

or

*CONFIGURE FS TecSupport

Default : 0.254

***CONFIGURE PS <x.xxx> or <Name>**

Description : Used to selected the default network printer server.

Options : PS Number
PS Name

eg.

*CONFIGURE FS 0.235

or

*CONFIGURE FS Laser

Default : 0.235

***CONFIGURE SPACE / NOSPACE**

Description : On the BBC Master Series pages &B00 and &C00 are allocated as workspace to be used by the Econet filing system. On previous models these areas were used a buffers. Some existing software may try to use these areas and conflict with the operating system use of the space. The Econet system can be configured to claim other areas thus leaving pages &B00 and &C00 free for use with any application programs which are found to make inappropriate use of these areas.

Options :

SPACE - Pages claimed for transient commands. Effect on PAGE, OSHWM rises by &200.

NOSPACE - PAGEs are not claimed and therefore the OSHWM is not increased.

Default : NOSPACE

The following option only applies to BBC Master Compact and to BBC Master 128's that are fitted with the optional System ROM (3.50).

***CONFIGURE View Setup <xxx>**

Description : Define how View should start up.

Options :

F - Format mode is on when View starts (an F will appear at the top left of the screen)
J - Justify mode is on when View starts (a J will appear at the top left of the screen)
I - Insert mode is on when View starts (an I will appear at the top left of the screen)

Default : FJ

General Information

The *CONFIGURE commands must always be followed by a CTRL BREAK to initialise the settings in the machine.

It is possible to use Edit supplied with the BBC Master to created a standard file which contains all the *CONFIGURE options which could be used to re configure the machine in one go by using the *EXEC Command.

The Master Compact EEPROM has a limited life of 10,000 write operations. The chip is easily replaced when this limit is reached.

Acorn recommends that in the BBC Master the batteries are replaced every 12 months.

If ROMs appear in the ROM table as being unplugged it is possible to re - insert then using the command *INSERT followed by the ROM Socket number eg.

*INSERT 13