

APPLICATION NOTE NO. 16.SCREEN MODES AND MEMORY REQUIREMENTS

This information refers to the default graphics and text pages. It should be noted that the commands 'TEXT 40' and 'TEXT 80' produce screens of 38 and 78 columns respectively due to two columns being reserved for control codes. Screens with 40 to 42 columns are possible from BASIC using other commands.

<u>MODE</u>	<u>DESCRIPTION</u>	<u>MEMORY USAGE</u>
TEXT 40	40 x 28 lines (2 colour pairs)	Approx. 4K
TEXT 80	80 x 28 lines (4 colour pairs)	Approx. 18K
LORES 2	336 x 256 pixels (2 colours)	8628 bytes.
LORES 4	168 x 256 pixels (4 colours)	8628 bytes.
LORES 16	84 x 256 pixels (16 colours)	8628 bytes.
LORES 256	42 x 256 pixels (256 colours)	8628 bytes.
ATTRIBUTE	336 x 256 pixels (16 colours)	8628 bytes.
HIRES 2	672 x 256 pixels (2 colours)	13744 bytes.
HIRES 4	336 x 256 pixels (4 colours)	13744 bytes.
HIRES 16	168 x 256 pixels (16 colours)	13744 bytes.
HIRES 256	84 x 256 pixels (256 colours)	13744 bytes.

Any HIRES or ATTRIBUTE mode in conjunction with 80 columns uses 16784 bytes.

Any LORES mode in conjunction with 80 columns uses 9885 bytes.

The ATTRIBUTE mode only allows 2 colours in a block. There are 1000 blocks arranged as a 40 by 25 matrix.