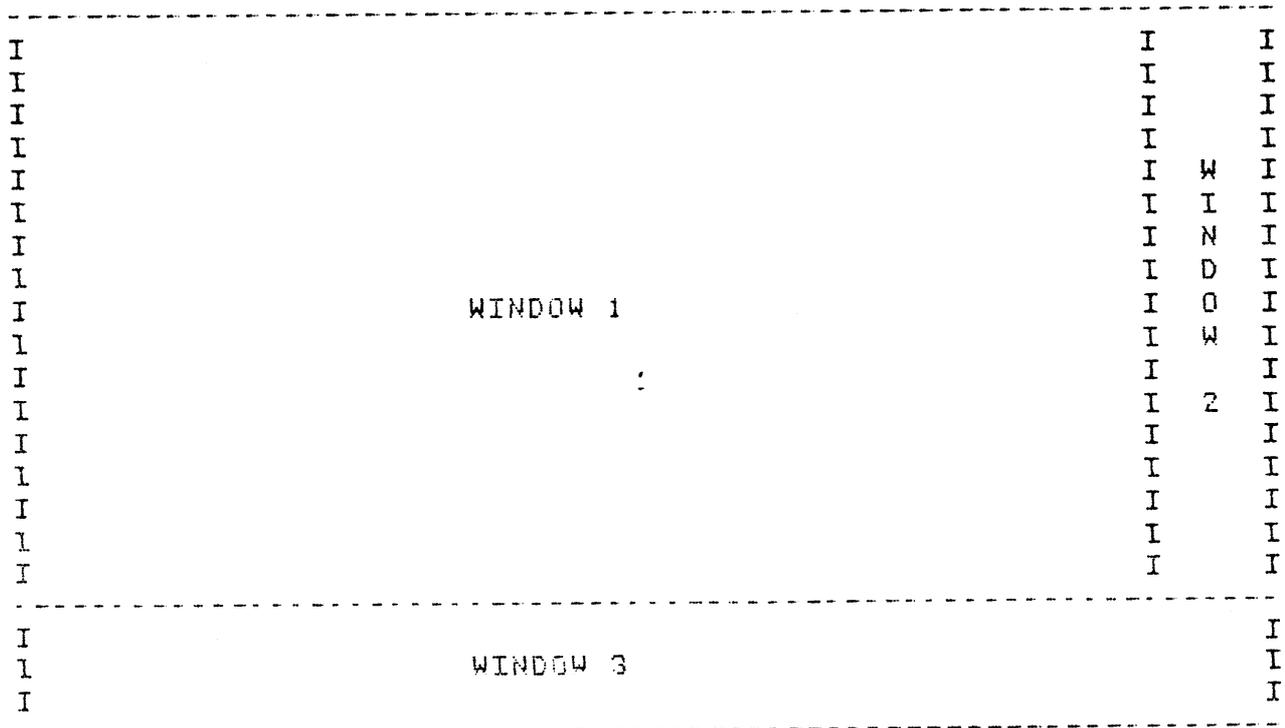# MOUSE PAINT

for the

ACORN ELECTRON

Adapted for the Acorn Electron

by

SLOGGER COMPUTERS

INTRODUCTION

MOUSE PAINT is an art package designed for ease of use. Designed
for the BBC computer and adapted for the Electron computer, MOUSE
PAINT is controlled by a combination of the keyboard and either a
Mouse connected through a User Port or a Tracker Ball connected
through the Analogue Port. MOUSE PAINT utilises a high resolution
4 colour screen mode and thus offers good definition pictures
with the flexibility of a colour scheme.

MOUSE PAINT is supplied on an 80 track disk (5.1/4 inch DFS) and
is loaded by SHIFT-BREAK.

Once loaded, MOUSE PAINT displays its standard screen layout
which may be regarded as three 'windows'. Window 1 is the area of
the screen in which the picture is drawn. It is initially blank.
The right hand area of the screen is designated for functions
selected by the Mouse and this area is defined as Window 2. The
bottom of the screen, Window 3, displays the current function
selected and also additional information associated with
individual functions.

```
I--------------------------------------------------I     I
I                                                  I     I
I                                                  I     I
I                                                  I     I
I                                                  I W   I
I                                                  I I   I
I                                                  I N   I
I                                                  I D   I
I                   WINDOW 1                       I O   I
I                                                  I W   I
I                        :                         I     I
I                                                  I 2   I
I                                                  I     I
I                                                  I     I
I                                                  I     I
I                                                  I     I
I--------------------------------------------------I-----I
I                                                        I
I                   WINDOW 3                             I
I                                                        I
I--------------------------------------------------------I
```

USING THE MOUSE
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

The Mouse movement controls a Cursor which is displayed in the
form of a cross. The Cursor may be moved up / down and left /
right on the screen by the forward / backward and left / right
movement of the Mouse on the desk top. The Cursor may be moved
anywhere over the entire screen and may select functions such as
Line Drawing, Trigonometrical functions, Colour changing, Saving
and Loading pictures etc. using the Left Mouse button.

WINDOW 2 is the function select window and is partitioned into a
number of small squares. To select a particular function, the
Cursor is moved to point into the square depicting the required
function and then the left hand button on the Mouse is pressed to
select that function. The function selected will be displayed in
Window 3.

```
                              I======I======I
                              I      I M/T  I    Mouse/Tracker ball
                              I======I======I
                              I      I      I
                              I======I======I
                              I      I      I
                              I======I======I
      Hatched Shape FILL      I      I  L   I    "L"oad picture
                              I======I======I
       Solid Shape FILL       I      I  S   I    "S"ave picture
                              I======I======I
         Paint BRUSH          I      I  C3  I    Colour 3
                              I======I======I
        Select TEXT           I   T  I  C2  I    Colour 2
                              I======I======I
       Select ELLIPSE         I      I  C1  I    Colour 1
                              I======I======I
       Select CIRCLE          I      I  C0  I    Colour 0
                              I======I======I
     Select RECTANGLE         I      I  P   I
                              I======I======I
   Dotted Corrected LINE      I      I  F   I
                              I======I======I
   Solid Corrected LINE       I      I  O   I
                              I======I======I
    Dotted Rubber LINE        I      I  C   I    "C"lear screen
                              I======I======I
     Solid Rubber LINE        I      I  N   I    "N"o
                              I======I======I
        Stream LINE           I      I  Y   I    "Y"es
                              I======I======I
```

MOUSE SELECTED FUNCTIONS

A variety of drawing aids are supported by MOUSE PAINT and these
are described as follows:

HATCHED SHAPE FILL

This function is used to fill an area of screen with a closely
spaced series of horizontal lines. The area filled is that blank
screen which is surrounded by solid colour but according to the
following: the first solid colour vertically below the cursor is
found...this is the lower Fill limit. The first solid colour
vertically above the Cursor is then found...this is the upper
limit. Starting from the lower limit and working vertically
upwards to the upper limit the blank screen is filled left and
right up to solid colour with the hatched pattern.

SOLID SHAPE FILL

This function is identical to the Hatched Shape Fill except that
the screen will be filled with solid colour.

PAINT

When this function is selected the Cursor may be used as a 'paint
brush'. The procedure is to move the Cursor to the required
position on the screen, depress the the Mouse button, and 'paint
the screen' by moving the Mouse accordingly. The width of the
brush may be altered by moving the Cursor to the bottom of the
screen marked 'Brush width', moving the Cursor left or right
to achieve the required width, (note the size of the brush is
displayed at the right hand end of this window) and then
returning the Cursor to the picture screen. It is not necessary
to press any Mouse buttons for this procedure.

TEXT

Text may be displayed in the picture by firstly preparing the
required message at the prompt 'Enter text' at the bottom of the
screen. The text line should be terminated by the RETURN key. The
Cursor is then positioned at the required position and the Left
Mouse button pressed to transfer the text line to the picture.

3

ELLIPSE

Ellipses may be drawn by designating the centre of the Ellipse and then a point through which the Ellipse should pass. The Ellipse function will then perform the appropriate calculations to display the Ellipse. The centre of the Ellipse is designated by moving the Cursor to the required position in the picture and pressing the Left Mouse button:- a single dot confirms this position. The Cursor is then moved to a point through which the Ellipse should pass and the Left Mouse button pressed again. The Ellipse will then be drawn accordingly. The Right Mouse button may be used to abort and restart this operation.

CIRCLE

Circles are drawn in an identical manner to the Ellipses.

RECTANGLE

Rectangles are drawn by first designating one corner by positioning the Cursor accordingly and then pressing the Left Mouse button. The Cursor may then be moved away from this position and it will be seen that a rectangle is displayed, its length and width continuously changing as the Cursor is moved around the picture, the Cursor being "fixed" to the opposite corner of the rectangle. Once it is satisfied that the rectangle is correct placed, the Left Mouse button is pressed to complete the function. The Right Mouse button may be used to abort and restart this function.

DOTTED CORRECTED LINE

A Corrected line is one which is adjusted to be either horizontal or vertical. A Dotted Corrected Line is drawn by firstly designating the start point by moving the Cursor to the required position and pressing the Left Mouse button. The Cursor would then be moved to the end position and the Left Mouse button pressed to initiate the drawing operation.

SOLID CORRECTED LINE

A Solid Corrected Line is drawn identical to the Dotted Corrected Line.

DOTTED RUBBER LINE

A Rubber Line is drawn by first designating one end of the line
by positioning the Cursor accordingly and then pressing the Left
Mouse button. The Cursor may then be moved away from this point
and it will be seen that a Dotted line is drawn connecting the
Cursor with the initial designated point. Once it is satisfied
that the line is correct, the Left Mouse button is pressed to
complete the function.

SOLID RUBBER LINE

A Solid Rubber Line is produced in the same manner as the Dotted
Rubber Line.

STREAM LINE

This function allows the continuous display of dots wherever the
Cursor lies whilst the left Mouse button is pressed.

SAVE PICTURE

The entire picture or indeed a portion of it may be saved to
disk by selecting this function. When the Save Picture is
selected the user will be requested to position the Cursor
firstly at the top left of the area to be saved. Pressing the
Left Mouse button will designate this. A 'Rubber Rectangle' will
then be controlled by the Cursor and when satisfied with the
enclosed area the user should press the Left Mouse button again
to confirm this. A prompt will then be made for a Filename which
should be a DFS compatible name after which the appropriate
screen will be saved to disk.

LOAD PICTURE

This function is used to load a previously saved picture. It
should be noted that the new picture will 'exclusive or' anything
already on the screen. This means that pictures may be
constructed from a number of previously saved files.

COLOUR 0,1,2,3

The colour used for drawing etc is from selecting one of these
four functions. Note that Colour 0 is black and may therefore be
used effectively as a 'rubber'.

CLEAR SCREEN

Used to clear the entire screen ready for a new picture or for loading a picture from disk. The user will be prompted to confirm this by moving the Cursor to the "Y"es Window and selecting the Left Cursor key to continue.

FUNCTION KEYS
=============

MOUSE PAINT uses a number of Function keys within its command repertoire. These are described as follows:

FN 1   PRINTER

Used to initiate the print screen function the user will first be prompted to confirm the selection. Type "Y" then RETURN to print else any other key to abort. The printer must support the EPSON Graphics codes for this to work correctly. MOUSE PAINT supports a four colour screen and the printout of colours will be in the form of a fine pattern to simulate this.

Graphics screen dumps are a slow process so do not think there is something wrong if printing appears a little slow.

FN 2   does nothing

FN 3   does nothing

FN 4   "M"OUSE / "T"RACKER BALL

Although MOUSE PAINT was developed primarily for the Mouse it is also possible to use a Tracker Ball. Function key 4 will toggle between selecting the Mouse routines and the Tracker Ball routines.

FN 5   BACKGROUND COLOUR (COLOUR 0)

Background colour can be changed using this function key.
Colour will alternate between Black and Blue on each successive
selection.

FN 6   COLOUR 1

Colour 1 may be selected Red and Magenta and is reflected in
Window 2 (C1).

FN 7   COLOUR 2

Colour 2 may be selected between Green and Cyan. The appropriate
colour is reflected in Window 2 (C2).

FN 8   FOREGROUND COLOUR (COLOUR 3)

The foreground colour is selectable between White and Yellow.

FN 9   does nothing

FN 0   BLANK FUNCTION WINDOWS

This function may be used to blank the Windows 2 and 3. This is
useful if the user wishes to use the entire screen for a picture.