Genie Graphics Notes

FAA 16/3/96

Pre-defined colours

The following pre-defined variables may be passed to any drawing routine that takes a COLOUR parameter:

- $WHITE
- $BLACK
- $RED
- $GREEN
- $BLUE
- $CYAN
- $MAGENTA
- $YELLOW
- $ORANGE
- $LIGHT_GREEN
- $SEA_GREEN
- $LIGHT_BLUE
- $PURPLE
- $CRIMSON
- $DARK_GRAY
- $LIGHT_GRAY

Addition colours may be defined using the COLOUR command e.g.

```
>>  PEACH_PUFF = COLOUR:RGB(1.0,  218.0/255.0,  185.0/255.0)
>>  ROYAL_BLUE  = COLOUR:NAMED("royal blue")
```

There are two global variables, FOREGROUND and BACKGROUND, that are used as the defaults when no colour is specified. Initially BACKGROUND is $BLACK and FOREGROUND is $WHITE, but these values can be changed by the user e.g.

```
>>   FOREGROUND = $RED                    # future plots now drawn in red
```

Pre-defined line types

The following variables are accepted as LINE_TYPE parameters:

- $FULL

- $DASH
- $DOT_DASH
- $DOT

Pre-defined Marker Symbols

The following symbols can be passed to DRAW/MARKERS

- $POINT
- $PLUS
- $STAR
- $CIRCLE
- $CROSS
- $BOX

Pre-defined Fonts

The following fonts are available:

- $NORMAL # Default
- $ROMAN # Used with /QUALITY qualifier
- $ITALIC
- $SCRIPT

Program Parameters and Defaults

Displayed with the PRINTENV command, and changed with ALTER and TOGGLE

- Hardcopy is to the file "GENIE.PS"
- An X windows display is assumed by DEVICE/OPEN
- Up to 6 pictures are kept and recalled with the REDRAW command (see RE-DRAW/INFO for the list)
- Device coordinates (for UNSCALED windows) range from 0.0 to 1.0 in X and Y

Returned Data Structures

Cursor Structure

This is returned by GET_CURSOR and contains the following fields:

- D_X # Device X coordinate of cursor
- D_Y # Device Y coordinate of cursor
- W_X # World X coordinate of cursor
- W_Y # World Y coordinate of cursor
- CHAR # Mouse button pressed (A=left, D=middle, X=right)