

Mousepointer

COLLABORATORS

	<i>TITLE :</i> Mousepointer	
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>
WRITTEN BY		February 14, 2023
		<i>SIGNATURE</i>

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1	Mousepointer	1
1.1	AFC Module: mousepointer / Main	1
1.2	Author(s) Info	2
1.3	Mousepointer / Introduction	2
1.4	Mousepointer / Error Table	2
1.5	Mousepointer / History	3
1.6	AFC module: mousepointer / mousepointer()	3
1.7	AFC module: mousepointer / image()	3
1.8	AFC module: mousepointer / changeImage()	4
1.9	AFC module: mousepointer / hotspot()	4
1.10	AFC module: mousepointer / update()	4
1.11	AFC module: mousepointer / move()	5
1.12	AFC module: mousepointer / x()	5
1.13	AFC module: mousepointer / y()	5
1.14	AFC module: mousepointer / auto()	6
1.15	AFC module: mousepointer / vp()	6
1.16	AFC module: mousepointer / version()	7

Chapter 1

Mousepointer

1.1 AFC Module: mousepointer / Main

** Mousepointer V1.10 - Original By Andrea ↵
Galiberti **

Part of Amiga Foundation Classes

Introduction

Author(s) Info

History

AFC doc

Requires: Hardsprite , Displayer , nodemaster

Base: \$8002

COMMANDS

BRIEF DESCRIPTION

mousepointer()
Initialises the mousepointer object

image()
Stores the mouse image

changeImage()
Changes the mouse image

hotspot()
Sets the hotspot

move()
Moves the mouse

```
x()
Returns x coordinate

y()
Returns y coordinate

update()
Updates mouse position

auto()
Auto updates mouse position

vp()
Returns mouse viewport

version()
Gets mousepointer version
```

```
ERROR TABLE
```

1.2 Author(s) Info

Original By: Andrea Galimberti

E Version By: Andrea Galimberti

1.3 Mousepointer / Introduction

Mousepointer.

This MODULE exploits the Hardsprite MODULE TO move a pointer around a viewport. You can move the pointer sprite by hand, or allow the module do it for you by reading the mouse hardware registers (update() method). The mouse sprite can be automatically clipped to a chosen viewport. If you use this module in conjunction with the Displayer module, you can have your mouse sprite automatically pass from one viewport to another taking care of the changing resolution of the different viewports (auto() method). Of course the mouse sprite image can be changed at your will.

1.4 Mousepointer / Error Table

Val (Hex)	Description
-----------	-------------

-----+-----	
none	

1.5 Mousepointer / History

V1.10 - added resourceTracker support

V1.00 - First release

1.6 AFC module: mousepointer / mousepointer()

NAME: mousepointer(number=-1, resTracker=NIL)

DESCRIPTION: Initialises a mousepointer object.

INPUTS: number of the (hardware) sprite (from 0 to 7) to be used to represent the pointer on the screen. The default value of -1 means that it will be allocated the first sprite available.

resTracker: pointer to an optional resourceTracker object

RESULTS: FALSE if the requested sprite is already in use and so it couldn't be allocated.
TRUE otherwise.

SEE ALSO: hardsprite / hardsprite()

1.7 AFC module: mousepointer / image()

NAME: image(height, list:PTR TO INT)

DESCRIPTION: this method stores the image to be used with the mouse sprite. Whenever this method is called, it will discard the previous image.

INPUTS: height (in lines) of the image,
a typed list (it MUST be typed to INT) in the following form:

```
[ $0000, $0000,
  $0000, $0000,
  ...           ]:INT
      ^         ^
      |         |
      |         | second bitplane (16 bits wide)
      |         |
      |         | first bitplane (16 bits wide)
```

This way you can select one of 4 colours for each pixel of the sprite's image.

RESULTS: returns FALSE if: sprite non allocated (with mousepointer()),
height<=0,

pointer to list =NIL.
The hardsprite will raise "No Memory" if it cannot allocate
the (CHIP) memory for the image.

SEE ALSO: hardsprite / image()

1.8 AFC module: mousepointer / changeImage()

NAME: changeImage(viewport)

DESCRIPTION: changes the mouse sprite image to the stored one.

INPUTS: pointer to a viewport structure. If this pointer is <>NIL
then the change will affect only the chosen viewport; if
pointer=NIL then the change is relative to the current
view.

RESULTS: FALSE if viewport<0 or mouse not allocated.
Otherwise TRUE.

SEE ALSO:

image()

hardsprite / changeImage()

1.9 AFC module: mousepointer / hotspot()

NAME: hotspot(x,y)

DESCRIPTION: sets the mouse hotspot

INPUTS: x and y coordinates of the mouse hotspot: these coordinates
are relative to the top-left hand corner of the mouse
image. (Negative values are allowed.)

RESULTS: NONE

SEE ALSO:

1.10 AFC module: mousepointer / update()

NAME: update(viewport, hclip=TRUE, vclip=TRUE)

DESCRIPTION: when called, this method moves the pointer hotspot to the
new mouse coordinates relative to the top-left hand corner
of the chosen viewport.

INPUTS: viewport: pointer to a viewport structure; if this pointer
is NIL then the pointer movements are relative to the
current view.

hclip: TRUE= pointer hotspot cannot exceed the horizontal dimensions of the viewport (this flag is switched automatically to FALSE if viewport=NIL, because in this case there aren't any bounds to check for).

vclip: same as hclip, but for the vertical direction.

RESULTS: NONE

SEE ALSO:

auto()

1.11 AFC module: mousepointer / move()

NAME: move(viewport, x,y)

DESCRIPTION: moves the mouse image to the desired location on a viewport (either Intuition or hand made), taking care of the hotspot position.

INPUTS: viewport: pointer to a viewport structure,
x and y coordinates of the site where to move the mouse hotspot.

RESULTS: NONE

SEE ALSO:

1.12 AFC module: mousepointer / x()

NAME: x()

DESCRIPTION: returns the x coordinate of the mouse hotspot

INPUTS: NONE

RESULTS: x coordinate of mouse hotspot

SEE ALSO:

y()

1.13 AFC module: mousepointer / y()

NAME: y()

DESCRIPTION: returns the y coordinate of the mouse hotspot.

INPUTS: NONE

RESULTS: y coordinate of mouse hotspot

SEE ALSO:

x()

1.14 AFC module: mousepointer / auto()

NAME: auto(vo:PTR TO displayer, hclip=TRUE)

DESCRIPTION: when called, moves the pointer hotspot to the new coordinates, taking care of changing viewport if necessary and automatically switching to the new resolution. One thing you must be aware of: when you position the mouse sprite in the first viewport you have also to set the correct mouse hotspot for that resolution; the auto() method then takes care of rescaling the hotspot coordinates when the resolution changes.

INPUTS: vo: pointer to a displayer (see the BuildView module documentation); this pointer contains all the information concerning dimensions and resolutions of all the viewports displayed in the current view.

hclip: TRUE= pointer hotspot cannot exceed the horizontal dimensions of the current viewport.

RESULTS: NONE

SEE ALSO:

update()

1.15 AFC module: mousepointer / vp()

NAME: vp()

DESCRIPTION: returns the number (starting from 0) of the viewport the mouse sprite is in. This value is meaningful only if you are using the auto() method to move the mouse.

INPUTS: NONE

RESULTS: number of viewport the mouse is in

SEE ALSO:

auto()

1.16 AFC module: mousepointer / version()

NAME: version()

DESCRIPTION: returns the version number of the Mouse module.

INPUTS: NONE

RESULTS: version, revision of mousepointer

SEE ALSO: