
Subject: Re: Giant crosshairs (with arrows)
Posted by [pendleton](#) on Sat, 29 Aug 1992 22:41:36 GMT
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In article <Btpv88.4ss@csn.org>, james@teal.csn.org (Jim Phillips) writes:
> In article <laa-270892173708@berserk.c3.lanl.gov> laa@lanl.gov (Lee Ankeny) writes:
>> Hello Wave gurus,
>>
>> I'd like to implement a "giant crosshair", like the old tek terminals used
>> to have. It would extend from top edge to bottom edge, and left edge to
>> right edge of the window, intersecting at the current mouse pointer
>> location.
>>
>
> Hi Lee. You might give this a try. Not guaranteed to be bullet proof :-)
> But it should get you going in the right direction. Courtesy of
> Mike 4 Mayer, PVI field Technical Sales Engineer.
>
> James K. Phillips Sprocket Scientist pvi!james@boulder.colorado.edu
> Precision Visuals, Inc. (303) 530-9000
> 6260 Lookout Rd Boulder - A quaint little town nestled between
> Boulder, CO 80301 the ROCKIES and REALITY.

I've modified BIGHAIR to optionally accept arrow keys from the keyboard (your escape sequences may vary...I'm using ESC[A, B, C, D). Also the blips from the continuous overplotting have been eliminated by selectively plotting only when the cursor position changes.

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> ----8<-----CUT HERE ----8<-----CUT HERE-----
PRO BIGHAIR, x, y, keyboard=keyboard, accelerate=accelerate
;
; Procedure to get cursor location in current window,
; using cursor lines across the entire window.
; The X and Y cursor locations (in pixels) are returned.
; Further modification could allow Normalized or
; Data coordinates to be returned.
; /Keyboard accepts arrow keys input from keyboard, rather than mouse
; Accelerate = number of pixels to jump in "/keyboard" mode.
;
;
; Mike Mayer, 8/28/92
; Modified:
; Jim Pendleton, Dept. Physics & Astronomy
; Northwestern U.
; 8/29/92
;
; Usage:
; WAVE> BIGHAIR, x, y [, /Keyboard [, Accelerate=# pixels]]
;
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DEVICE, Get_Graphics = oldmode
DEVICE, Set_Graphics = 6 ; XOR write mode.
xmax = !D.X_Vsize
ymax = !D.Y_Vsize
!Err = 0 ; Reset.
oldx = 0
oldy = 0
If (not Keyword_Set(Accelerate)) then Begin
  Accelerate = 1.
EndIf
If (not Keyword_Set(KeyBoard)) then Begin
  PRINT, 'Press left mouse button to quit...'
  CURSOR, oldx, oldy, /Device, /Change
EndIf Else Begin
  PRINT, 'Press space bar to quit...'
  oldx = xmax/2
  oldy = ymax/2
  x = oldx
  y = oldy
EndElse
PLOTS, [oldx, oldx], [0, ymax], /Device ; Draw first crosshairs.
PLOTS, [0, xmax], [oldy, oldy], /Device ; Draw first crosshairs.
EMPTY
Up = String(27B) + '[A'
Down = String(27B) + '[B'
Right = String(27B) + '[C'
Left = String(27B) + '[D'
Clear = Get_Kbrd(0)
Null = "
WHILE !Err NE 1 DO BEGIN
  If (Keyword_Set(Keyboard)) then Begin
    A = String(Byte(Get_Kbrd(0)))
    While ((A ne String(27B)) and (StrUpCase(A) ne ' ')) Do Begin
      A = String(Byte(Get_Kbrd(0)))
    EndWhile
    B = String(Byte(Get_Kbrd(0)))
    C = String(Byte(Get_Kbrd(0)))
    Key = A + B + C
  EndIf Else Begin
    CURSOR, x, y, /Device, /Change
  EndElse
  PLOTS, [oldx, oldx], [0, ymax], /Device ; Erase last crosshairs.
  PLOTS, [0, xmax], [oldy, oldy], /Device ; Erase last crosshairs.
  If (Keyword_Set(Keyboard)) then Begin
    !Err = 0
    Case Key Of
      Up : y = oldy + Accelerate
      Down : y = oldy - Accelerate

```

```

Left : x = oldx - Accelerate
Right : x = oldx + Accelerate
Null : x = x
Else : !Err = 1
    EndCase
EndIf
If ((x ne oldx) or (y ne oldy)) then Begin
    PLOTS, [x, x], [0, ymax], /Device ; Draw new crosshairs.
    PLOTS, [0, xmax], [y, y], /Device ; Draw new crosshairs.
    oldx = x
    oldy = y
    EMPTY
EndIf
ENDWHILE
If (not Keyword_Set(Keyboard)) then Begin
;
; Already erased in Keyboard mode.
;
    PLOTS, [oldx, oldx], [0, ymax], /Device ; Erase last crosshairs.
    PLOTS, [0, xmax], [oldy, oldy], /Device ; Erase last crosshairs.
EndIf
Empty
DEVICE, Set_Graphics = oldmode
PRINT, 'X = ' + STRTRIM(x, 2), ' Y = ' + STRTRIM(y, 2)
END
> ----8<-----CUT HERE ----8<-----CUT HERE-----

```

Jim Pendleton, SysMgr, etc.
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