## Subject: Re: keypressed pauses program - how to do that? Posted by thompson on Tue, 08 Nov 1994 15:01:29 GMT

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frank@chaos.uni-frankfurt.dbp.de (Frank Hoffsuemmer) writes:

- > Hi all,
- > basically what I have is a program like this:
- > FOR loop=0,1000 DO BEGIN
- > TVSCL, image(loop)
- > WAIT. 2
- > ENDFOR
- > because the images aren't very big it's quite fast.
- > to make it slower I inserted a 'WAIT, 2' after the TVSCL line.
- > But that's not what I want to do. It would be much nicer to have something
- > like a key-controled slide-show, where e.g. <space> toggles pause/slide mode
- > and e.g <return> (in pause mode) advances the images manually.
- > I know there's some function for keyboard-stuff in IDL, but I don't know it's
- > name, and I have no idea how to implement it, that it works the waz I described
- > above. Maybe somebody wrote something similar an can help me out now.

What you want to use is GET\_KBRD. This gets a single character from the input buffer of the keyboard. If you say

$$Char = GET_KBRD(1)$$

then the program waits until the user presses one of the keys. If you say

Char = 
$$GET KBRD(0)$$

then the program reads from the input buffer without waiting, or returns a null if nothing's there.

One needs to be aware of two things:

- 1. GET\_KBRD only returns a single character. If the key pressed generates an escape sequence, then repeated calls to GET\_KBRD are needed to read in the entire sequence.
- 2. The last time I checked, in IDL for Windows, the non-printing characters such as carriage-return or line-feed, all are read in as the null character. This isn't true for other platforms.

Here's an example of a program that uses GET\_KBRD.

Bill Thompson

```
PRO PAUSE, SWITCH
: NAME:
PAUSE
: PURPOSE:
; Pauses until a key is pressed at the keyboard.
: CATEGORY:
: CALLING SEQUENCE:
; PAUSE [, SWITCH]
OPTIONAL INPUT PARAMETERS:
SWITCH - If nonzero and !D.NAME is 'PS', then no action is taken.
  The default value for SWITCH is 0; i.e. PAUSE will take
  effect no matter what plotting device is in use.
OUTPUTS:
: None.
; OPTIONAL OUTPUT PARAMETERS:
: None.
COMMON BLOCKS:
: None.
SIDE EFFECTS:
If the character entered is "Q", then the PAUSE procedure executes a
: RETALL command.
RESTRICTIONS:
The variable SWITCH must not be an array, or of type string.
PROCEDURE:
The GET KBRD function is used.
MODIFICATION HISTORY:
William Thompson Applied Research Corporation
September, 1987 8201 Corporate Drive
  Landover, MD 20785
ON_ERROR,2
 If SWITCH is passed and is nonzero, then check to see if PAUSE will have any
 effect.
IF N_PARAMS(0) EQ 0 THEN SWITCH = 0
IF (SWITCH NE 0) AND (!D.NAME EQ 'PS') THEN RETURN
 Force the plot buffer to empty so that the entire current plot is visible.
EMPTY
```

```
; Loop until a character is entered at the keyboard. If the character "Q" is ; pressed, then return to the main level. ;

TEST_CHAR = GET_KBRD(1)

IF STRUPCASE(TEST_CHAR) EQ "Q" THEN RETALL ;

RETURN
END
```