
Subject: Re: keypressed pauses program - how to do that?

Posted by [thompson](#) on Tue, 08 Nov 1994 15:01:29 GMT

[View Forum Message](#) <> [Reply to Message](#)

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-controlled 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 way I described

> above. Maybe somebody wrote something similar and 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
```
