

input

COLLABORATORS

	<i>TITLE :</i> input		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1	input	1
1.1	input.doc	1
1.2	input.device/IND_ADDHANDLER	1
1.3	input.device/IND_REMHANDLER	2
1.4	input.device/IND_SETMPORT	2
1.5	input.device/IND_SETMTRIG	2
1.6	input.device/IND_SETMTYPE	3
1.7	input.device/IND_SETPERIOD	3
1.8	input.device/IND_SETTHRESH	4
1.9	input.device/IND_WRITEEVENT	4
1.10	input.device/PeekQualifier	5

Chapter 1

input

1.1 input.doc

```
IND_ADDHANDLER
IND_REMHANDLER
IND_SETMPORT
IND_SETMTRIG
IND_SETMTYPE
IND_SETPERIOD
IND_SETTHRESH
IND_WRITEEVENT
PeekQualifier()
```

1.2 input.device/IND_ADDHANDLER

NAME

IND_ADDHANDLER -- Add an input handler to the device

FUNCTION

Add a function to the list of functions called to handle input events generated by this device. The function is called as

```
newInputEvents = Handler(inputEvents, handlerData);
D0                A0        A1
```

IO REQUEST

io_Message mn_ReplyPort set
io_Device preset by OpenDevice
io_Unit preset by OpenDevice
io_Command IND_ADDHANDLER
io_Data a pointer to an interrupt structure.
is_Data the handlerData pointer described above
is_Code the Handler function address

NOTES

The interrupt structure is kept by the input device until a RemHandler command is satisfied for it.

1.3 input.device/IND_REMHANDLER

NAME

IND_REMHANDLER -- Remove an input handler from the device

FUNCTION

Remove a function previously added to the list of handler functions.

IO REQUEST

io_Message mn_ReplyPort set
io_Device preset by OpenDevice
io_Unit preset by OpenDevice
io_Command IND_REMHANDLER
io_Data a pointer to the interrupt structure.

NOTES

This command is not immediate

1.4 input.device/IND_SETMPORT

NAME

IND_SETMPORT -- Set the current mouse port

FUNCTION

This command sets the gameport port at which the mouse is connected.

IO REQUEST

io_Message mn_ReplyPort set if quick I/O is not possible
io_Device preset by the call to OpenDevice
io_Unit preset by the call to OpenDevice
io_Command IND_SETMPORT
io_Flags IOB_QUICK set if quick I/O is possible
io_Length 1
io_Data a pointer to a byte that is either 0 or 1,
indicating that mouse input should be obtained
from either the left or right controller port,
respectively.

1.5 input.device/IND_SETMTRIG

NAME

IND_SETMTRIG -- Set the conditions for a mouse port report

FUNCTION

This command sets what conditions must be met by a mouse before a pending Read request will be satisfied. The trigger specification is that used by the gameport device.

IO REQUEST

io_Message mn_ReplyPort set if quick I/O is not possible

```

io_Device preset by the call to OpenDevice
io_Unit   preset by the call to OpenDevice
io_Command IND_SETMTRIG
io_Flags  IOB_QUICK set if quick I/O is possible
io_Length sizeof(gameportTrigger)
io_Data   a structure of type GameportTrigger, which
          has the following elements
  gpt_Keys -
    GPTB_DOWNKEYS set if button down transitions
    trigger a report, and GPTB_UPKEYS set if button up
    transitions trigger a report
  gpt_Timeout -
    a time which, if exceeded, triggers a report;
    measured in vertical blank units (60/sec)
  gpt_XDelta -
    a distance in x which, if exceeded, triggers a
    report
  gpt_YDelta -
    a distance in y which, if exceeded, triggers a
    report

```

1.6 input.device/IND_SETMTYPE

```

NAME
IND_SETMTYPE -- Set the current mouse port controller type

```

```

FUNCTION
This command sets the type of device at the mouse port, so
the signals at the port may be properly interpreted.

```

```

IO REQUEST
io_Message mn_ReplyPort set if quick I/O is not possible
io_Device  preset by the call to OpenDevice
io_Unit    preset by the call to OpenDevice
io_Command IND_SETMTYPE
io_Flags  IOB_QUICK set if quick I/O is possible
io_Length 1
io_Data   the address of the byte variable describing
          the controller type, as per the equates in
          the gameport include file

```

1.7 input.device/IND_SETPERIOD

```

NAME
IND_SETPERIOD -- Set the key repeat period

```

```

FUNCTION
This command sets the period at which a repeating key repeats.

```

```

This command always executes immediately.

```

```

IO REQUEST - a timerequest

```

```

tr_node.io_Message  mn_ReplyPort set if quick I/O is not possible
tr_node.io_Device   preset by the call to OpenDevice
tr_node.io_Unit     preset by the call to OpenDevice
tr_node.io_Command  IND_SETPERIOD
tr_node.io_Flags    IOB_QUICK set if quick I/O is possible
tr_time.tv_secs     the repeat period seconds
tr_time.tv_micro    the repeat period microseconds

```

1.8 input.device/IND_SETTHRESH

NAME

IND_SETTHRESH -- Set the key repeat threshold

FUNCTION

This command sets the time that a key must be held down before it can repeat. The repeatability of a key may be restricted (as, for example, are the shift keys).

This command always executes immediately.

IO REQUEST - a timerequest

```

tr_node.io_Message  mn_ReplyPort set if quick I/O is not possible
tr_node.io_Device   preset by the call to OpenDevice
tr_node.io_Unit     preset by the call to OpenDevice
tr_node.io_Command  IND_SETTHRESH
tr_node.io_Flags    IOB_QUICK set if quick I/O is possible
tr_time.tv_secs     the threshold seconds
tr_time.tv_micro    the threshold microseconds

```

1.9 input.device/IND_WRITEEVENT

NAME

IND_WRITEEVENT -- Propagate an input event to all handlers

FUNCTION

IO REQUEST

```

io_Message  mn_ReplyPort set if quick I/O is not possible
io_Device   preset by the call to OpenDevice
io_Unit     preset by the call to OpenDevice
io_Command  IND_WRITEEVENT
io_Flags    IOB_QUICK set if quick I/O is possible
io_Length   should be sizeof(struct InputEvent)
io_Data     a pointer to the struct InputEvent:
    ie_NextEvent
    will be ignored.
    ie_Class
    ie_SubClass
    ie_Code
    ie_Qualifier
    ie_X, ie_Y
    as desired

```

ie_TimeStamp
will be set by this call (V36)

NOTES

The contents of the input event are destroyed.

This function was documented in V34 and earlier to allow chaining of events via ie_NextEvent. The implementation never allowed that. The documentation now reflects this.

ie_TimeStamp is set only in V36 and later. Software written to run on earlier versions should set this field to the current time.

1.10 input.device/PeekQualifier

NAME

PeekQualifier -- get the input device's current qualifiers (V36)

SYNOPSIS

```
qualifier = PeekQualifier()  
d0
```

```
UWORD PeekQualifier( VOID );
```

FUNCTION

This function takes a snapshot of what the input device thinks the current qualifiers are.

RESULTS

qualifier - a word with the following bits set according to what the input device knows their state to be:

```
IEQUALIFIER_LSHIFT, IEQUALIFIER_RSHIFT,  
IEQUALIFIER_CAPSLOCK, IEQUALIFIER_CONTROL,  
IEQUALIFIER_LALT, IEQUALIFIER_RALT,  
IEQUALIFIER_LCOMMAND, IEQUALIFIER_RCOMMAND,  
IEQUALIFIER_LEFTBUTTON, IEQUALIFIER_RIGHTBUTTON,  
IEQUALIFIER_MIDBUTTON
```

NOTE

This function is new for V36.

SEE ALSO

devices/inpotevent.h