

input

COLLABORATORS

	TITLE : input		
ACTION	NAME	DATE	SIGNATURE
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

input

1.1 input.doc

IND_ADDHANDLER	IND_SETMTRIG	IND_SETTHRESH
IND_REMHANDLER	IND_SETMTYPE	IND_WRITEEVENT
IND_SETMPORT	IND_SETPERIOD	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`
