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**DRAFT DOCUMENT**

The feature has 1 function:

**[0x2200] MousePointer Basic Optical Sensors**

MousePointerInfo = [0]GetMousePointerInfo()

**Event**

None

**GetMousePointerInfo**

Returns information about the mouse pointer, like resolution, need for sensor orientation tuning, need for acceleration, etc.. basically all information needed by SetPoint UI for pointer/cursor settings.

**Returns**

SensorResolution [16bits] Returns the sensor resolution, in 1 DPI steps (0...65'536 DPI)

Flags [8bits] Various informative bits, see definition below.

**SensorResolution:**

This value gives the typical sensor resolution on a standard surface, in real life; the optical sensor resolution can change up to +/- 20% the indicated resolution depending on the surface.

**Flags:**

bit 7	6	5	4	3	2	1	0
reserved	reserved	reserved	reserved	Suggest vertical orientation tuning (trackball)	Suggest OS ballistics*	Pointer acceleration bit1 *	Pointer acceleration bit0 *

**Pointer acceleration [2bits]**

- 00 = none,
- 01 = low,
- 02 = med,
- 03 = high

The device informs which ballistics curve is more appropriate given its physical characteristics. If the host SW has several ballistics curves, (up to 4) the host can choose a default curve based on this information. If the host does not provide multiple ballistics, then this information is to be ignored.

**Suggest OS ballistics** [1bit]

0 : If the host SW can override the OS native ballistics, then this setting suggests that it is OK to do so.

1 : The device suggests that the OS native ballistics is used.

**Suggest vertical tuning** [1bit]

0 = No vertical tuning *(Standard mice)*

1 = Provide vertical tuning (orientation) *(Trackball)*

When suggest vertical tuning bit is set, the host SW can provide a mechanism for the user to fine tune its X and Y movement vs the cursor movement on the screen. This is typically required for trackballs.

**Report format**

Byte 0	1	2	3	4	...	15
Sensor Resolution <sub>MSB</sub>	Sensor Resolution <sub>LSB</sub>	Flags	reserved	reserved	reserved	reserved

**SW Response Error Exception**

None

**Remarks**