

Logging data, 1-16 occurred at launch of tenma software (device detect):

Get descriptor from device  
 Get descriptor from device  
 returned 04 03 09 04

IN

- blank? -

1C 03 55 00 53 00 42 00 20 00 74 00 6F 00 20 00 53 00 65 00 72 00 69 00 61 00 6C 00  
 (the above translates to something like 'USB to Serial' (see below))

Index	Operation	Direction	Endpoint	Status	Data
0	START	START OF LOG			
1	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
2	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
3	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
4	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	04 03 09 04
5	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
6	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
7	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
8	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	1C 03 55 00 53 00 42 00 20 00 74 00 6F 00 20 00 53 00 65 00 72 00 69 00 61 00 6C 00
9	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
10	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
11	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
12	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	04 03 09 04
13	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
14	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
15	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
16	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	04 03 09 04
17	START	START OF LOG			

Item #4 expanded:

Index	Operation	Direction	Endpoint	Status	Data
4	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	04 03 09 04
5	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
6	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
7	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
8	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	1C 03 55 00 53 00 42 00 20 00 74 00 6F 00 20 00 53 00 65 00 72 00 69 00 61 00 6C 00
9	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
10	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
11	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
12	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	04 03 09 04
13	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
14	URB	GET_DESCRIPTOR_FROM_DEVICE	OUT 0	STATUS_SUCCESS	
15	URB	CONTROL_TRANSFER	IN 0	STATUS_PENDING	
16	URB	CONTROL_TRANSFER	IN 0	STATUS_SUCCESS	04 03 09 04
17	START	START OF LOG			
18	URB	CLASS_DESCRIPTOR_REQUEST	OUT 0	STATUS_SUCCESS	60 09 00 00 03
19	HID	(Set) INTERFACE	OUT 0	STATUS_SUCCESS	60 09 00 00 03
20	HID	(Set) INTERFACE	IN 0	STATUS_PENDING	
21	HID	(Set) INTERFACE	IN 0	STATUS_SUCCESS	
22	URB	BULK_TRANSFER	OUT 2	STATUS_SUCCESS	02 5A 00 00 00
23	URB	BULK_TRANSFER	OUT 2	STATUS_SUCCESS	02 5A 00 00 00

**URB\_FUNCTION\_CONTROL\_TRANSFER**

Length : 0x50  
 USB Status : USBD\_STATUS\_SUCCESS (0x0)  
 EndpointAddress : 0x0  
 PipeHandle : 0x869C4560  
 TransferFlags : 0xB ( USBD\_TRANSFER\_DIRECTION\_IN USBD\_SHORT\_TRANSFER\_OK )  
 TransferBufferLength : 0x4  
 TransferBuffer : 0x86978EF8  
 TransferBufferMDL : 0x86930480  
 UrbLink : 0x0  
 SetupPacket : 0x80 0x6 0x0 0x3 0x9 0x4 0x6 0x1  
 RequestType : 0x80 (Direction: Device-to-host, Type: Standard, Recipient: Device)  
 Request : 0x6 (GET\_DESCRIPTOR)  
 Value : 0x300 (USB\_STRING\_DESCRIPTOR\_TYPE)  
 Index : 0x409  
 Length : 0x106

**String Descriptor**  
 bLength : 0x4  
 wLANGID[0] : 0x 409 (English - United States)  
 Data : 04 03 09 04

Item #8 expanded:

URB	CONTROL_TRANSFER	IN	0	\Device\USBPDO-0	0x86A61358	STATUS_SUCCESS	1C 03 55 00 53 00 42 00 20 00 74 00 6F 00 20 00 53 00 65 00 72 00 69 00 61 00 6C 00	28
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**URB\_FUNCTION\_CONTROL\_TRANSFER**

Length : 0x50  
 USBD Status : USBD\_STATUS\_SUCCESS (0x0)  
 EndpointAddress : 0x0  
 PipeHandle : 0x869C4560  
 TransferFlags : 0xB ( USBD\_TRANSFER\_DIRECTION\_IN USBD\_SHORT\_TRANSFER\_OK )  
 TransferBufferLength : 0x1C  
 TransferBuffer : 0x86960650  
 TransferBufferMDL : 0x868BEF88  
 UrbLink : 0x0  
 SetupPacket : 0x80 0x6 0x2 0x3 0x9 0x4 0xFE 0x1  
 RequestType : 0x80 (Direction: Device-to-host, Type: Standard, Recipient: Device)  
 Request : 0x6 (GET\_DESCRIPTOR)  
 Value : 0x302 (USB\_STRING\_DESCRIPTOR\_TYPE)  
 Index : 0x409  
 Length : 0x1FE

String Descriptor  
 bLength : 0x1C  
 bString : USB to Serial

Data : 1C 03 55 00 53 00 42 00 20 00 ... (click and see buffer)

Offset	Hex	Ascii
00000000	1C 03 55 00 53 00 42 00 20 00 74 00 6F	..U.S.B. to
0000000D	00 20 00 53 00 65 00 72 00 69 00 61 00	..S.e.r.i.a.l.
0000001A	6C 00	l.

Item #12 expanded:

12	URB	CONTROL_TRANSFER	IN	0	\Device\USBPDO-0	0x86A61358	STATUS_SUCCESS	04 03 09 04
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**URB\_FUNCTION\_CONTROL\_TRANSFER**

Length : 0x50  
 USBD Status : USBD\_STATUS\_SUCCESS (0x0)  
 EndpointAddress : 0x0  
 PipeHandle : 0x869C4560  
 TransferFlags : 0xB ( USBD\_TRANSFER\_DIRECTION\_IN USBD\_SHORT\_TRANSFER\_OK )  
 TransferBufferLength : 0x4  
 TransferBuffer : 0x867EC9C0  
 TransferBufferMDL : 0x868BEF88  
 UrbLink : 0x0  
 SetupPacket : 0x80 0x6 0x0 0x3 0x9 0x4 0xFE 0x1  
 RequestType : 0x80 (Direction: Device-to-host, Type: Standard, Recipient: Device)  
 Request : 0x6 (GET\_DESCRIPTOR)  
 Value : 0x300 (USB\_STRING\_DESCRIPTOR\_TYPE)  
 Index : 0x409  
 Length : 0x1FE

String Descriptor  
 bLength : 0x4  
 wLANGID[0] : 0x 409 (English - United States)

Data : 04 03 09 04

Offset	Hex	Ascii
00000000	04 03 09 04	

Item #16 expanded:

16	URB	CONTROL_TRANSFER	IN	0	\Device\USBPDO-0	0x86A61358	STATUS_SUCCESS	04 03 09 04
<b>URB_FUNCTION_CONTROL_TRANSFER</b>								
Length : 0x50								
USB Status : USBD_STATUS_SUCCESS (0x0)								
EndpointAddress : 0x0								
PipeHandle : 0x869C4560								
TransferFlags : 0xB ( USBD_TRANSFER_DIRECTION_IN USBD_SHORT_TRANSFER_OK )								
TransferBufferLength : 0x4								
TransferBuffer : 0x867EC7B8								
TransferBufferMDL : 0x868BEF88								
UrbLink : 0x0								
SetupPacket : 0x80 0x6 0x0 0x3 0x9 0x4 0xFE 0x1								
RequestType : 0x80 (Direction: Device-to-host, Type: Standard, Recipient: Device)								
Request : 0x6 (GET_DESCRIPTOR)								
Value : 0x300 (USB_STRING_DESCRIPTOR_TYPE)								
Index : 0x409								
Length : 0x1FE								
<b>String Descriptor</b>								
bLength : 0x4								
wLANGID[0] : 0x 409 (English - United States)								
Data : 04 03 09 04								

Next is begin monitoring:

I think the following would be sent to hidraw0 ???

60 09 00 00 03 (URB? - \device\USBPDO-2)  
60 09 00 00 03 (HID?)

02 5A 00 00 00 00 00 00 (URB)  
02 5A 00 00 00 00 00 00 (HID)

01 01 00 00 00 00 00 00 (URB)  
01 01 00 00 00 00 00 00 (HID)

begin flow of data

17	START	START OF LOG						
18	URB	CLASS_INTERFACE	OUT	0	\Device\USBPDO-2	0x86782A38	STATUS_SUCCESS	60 09 00 00 03
19	HID	(SetReport) CLASS_INTERFACE	OUT	0	\Device\_HID00...	0x86782A38	STATUS_SUCCESS	60 09 00 00 03
20	HID	(SetReport) CONTROL_TRANSFER	IN	0	\Device\_HID00...	0x86782A38	STATUS_PENDING	
21	HID	(SetReport) CONTROL_TRANSFER	IN	0	\Device\_HID00...	0x86782A38	STATUS_SUCCESS	
22	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	2	\Device\USBPDO-2	0x86782A38	STATUS_SUCCESS	02 5A 00 00 00 00 00 00
23	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	2	\Device\_HID00...	0x86782A38	STATUS_SUCCESS	02 5A 00 00 00 00 00 00
24	URB	BULK_OR_INTERRUPT_TRANSFER	IN	2	\Device\_HID00...	0x86782A38	STATUS_PENDING	
25	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x869B4538	STATUS_NOT_SUPPORTED	
26	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\_HID00...	0x869B4538	STATUS_NOT_SUPPORTED	
27	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\_HID00...	0x869B4538	STATUS_PENDING	
28	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x86A61518	STATUS_NOT_SUPPORTED	
29	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\_HID00...	0x86A61518	STATUS_NOT_SUPPORTED	
30	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\_HID00...	0x86A61518	STATUS_PENDING	
31	URB	BULK_OR_INTERRUPT_TRANSFER	IN	2	\Device\_HID00...	0x86782A38	STATUS_SUCCESS	
32	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	2	\Device\USBPDO-2	0x86782A38	STATUS_SUCCESS	01 01 00 00 00 00 00 00
33	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	2	\Device\_HID00...	0x86782A38	STATUS_SUCCESS	01 01 00 00 00 00 00 00
34	URB	BULK_OR_INTERRUPT_TRANSFER	IN	2	\Device\_HID00...	0x86782A38	STATUS_PENDING	
35	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\_HID00...	0x869B4538	STATUS_SUCCESS	F0 00 00 00 00 00 00 00
36	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x869B4538	STATUS_NOT_SUPPORTED	
37	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\_HID00...	0x869B4538	STATUS_NOT_SUPPORTED	

37	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\HID00...	0x869B4538	STATUS_NOT_SUPPORTED	
38	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x869B4538	STATUS_PENDING	
39	URB	BULK_OR_INTERRUPT_TRANSFER	IN	2	\Device\HID00...	0x86782A38	STATUS_SUCCESS	
40	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x86A61518	STATUS_SUCCESS	F0 00 00 00 00 00 00
41	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x86A61518	STATUS_NOT_SUPPORTED	
42	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\HID00...	0x86A61518	STATUS_NOT_SUPPORTED	
43	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x86A61518	STATUS_PENDING	
44	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x869B4538	STATUS_SUCCESS	F0 00 00 00 00 00 00
45	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x869B4538	STATUS_NOT_SUPPORTED	
46	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\HID00...	0x869B4538	STATUS_NOT_SUPPORTED	
47	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x869B4538	STATUS_PENDING	
48	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x86A61518	STATUS_SUCCESS	F0 00 00 00 00 00 00
49	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x86A61518	STATUS_NOT_SUPPORTED	
50	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\HID00...	0x86A61518	STATUS_NOT_SUPPORTED	
51	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x86A61518	STATUS_PENDING	
52	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x869B4538	STATUS_SUCCESS	F2 32 3A 00 00 00 00
53	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x869B4538	STATUS_NOT_SUPPORTED	
54	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\HID00...	0x869B4538	STATUS_NOT_SUPPORTED	
55	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x869B4538	STATUS_PENDING	
56	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x86A61518	STATUS_SUCCESS	F3 36 37 31 00 00 00
57	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\USBPDO-2	0x86A61518	STATUS_NOT_SUPPORTED	
58	URB	BULK_OR_INTERRUPT_TRANSFER	OUT	81	\Device\HID00...	0x86A61518	STATUS_NOT_SUPPORTED	
59	URB	BULK_OR_INTERRUPT_TRANSFER	IN	81	\Device\HID00...	0x86A61518	STATUS_PENDING	