

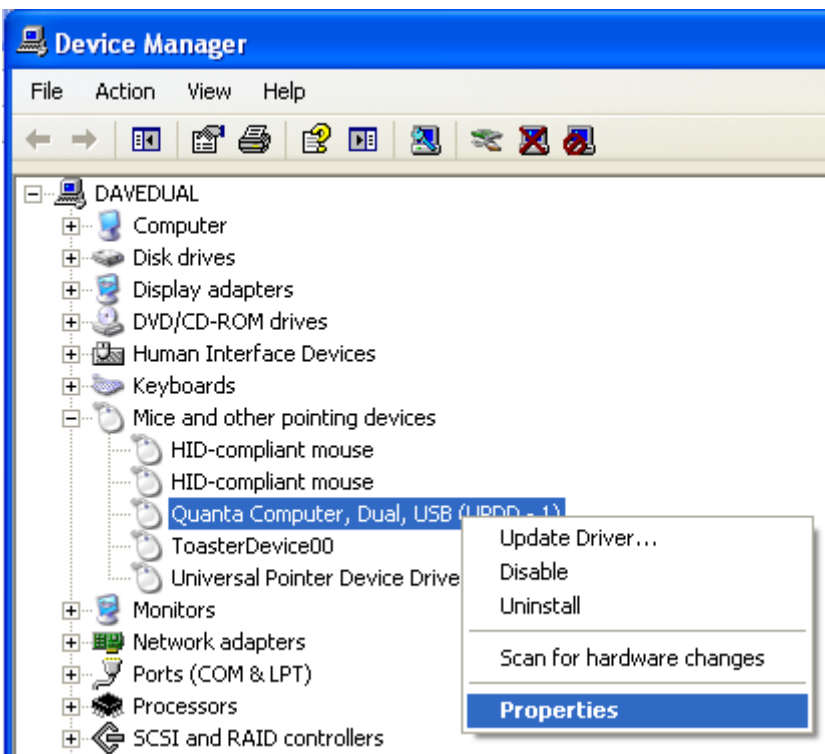
## Windows

There are many ways to identify USB devices plugged into a Windows USB compliant system and here are some of the methods we use to view the USB vendor and product ids:

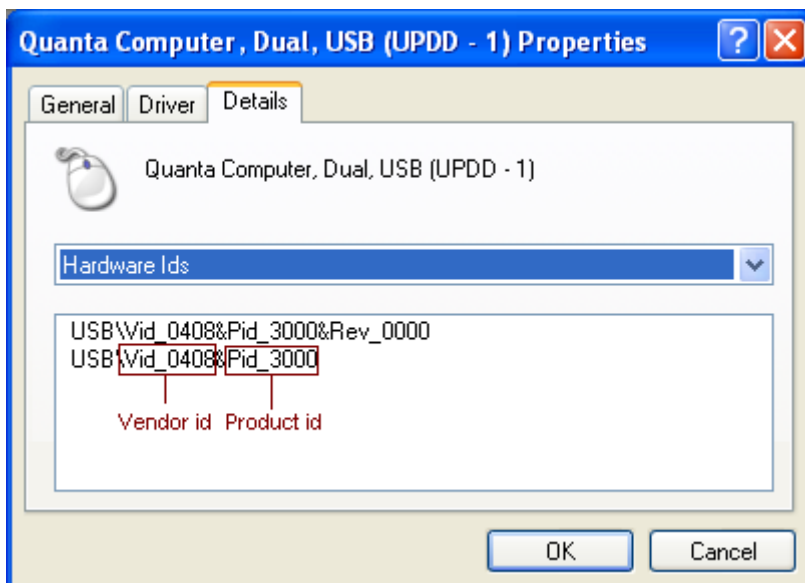
### Device Manager

Depending on the operating system in use the device's entry in the Device Manager may show the required information. Touch screens are likely to either reside in the Mice and other pointer devices (if a custom driver is loaded to supported the device) or Human Interface Devices sections.

Start>Control panel>system>hardware>device manage>[section]>[device] right click on device entry, properties tab:

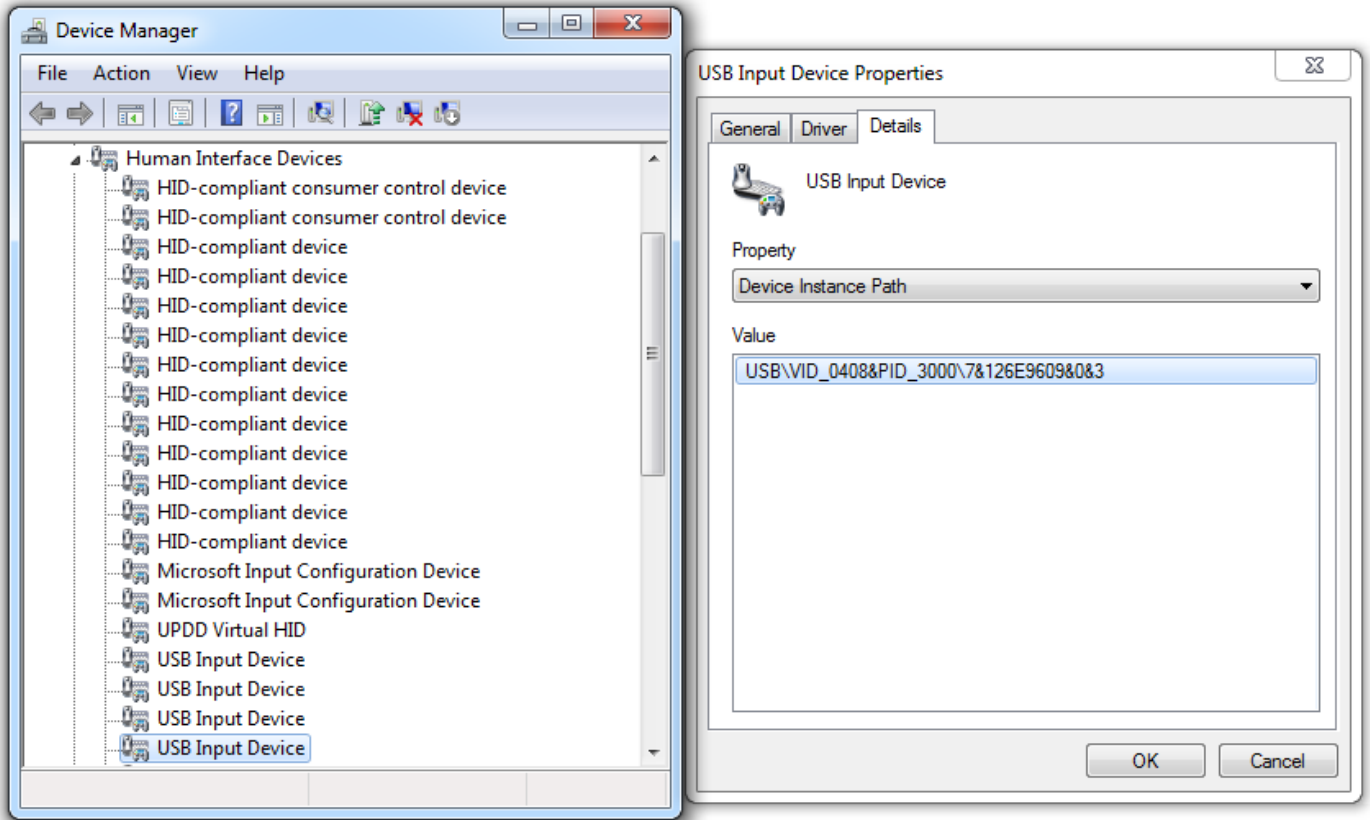


The following screen shots, taken on XP and Win 7, show a touch device handled by our UPDD driver:



The following screen shot, taken on Win 7, shows the same touch device handled by the Windows HID

driver:



So the touchscreen's Vendor ID (VID) is 0408 and Product ID(PID) is 3000.

Next step, Let's create an android driver for this touchscreen monitor:

1# create a text file and save it as "display\_param.cfg", quotation marks are must to make the identifiable file extension .cfg.

Copy the following code into the text file ( open the newly created .cfg file in note pad text ).

```
screen0_output_type=3;  
screen0_output_mode=10;  
lcd_x=1920;  
lcd_y=1080;  
lcd_swap=0;  
lcd_dclk_freq=80;  
lcd_hbp=90;  
lcd_ht=2100;  
lcd_vbp=16;  
lcd_vt=2260;  
lcd_lvds_ch=1;  
lcd_lvds_reverse=0;  
lcd_lvds_mode=0;  
lcd_lvds_bitwidth=0;  
lcd_lvds_io_cross=0;  
hid_vid=0408;  
hid_pid=3000;
```

Notes: Normally, what we need to modify is the last two lines: hid\_vid & hid\_pid, while sometimes, we need to change the first two lines: output type & output mode, for example, 1080P at 60Hz( the above) and 1080P at 50Hz is different. Fortunately, today's touch monitor are not as fragmented as 5 years ago, even there is some mismatch, we have prepared the code for every scenario including 480i/p, 576i/p,720p@50Hz, 720P@60Hz, 1080i@50Hz, 1080P@60Hz