Known Hardware Issues

Controllers   Contact

Our driver works with many touch devices (controllers) and operating systems in many different system configuration and environments.

This document lists known issues or configuration consideration that we have observed / discovered along the way.

Touch Controllers

This section lists any issues or specialities we have encountered with touch controllers:

USB 3.0 issue	A number of Mac customers have reported difficulties with touch devices plugged into USB 3.0 ports that do not arise when used in USB 2.0 ports / hubs. This was observed thus far on the following controllers but could be more widespread: iNexio, HID Multi-touch, USB
Delta Mode devices	Controllers that operate in what we refer to as "delta mode" are controllers whereby touch co-ordinates are not transmitted when touch is held steady in the same position. The UPDD Console, Properties, Lift off time setting should be set to 0 to reflect this mode of operation. Known controllers that operate in this mode are: Elo Touchsystems, Smartset 2216, USB
Cisco 4400 Media	X86 Linux system - UPDD must be manually installed on this device as per these instructions.
Player 4310	MIPS Linux system - UPDD must be manually installed on this device as per these instructions.
Samsung Series 7 Slate tablet	This touch/pen device is supported by our driver with a number of limitations as described here.
Microsoft Surface Pro and Pro 2	This touch/pen device is supported by our driver with a number of limitations as described here.
Acer T2x2 HUL	This touch device did not show up in a Mac System Profiler under USB devices when the monitor was plugged into a DVI slot but did when plugged into a HDMI slot! We find this difficult to believe but this is what was reported! Another customer reported that touch stopped working – we sent the latest driver…. "Didn't seem to have fixed it at first, but then I did some resetting of my monitor settings in the Acer OSD and then it finally started working again. I just hit the reset of the monitor settings on the OSD - Very odd.
DMC, DUS series	The auto-calibration tool, TPOffset, must be executed before operating DMC's multi-touch capacitive touch screens (DUS series and EXC series) with the DUS series controller. It is necessary to run this once before initial use of the touch screens, and only again if either the usage environment drastically changes or operation performance is felt to be poor.
Multitou.ch MultiTaction	This device is not directly supported by the driver but can be utilized in Mac OS X via our gesture software (configured to receive co-ordinate data in from TUIO). A 'dummy' UPDD driver needs to be installed to allow our gesture software to work. You have to set the incoming TUIO port to that defined by the Multitou.ch software. We have also experimented with a modified gesture engine to interface directly with this device via the Cornerstone SDK which appeared to work well (albeit the development was not completely finished) as the TUIO interface worked equally well. The incoming TUIO data is associated with a specific display so can only be used to control one Mac OS X desktop. Please contact Touch-Base for further details.
IQboard, Serial	Although this is a USB device it is actually a Silicon Labs CP2101 USB to UART bridge so requires the Silicon Labs VCP driver to be installed to create a virtual com port. At the time of writing 12/12/11 we downloaded and tested with version 6.5. This device does not stay active unless the device driver pulses the device so the UPDD driver looks for a device called IQboard and if found pulses every 1 second unless the user mode UPDD setting iqboardtimerms is used to define a different timer pulse (in milliseconds).
Next Window	Our support for Next Window hardware is described here. Next Window touch devices can be placed in a Mac mode. One customer, when using our driver under Mac, made the following observation: "Originally I was having trouble getting the equivalent of a 'click and hold' effect from the unit; but by killing the mac mode, leaving the drag function active on the hardware side and setting your driver to point & click I seem to be where I want to be with it."
Microchip	Although this is a USB device it is actually a Microchip USB to UART bridge so requires the Microchip USB

mTouch	Serial Port Driver to create the virtual com port.
Microchip AR1100	This device can operate in three mode, Mouse, Generic, Digitizer. In each case the controller is set with a different USB product id and sends out different touch data packets.
	The USB product ids are Mouse = C02, Generic = C01 and Digitizer=C03. You can view the product id of a connected device in Windows desktop, Mac and Linux as described here.
	The AR1100 is in HID-Mouse mode by default.
	The AR1100 configuration utility software can be used to change the mode. **The configuration utility and the UPDD driver cannot be installed at the same time.**
	Link to download the configuration utility: http://www.microchip.com/wwwproducts/Devices.aspx?dDocName=en555168
	Link to the datasheet (see Sec. 4.1.3): http://ww1.microchip.com/downloads/en/DeviceDoc/41606B.pdf
	When using the Windows CE driver you have to have the correct driver that matches the correct mode of operation so that both the PID and data packet configuration match that of the controller.
Keetouch USB	Under Windows 7 the driver is receiving an error return to our standard USB Set Configuration request. The device returns error "USBD Buffer Underrun" message. This means that the driver tries to re-establish a connection with the USB device and goes into an endless loop. One customer reported (December 2010) that updating Windows 7 to the latest patch status fixed the issue. Another customer (Jan 2011) reported that KeeTouch controller must have firmware 1.42 or higher when used with Windows 7
iNexio	Their USB device with vendor id 1870 and product id 0001 is available as a single touch device which uses firmware 1.x and a dual touch device which uses firmware 2.x. Firmware 1.x outputs 5 bytes of touch data and 2.x outputs 100's of bytes of data and caters for 2 stylus and unfortunately we do not know it's format, hence it is not supported. The 2 stylus 0001 controller was soon replaced with 1870 / 010x which we do support.
	To summarise:
	1870/0001 – single touch – firmware 1.x – 5 bytes of data – supported 1870/0001 – dual touch – firmware 2.x – 100's bytes of data – not supported 1870/010x – dual touch – supported
3M SCXXX range	The 3M range of controllers commonly known as the SC5 (SC40n, SC50n, SC80n) may need initialising before they generate the full range of touch coordinates. With un-initialised controllers, coordinates are not generated across the entire screen which can result in dead touch areas at the edges. If you are using these controllers and find that, after calibration, there is no reaction to touch around the edges then either use 3 point calibration in UPDD Calibration and check the Eeprom check box (this hardware initialises the controller and stores calibration in the controller's Eeprom) or run the Windows initialisation program available on the 3M web site at http://www.3m.com/3MtouchSystems/downloads/drivers/HIDCalibUtility.zip and then recalibrate with the UPDD calibration utility.
	In our code we check for the controller name "3M Touch Systems, SC400/500/800, USB" and if it matches we try and perform a 3 point hardware eeprom calibration. If we do not get the correct response back from the controller we issue a 'Calibration failure' message.
	To run a normal calibration on this controller rename the controller such that the check fails, using the command line utility tbutils, e.g.
	tbutils setting sz "controller type" "Interactive Touch" "3M Touch Systems, SCxxx - NE, USB"
3M SC4 USB (Dynapro)	This device needs to be initialised by UPDD but needs to be initialised before interrupts are enabled. This code is only available in the old V3 or early versions of V4 but has not been ported to most recent versions of the driver that are compatible with Windows 7 or 8. To support this device in these OS we would need to be sent a controller to work with and return a working version of the driver.
OneTouch USB	The OneTouch USB controller is actually an onboard Prolific PL2320 serial to USB adaptor so requires an appropriate driver to create a virtual serial port. For Mac OS X, OneTouch sent us file md_pl2303H_HX_X_dmg_v1.1.ob1.zip for testing which worked fine. Once this driver is installed use the OneTouch UPDD serial driver to support the device.
Zytronic X-Y	A UPDD Console firmware dialog is enabled if this controller is configured
Zytronic ZXY100	A UPDD Console firmware dialog is enabled if this controller is configured. UPDD 4.1.10 supports this device on Mac OS. This supports the ZXY100 controller and firmware page. Note that to get to the advanced settings the key combination is "Apple-Z-A-M". There is a slight issue with focus for the advanced settings (for the keystroke to work one of the buttons on the FW page needs to have been pressed).
Hampshire Tsharc USB	This controller does not have a unique USB serial number in the firmware so when plugging / unplugging in a multi-controller environment the association between assigned desktop and controller can be lost as there is no binding information recorded. Since UPDD 4.1.10, build 2314 we have added custom binding so that a unique code is written into eeprom (if

it exists) and used as part of the binding process.

ITM Touch, FTDI, "USB"	We believe this to be a USB to Serial adaptor from FTDI and that you need their driver to create the virtual serial port and access it as a serial touch screen. To create the virtual serial port download the driver from here: http://www.ftdichip.com/FTDrivers.htm The driver you use will need to have been configured for the 0403/6001 device. See http://www.ftdichip.com/Support/Documents/TechnicalNotes/TN_100_USB_VID-PID_Guidelines.pdf
Dell P2x14T **Iiyama T2236MSC**	Users report the touch does not work on a Mac system after reboot unless they turn on monitor on / off then all is OK. Unplug / replug of the touch device may not sufficient, especially in the case of the Dell P2x14T. We believe that, for whatever reason, the driver cannot enumerate the device until the controller is somehow reset or initialised and power on / off seems to achieve this. The Dell monitor manual states • Unplug and replug the power cable from the power adapter to allow auto-recalibration of the touch module. • Make sure computer support USB 2.0 or later. • If the display cannot be detected by the computer, power off/on the monitor or unplug and replug the USB cable. There is also an OSD menu setting – "USB on during standby" which may help:

Carroll Touch **Serial SFP I & II**	The configuration of the controller includes a reset macro. Whenever the driver reloads the settings the reset macro is fired. This takes approximately 3 to 5 secs to complete. Invoking calibration results in this macro being run so the calibration points will not react until the reset is complete. You need to wait approx 5 secs before the points can be touched. This issue has been addressed in version 5.1.x (macros no longer run at calibration).
Lumio 4S optical	It is our understanding that this device can be placed in Mac mode – we are unsure exactly what mode this is (some sort of single touch mode) but our driver requires that this device is running in Windows 7 mode (we presume this is multi-touch mode). Some multi-touch controllers run in single touch mode until they receive a multi-touch USB request send from Win 7 / 8 but this controller would appear to be manually switched between Windows mode and Mac mode. We believe this switching can only be performed using the Windows CTM (Crystal Touch Manager by Lumio). Under Mac you must also ensure all instances of the Mac CTM are uninstalled.
Baanto, Optical	It is our understanding that this device can be placed in Mac mode – we are unsure exactly what mode this is (some sort of single touch mode) but our driver requires that this device is running in multi-touch mode. The Apple Mac setting is in Baanto Dash board software.
EL0 2216 / 2218	In our Windows driver we treat this device slightly differently to other controllers in that we do not clear the USB pipe or reset the device prior to use. We overlooked this when developing our Mac drivers and this appears to cause intermittent issues. As of UPDD Mac build 5.1.1144 we process the USB interface in the same manner which appears to have resolved the intermittent operation being experienced by some users. Further, this device needs to be initialised by the driver. This is achieved by sending a specific USB request which is configured as a UPDD macro. However, under Windows, for this device we send the USB request before enabling interrupts. This did not appear to be needed on the Mac.

Contact

For further information or technical assistance please email the technical support team at technical@touch-base.com