

[http://solutions.3m.com/wps/portal/3M/en\\_US/TouchSystems/TouchScreen/Solutions/ProductCatalog/?PC](http://solutions.3m.com/wps/portal/3M/en_US/TouchSystems/TouchScreen/Solutions/ProductCatalog/?PC)

[http://solutions.3m.com/wps/portal/3M/en\\_US/Electronics\\_NA/Electronics/Tools\\_Support/Support/](http://solutions.3m.com/wps/portal/3M/en_US/Electronics_NA/Electronics/Tools_Support/Support/)

```
dpavlin@t42:~$ lsusb -d 0596:0001 -v
```

```
Bus 003 Device 002: ID 0596:0001 MicroTouch Systems, Inc. Touchscreen
```

```
Device Descriptor:
```

```
  bLength                18
  bDescriptorType        1
  bcdUSB                  1.10
  bDeviceClass            0 (Defined at Interface level)
  bDeviceSubClass        0
  bDeviceProtocol        0
  bMaxPacketSize0       64
  idVendor                0x0596 MicroTouch Systems, Inc.
  idProduct              0x0001 Touchscreen
  bcdDevice              4.10
  iManufacturer          1 3M
  iProduct               2 3M USB Touchscreen - EX II
  iSerial                0
  bNumConfigurations    1
```

```
Configuration Descriptor:
```

```
  bLength                9
  bDescriptorType        2
  wTotalLength           25
  bNumInterfaces         1
  bConfigurationValue    1
  iConfiguration        0
  bmAttributes           0xe0
    Self Powered
    Remote Wakeup
```

```
MaxPower                100mA
```

```
Interface Descriptor:
```

```
  bLength                9
  bDescriptorType        4
  bInterfaceNumber      0
  bAlternateSetting     0
  bNumEndpoints         1
  bInterfaceClass       255 Vendor Specific Class
  bInterfaceSubClass    0
  bInterfaceProtocol    0
  iInterface            0
```

```
Endpoint Descriptor:
```

```
  bLength                7
  bDescriptorType        5
  bEndpointAddress      0x81 EP 1 IN
  bmAttributes           3
    Transfer Type        Interrupt
    Synch Type           None
    Usage Type           Data
  wMaxPacketSize        0x0020 1x 32 bytes
  bInterval             2
```

```
Device Status:          0x0000
```

```
(Bus Powered)
```

<http://www.linuxquestions.org/questions/linux-hardware-18/success-3m-microtouch-touchscreen-in-ubuntu-5>

<http://ubuntuforums.org/showthread.php?t=158666>

```
dpavlin@t42:~$ sudo apt-get install xserver-xorg-input-mutouch
```

```

dpavlin@t42:~$ xinput list
â | Virtual core pointer                id=2    [master pointer  (3)]
â   â ³ Virtual core XTEST pointer      id=4    [slave pointer  (2)]
â   â ³ 3M 3M USB Touchscreen - EX II   id=9    [slave pointer  (2)]
â   â ³ SynPS/2 Synaptics TouchPad      id=11   [slave pointer  (2)]
â   â ³ TPPS/2 IBM TrackPoint           id=12   [slave pointer  (2)]
â £ Virtual core keyboard              id=3    [master keyboard (2)]
â   â ³ Virtual core XTEST keyboard      id=5    [slave keyboard (3)]
â   â ³ Power Button                    id=6    [slave keyboard (3)]
â   â ³ Video Bus                      id=7    [slave keyboard (3)]
â   â ³ Sleep Button                   id=8    [slave keyboard (3)]
â   â ³ AT Translated Set 2 keyboard     id=10   [slave keyboard (3)]
â   â ³ ThinkPad Extra Buttons          id=13   [slave keyboard (3)]

```

```

dpavlin@t42:~$ xinput list-props 9

```

```

Device '3M 3M USB Touchscreen - EX II':
Device Enabled (139):      1
Coordinate Transformation Matrix (141): 1.000000, 0.000000, 0.000000, 0.000000, 1.000000,
Device Accel Profile (263):      0
Device Accel Constant Deceleration (264):      1.000000
Device Accel Adaptive Deceleration (265):      1.000000
Device Accel Velocity Scaling (266):      10.000000
Device Product ID (257):      1430, 1
Device Node (258):      "/dev/input/event7"
Evdev Axis Inversion (267):      1, 0
Evdev Axis Calibration (268):      <no items>
Evdev Axes Swap (269):      0
Axis Labels (270):      "Abs X" (261), "Abs Y" (262)
Button Labels (271):      "Button Unknown" (260), "Button Unknown" (260), "Button Unknown"
Evdev Middle Button Emulation (272):      0
Evdev Middle Button Timeout (273):      50
Evdev Third Button Emulation (274):      0
Evdev Third Button Emulation Timeout (275):      1000
Evdev Third Button Emulation Button (276):      3
Evdev Third Button Emulation Threshold (277):      20
Evdev Wheel Emulation (278):      0
Evdev Wheel Emulation Axes (279):      0, 0, 4, 5
Evdev Wheel Emulation Inertia (280):      10
Evdev Wheel Emulation Timeout (281):      200
Evdev Wheel Emulation Button (282):      4
Evdev Drag Lock Buttons (283):      0

```

```

# flip y axis

```

```

dpavlin@t42:~$ xinput set-prop 9 267 1 0

```

```

# calibrate screen

```

```

xinput set-prop 9 268 2380 14000 2800 13500

```