

This document describes the Linux driver **wntouch**. It currently supports Wincor Nixdorf touch screens based on irTouch technology (**BA83 /irTouch**).

It replaces the formerly used driver irtouch.

The driver was tested with WNLPOS 2.0 based on CentOS 5.

## **New features and improvements**

### **Version 1.0.0-0**

- Support of irTouch screen
- Xinerama enabled is not supported

## **Table of contents**

New features and improvements .....	1
Table of contents .....	1
Contents of DOWNLOAD.ZIP .....	1
Identification of the driver version .....	2
Identification of irTouch technology .....	2
Installation .....	3
Xorg configuration .....	3
Configuration for association of USB port to Screen .....	4
Mode configuration .....	4
Calibration .....	4

## **Contents of DOWNLOAD.ZIP**

qt4-4.2.1-1.i386.rpm	QT graphical library
xorg-x11-drv-evdev-1.0.0.5-5.1.wn.i386.rpm	Updated X org driver
wntouch-1.0.0-0.i386.rpm	The driver and calibration tool
README.PDF	This document

## Identification of the driver version

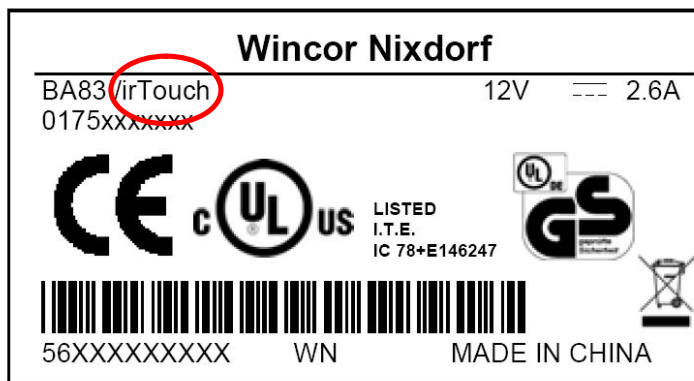
Check the installed package with

```
> rpm -qi wntouch  
> rpm -qi xorg-x11-drv-evdev
```

## Identification of irTouch technology

### Type label

The picture shows a sample of a BA8x type label. The string “/irTouch” indicates that the irTouch technology is used.



### Linux operating system

Check `/proc/bus/usb/devices` with an editor of your choice. The string “**Vendor=6615 ProdID=0012**” can be found there if an irTouch controller has been connected.

## **Installation**

For installation of the touch driver 3 RPM's have to be installed/updated (see command lines below). First install the library qt4 if not it is not installed. The second package is the touch driver itself (containing the touch daemon and the calibration tool) and the third is a patched version of the evdev driver.

```
> rpm -i qt4-4.2.1-1.i386.rpm
> rpm -i wntouch-*.i386.rpm
> rpm -U xorg-x11-drv-evdev-1.0.0.*.i386.rpm
```

The calibration tool of wntouch requires qt4. Therefore install this package first.

**Disable all other drivers for irTouch screens.** The process irtouchServer from the former irTouch driver modifies the touch controller temporarily. wntouch can not be used after this modification. The display needs to be made powerless for about 30 seconds to reset the controller after.

## **Xorg configuration**

An InputDevice in the section ServerLayout is needed for each touch controller. The first is a CorePointer the following are SendCoreEvents. Touchscreen0 must also be set to SendCoreEvents if a mouse has already been configured as CorePointer

```
Section "ServerLayout"
...
    InputDevice      "Touchscreen0" "CorePointer" # or "SendCoreEvents"
    InputDevice      "Touchscreen1" "SendCoreEvents"
...
EndSection
```

A section has to be created for each touch controller.

```
Section "InputDevice"
    Identifier "Touchscreen0"
    Driver "evdev"
    Option "Device" "/dev/input/wntouch0"
    Option "ScreenNumber" "0"
EndSection
```

To specify which screen is associated with a touch device, add the Option "ScreenNumber" to the InputDevice section of your xorg.conf.

## **Configuration for association of USB port to Screen**

To force a specific order of touchscreen controller, the sysfs path of the device can be specified here. This path refers to the USB port where the controller is plugged in. The paths of available touchscreen controllers can be identified using:

```
> /opt/wn/wntouch/sbin/wntouch --list > /etc/opt/wn/wntouch/devices
```

Example devices file containing two devices:

```
> /sys/devices/pci0000:00/0000:00:02.1/usb1/1-8/1-8.1/1-8.1:1.0  
> /sys/devices/pci0000:00/0000:00:02.1/usb1/1-9/1-9.1/1-9.1:1.0
```

The controller in the first line will be `/dev/input/wntouch0` and so on. If the touch controllers are assigned in the wrong order, please switch the two lines in file `/etc/opt/wn/wntouch/devices`

The configuration file is not needed if only one touch controller is used.

## **Mode configuration**

Furthermore the touch mode can be configured by creating/editing the file `/etc/opt/wn/wntouch/mode` and add one of the following keywords:

- touch     -- Click-on-touch (default)
- release   -- Click-on-release
- mouse     -- mouse mode

The following command line shows an example:

```
> echo "touch" > /etc/opt/wn/wntouch/mode
```

## **Calibration**

The calibration tool can be started as follows:

- first touch controller

```
#DISPLAY=:0 /opt/wn/wntouch/bin/wncalibrate
```

- second touch controller

```
#DISPLAY=:0.1 /opt/wn/wntouch/bin/wncalibrate
```

The wntouch driver will store the calibration data as text file in `/etc/opt/wn/wntouch/calibrationX`, containing the min\_x, max\_x, min\_y and max\_y values on individual lines.

## **Uninstallation**

Run the following command for uninstallation

```
> rpm -e qt4 wntouch xorg-x11-drv-evdev
```