

There exist a number of useful utilities to enhance the touch experience and some of these utilities are integrated into the UPDD touch software. Virtual keyboards (on-screen graphical keyboards) are one of the most useful touch applications, especially where data entry is required and a physical keyboard is not available.



This document highlights a number of virtual keyboards that we have used and should be sufficient to satisfy most user requirements. This document does not try to be a comprehensive review of available virtual keyboards and we acknowledge that there are many more available, details of which can be obtained via the internet.

## Windows

### System keyboard

Since Windows 2000 the system ships with a basic virtual keyboard, found under the Accessibility program group. When first invoked the system states that "the keyboard provides a minimum level of functionality for mobility-impaired users. Mobility-impaired users will need a utility program with higher functionality for daily use" the underlying message is this is basic adaptation of a virtual keyboard. There is not a secure mode version so the keyboard is not available when in a secure desktop, such as logging in etc.



Windows system virtual keyboard

Standard system keyboards are acceptable as entry level keyboards that satisfy a functional requirement but offer minimum extensibility. Where presentable and functional keyboards are a requirement for professional and commercial usage there are a number of licensed products available.

### Eyesboard

The [EyesBoard](#) product from PlazaLOGIC offers a high visual impact and enhanced functionality, offering both secured and desktop keyboards.



Eyesboard Virtual Keyboard

Evaluation software and full documentation is available on their site. The keyboard actions can be controlled from applications via an Eyesboard API. Documentation regarding the API and registry settings and a small API demo application can be downloaded from [here](#).

Keyboard template files can be easily edited. Keyboard template files (board.xxx.yyy.xml) define the keyboard layout. For example, to remove the option to close the keyboard (X in top right corner) the line command="eyesboard.close" is deleted from the relevant keyboard XML file.

Many other similar on-screen keyboards are available for Windows. Here is a small selection:

#### Touch-It Virtual Keyboard

Available from Chessware SA at <http://www.chessware.ch/virtual-keyboard>

#### Hot Virtual Keyboard

Available for Windows 7 from Comfort Software Group at <http://hot-virtual-keyboard.com>



Free version also appears to be available at <http://www.freevirtualkeyboard.com/>

#### My-T-Soft Virtual Keyboard

Available from Innovation Management Group at <http://www.my-t-soft.com>



IMG's My-T-Soft Family includes My-T-Pen, My-T-Soft, My-T-Touch, OnScreen for Assistive Technology, and Build-A-Board Keyboard Designer Tools.

The latest Build-A-Board Keyboard Designer Tool, supporting many OS, is available June 2010 and offers the ability to create a single button macro or hundreds of keys and interlaced panels.

#### Oska On-Screen Keyboard Application

Available from Claro Software at <http://www.oskaworld.com/category/oska-for-touch-screen.php>

#### Click-N-Type On-Screen virtual keyboard

Available from The Lake Software folks at <http://cnt.lakefolks.com>

#### Available from Claro Software

#### Comfort On-Screen Keyboard

Available from Comfort Software at <http://www.comfort-software.com/on-screen-keyboard.html>

Comfort On-Screen Keyboard supports all characteristics of the regular keyboard (for instance, repeated keystrokes when you hold down a key) and has **additional advantages**:

- Displaying the **icons of shortcuts** of Windows® and popular applications.
- Displaying characters actually typed in **any language**, which allows you to type text without a localized keyboard.
- **Customizing** the keyboard

appearance (the position, size and number of keys, the color and the skin) with the possibility to select it from a large number of available templates (without having to buy a new keyboard)

- **Color areas** for fingers (if necessary) in case you learn to touch type. It is convenient because when you press a key, you can see it pressed on the on-screen keyboard!



### UPDD Toolbar virtual keyboard option

The UPDD Toolbar function offers the ability to associate areas of the touch screen with specific touch functions, such as a single touch to invoke a virtual keyboard. Toolbars are explained in full in the [Toolbar document](#).

A toolbar can be created specifically to invoke a virtual keyboard and the keyboard option caters for the System and Eyesboard keyboards described above:

**Change Cell Options**

**Specify the action to take when this toolbar cell is pressed**

Cell 1, Row 1, Column 1

**Type of action**

UPDD action Copy next keyboard input

**Action**

Keyboard  Toggle

System  EyesBoard

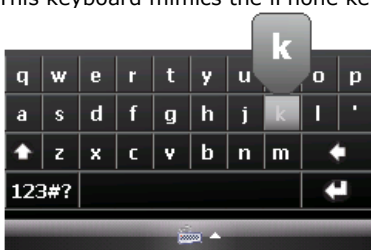
In this example a toolbar has been created such that when the toolbar is touched the Eyesboard will be invoked. The enabled Toggle check box defines that the application is to be removed on touch if it is currently active.

If a different virtual keyboard is in use then a toolbar can be defined to invoke the keyboard application directly (via the full pathname).

## Windows Mobile

### Pocket CM

This keyboard mimics the iPhone keyboard and is available at <http://www.pocketcm.com>



## TouchPal

Neat keyboard concept from CooTek and is available at <http://www.cootek.com>



## Mac OS X

### System keyboard

Since Mac OS X 10.4 the system ships with a basic virtual keyboard, which can be enabled under the System Preferences, International, Input Menu.



Mac OS 10 system virtual keyboard

### TouchStrokes

One of the most popular Mac OS X virtual keyboards available is called TouchStrokes and can be found at <http://www.assistiveware.com/touchstrokes.php>.



### Virtual Keyboard

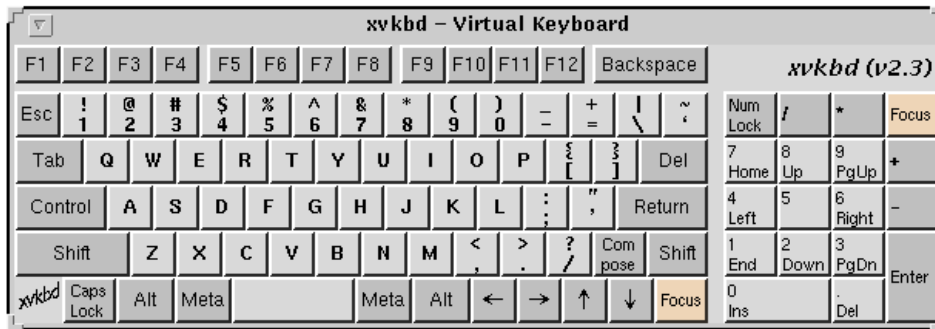
Shareware product available at <http://www.corallosoftware.it/>



## Linux

### xvkbd

Is a freely available virtual keyboard program for X Window systems and can be found at <http://homepage3.nifty.com/tsato/xvkbd/>.



### Vkeyboard

Another freely available virtual keyboard program for X Window systems and can be found at <http://kiosk.mozdev.org/>.

The following keyboards are all documented at [http://tuxmobil.org/tablet\\_unix.html](http://tuxmobil.org/tablet_unix.html)

### xvkbd - virtual keyboard for X window system

[xvkbd](#) is a virtual (graphical) keyboard program for X Window System which provides facility to enter characters onto other clients (softwares) by clicking on a keyboard displayed on the screen. This may be used for systems without a hardware keyboard such as kiosk terminals or handheld devices. This program also has facility to send characters specified as the command line option to another client.

### GNOME On-screen Keyboard (GOK)

The [GNOME On-screen Keyboard \(GOK\)](#) is a dynamic on-screen keyboard for UNIX and UNIX-like operating systems. It features Direct Selection, Dwell Selection, Automatic Scanning and Inverse Scanning access methods and includes word completion.

### Florence

[Florence](#) is a virtual keyboard for GNOME that appears on screen. It is adapted for people who are able to use a pointing device but have difficulties using a real keyboard. It aims at being easy and pretty.

### kbde

[kbde](#) is a keyboard emulator. The goal is to provide tools for emulation of keyboard input on keyboardless (x86) computers. It includes a keyboard emulator driver and a user-space program, as well as a library which make it easy to write custom applications able to create keyboard input emulation.

### GTKKeyboard

[GTKKeyboard](#) is an application written in C with the aid of the Gimp Toolkit. It is intended to help users with physical disabilities to enter text into a simple editor, as well as to help them use other X11 applications that require keyboard input. GTKKeyboard allows the user to press keys on an onscreen keyboard that will either be entered into a simple text editor that GTKKeyboard provides, or into the application of choice that the user specifies by clicking on the window. It has also been used by people who have strange keyboard layouts, and by people who for one reason or another cannot use a keyboard with the machine in question.

### matchbox-keyboard -- On-Screen Keyboard

[Matchbox-keyboard](#) is an on screen 'virtual' or 'software' keyboard. It will hopefully work well on various touchscreen devices from mobile phones to tablet PCs running X Windows. You can embed matchbox-keyboard into other applications with toolkits that support the XEMBED protocol ( GTK2 for example ).

### Android

A selection of Android keyboards:

Name	URL
Keypurr	<a href="http://keypurr.com/">http://keypurr.com/</a>
Swype	<a href="http://swypeinc.com/">http://swypeinc.com/</a>
Swiftkey	<a href="http://www.swiftkey.net/">http://www.swiftkey.net/</a>

### Contact

For further information or technical assistance please email the technical support team at [technical@touch-base.com](mailto:technical@touch-base.com).