



# Keyboard – Single Handed Use

## Introduction

Using a computer one-handed, with one hand doing the work that would otherwise be done with two can introduce two major difficulties:

- Over use of the one hand can cause injury through excess repetitive use.
- Using one hand may mean slower, less efficient operation.

There are a number of ways in which these issues can be addressed.

## Simultaneous Keystrokes

Use of the latch keys (Shift, Ctrl, Alt, and the Windows logo key) normally requires two keys to be pressed at the same time. This is difficult for people using one hand. Even if they can reach the two keys simultaneously this is generally not desirable as the stretching and twisting required increase the risk of injury.

Within the “ease of access” facilities built in to Windows is “StickyKeys”: this allows you to press one key at a time and instructs Windows to respond as if the keys had been pressed simultaneously. We have a skillsheet that gives a step by step guide to StickyKeys.

## Smaller Keyboards

Single handed users may benefit from using smaller keyboards which present normally-spaced keys in a more compact area, and therefore require less lateral movement. These are similar in size and layout to those found on laptop computers.

It is important that the keyboard is placed in a comfortable position for easy operation. This can be more easily achieved with a compact keyboard.



Cherry G84

There are some significant differences between the keyboards. AbilityNet would be happy to advise further if necessary.

Product	Supplier
BTC6100 Slimline Mini: Q-Board: Sejin Mini, Cherry G84-4100, and others.	Inclusive Technology, Keytools, Osmond Group, Keyboard Company,

## Number Pad

The numeric pad on a standard keyboard is located on the right hand side of the keyboard - this can present left handed users in particular with extra arm movement.

Alternatives:

All laptop computers and compact keyboards have an integrated number pad through dual use of keys on the right side of the main key area (you'll see small numbers and symbols on the keys used) – as well as the numbers row above the top alpha row.

Otherwise separate number pads are available and can be placed for comfort anywhere on the desk top.



Cherry number pad

Product	Supplier
Various separate number pads	Keytools, Osmond, Posturite, Keyboard Company.

## Touch Typing with One Hand

By redefining the standard home keys (fghj) it is possible to learn to touch type using one hand. A software based typing tutor, Five Finger Typist, is available from Inclusive Technology and there is a useful website: [www.fivefingertypist.com](http://www.fivefingertypist.com) (click the British link near the top for the British language version of this page).

[www.aboutonehandtyping.com](http://www.aboutonehandtyping.com)

## Dvorak Layout

The standard QWERTY layout is not optimised for single handed use. Dvorak layouts for right and left handed use attempt to correct this. Alphabetic keys are relocated to one side of the keyboard, using all four rows, with numbers being positioned to the side. These layouts are already available in Windows. We have a skillsheet that gives a step by step guide on how to do this.

It would be advisable to use keyboard stickers to mark the new keyboard layout. These cost around £15 and are available in uppercase, lowercase and high visibility varieties.

Product	Supplier
Keyboard stickers	Dolphin Computer Access, Keytools, Inclusive Technology.

## Single Handed Keyboards

A keyboard which has been specifically designed for single handed use. It requires good dexterity and has been designed for touch typing using 4 fingers and thumb. Latching facilities are built-in to the modifier keys. It uses a non-QWERTY layout, and is supplied with exercises to teach the layout. This is for users who want to achieve high speed, are prepared for something new, and are patient enough to learn a new touch-typing technique.



Maltron right handed keyboard

Product	Supplier
Maltron	PCD Maltron, Enabling Computers

## Chord Keyboard



Cykey

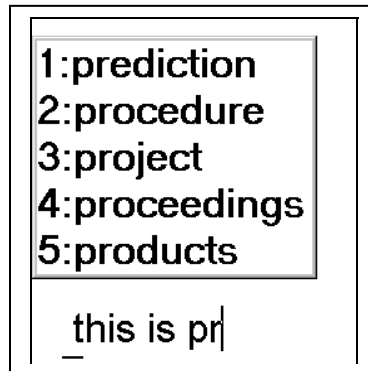
Chord keyboards have only a few keys and rely on keys being pressed in combination to generate letters. They therefore work well for single handed users with independent movement in each of their fingers.

Product	Supplier
CyKey	Bellaire Electronics, Keytools

## Speeding Up Keyboarding

The following techniques can increase keyboarding speed:

### Prediction



After typing the first few letters of a word predictive software gives a number of words starting with those letters. To complete the word the user simply selects one of the words offered. For longer words this can offer speed improvements.

Some examples of prediction software also predict the follow-on word – after a word is completed they suggest words that have previously followed that word.

There are other important differences between these systems.

Product	Supplier
Co-Writer	lansyst
TextHelp Read & Write	lansyst
Penfriend	Inclusive Technology, Keytools

### Storing and Retrieving Text

Most word processors have facilities to store blocks of text against a particular word or keystroke. These are often called macros, but also go by other names: glossary, Autotext etc. Once a macro is defined it can be entered anywhere in the current document by using a short keystroke or word.

In situations where there are no built in macro facilities, there are a number of add-on packages giving the same facilities.

We have skillsheets with further detail on this subject and keystroke saving in general.

### Voice Recognition

Voice recognition systems have developed and improved dramatically over the last few years. For people with clear speech they can enable computer use to be fast and efficient with little or no use of the hands.