

Disability Discrimination Act (DDA) **-Implications on Keypad Design-**

Since October 1999, service providers have to take reasonable steps to:

- Change practices and procedure, which make it impossible or unreasonably difficult to use a service.
- Provide auxiliary aides or services which would make it easier for or enable disabled people to use a service
- Overcome physical features, which make it impossible or unreasonably difficult for disabled people to use a service, by providing the service by a reasonable alternative method.

From 2004 there is a requirement for service providers to take reasonable steps to remove, alter or provide reasonable means of avoiding physical features that make it impossible or unreasonably difficult for disabled people to use a service.

07/10/03

Overview prepared by Steve Greenaway
Information from: www.disability.gov.uk
www.oftel.gov.uk
www.tiresias.org
www.bankers.asn.au

Guidelines for Keypad Design:

A standard layout for keypads is essential for blind people. There are currently two common layouts for numeric keys; the telephone layout and the calculator layout. It is recommended that the telephone layout be used exclusively on public access terminals.

Enlarged keys enable persons with poor dexterity to press the correct key; a concave shape to the keys will also help fingers to stay in place. The spacing between the keys is as important as the size of the keys.

Persons who are blind or have low vision find it useful to be able to feel the keys of a telephone. It is particularly important to have a single raised dot on the number 5 key.

Large clear typefaces should be used to improve legibility for persons with low vision. When choosing typefaces it is important to use characters that have clear 'open' shapes. Many people with low vision can easily misread such characters as 3, 5, 6, 8 and 9 if the tails curl over; this tends to blur or merge the shapes.

Numeric and command keys:

People with low vision find some numeric characters difficult to read. It is important that a typeface is used that has numerals with open shapes. To help blind people, there should be a single raised dot on the number 5 key; this should be positioned so as not to reduce legibility. Visual markings on the keys should be characters at least 4 mm high and should have good contrast with the colour of the key (eg. white characters on matt black keys).

Colour coded keys should be:

Red: Cancel
Yellow: Clear or Correct
Green: Enter or Proceed

All keys or buttons should be tactually discernible. Controls and keys should be tactually discernible without activating the control or keys. The status of all locking or toggle controls or keys should be visually discernible, and discernible either through touch or sound.

The arrangement of keys:

Function keys should be clearly separated from the numeric keys. When command keys are vertically arranged, 'cancel' should be the uppermost key and 'enter' the lowest. When the command keys are horizontally arranged, 'cancel' should be located the furthest left, 'enter' the furthest right. It is better to position the command keys to the right of the numeric keys. They are then less likely to be inadvertently touched when entering numerals. Where command keys are positioned beneath the numerical keys they may be a problem to visually disabled persons because they are likely to be pressed accidentally when entering numbers. Command keys should be as large as possible so that the words on them can be larger and thus easier to read.

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