

# **Instructions for use**

Version 0.0.3

**\*\*\*DRAFT\*\*\***

## **User's Manual**

**for**

### **Global Keyboard Optimised for Small Wireless Devices (GKOS)**



## **GKOS Project**

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### **Keyboard operating instructions**

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## **Preface**

- 1. Quick Start**
- 2. Basic Character sets**
- 3. PC QWERTY Functions on GKOS (F1...F12, Windows keys etc.)**
- 4. Additional Functions**
- 5. Shortcuts**
- 6.**

# Foreword

Thank you for your interest in the GKOS keyboard designed for fast typing on very small devices. The name comes from **G**lobal **K**eyboard **O**pen **S**tandard but you will find that these four letters have something to do with the system itself!

This manual has been designed so that the beginner can start typing just after quickly studying the first page of the instructions (**1. Quick Start**).

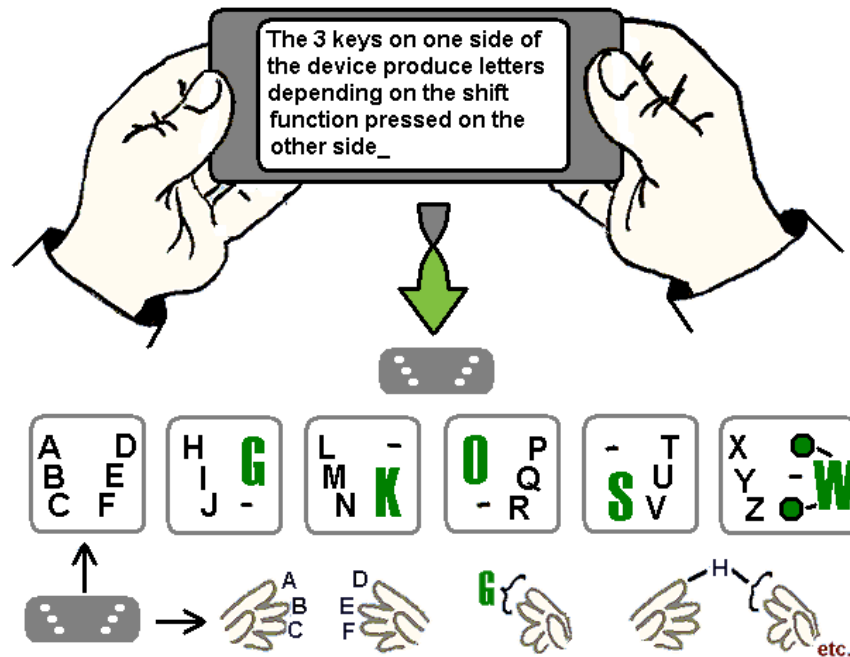
More features are explained in later chapters, most common first, then gradually going deeper in details up to the many inherent capabilities of the GKOS that simply are always there to be found, and to be used whenever needed. Some information is intended for most advanced users only.

One of the nice things in GKOS is that it is easy to start with (supposing you accept the completely new concept!), and later if you wish, you can start taking advantage of the additional features like shortcuts for the most frequently used words, and tricks for quick text formatting (bold etc.). There are hundreds of complete words available! *You will be astonished how much can be done with six keys only.*

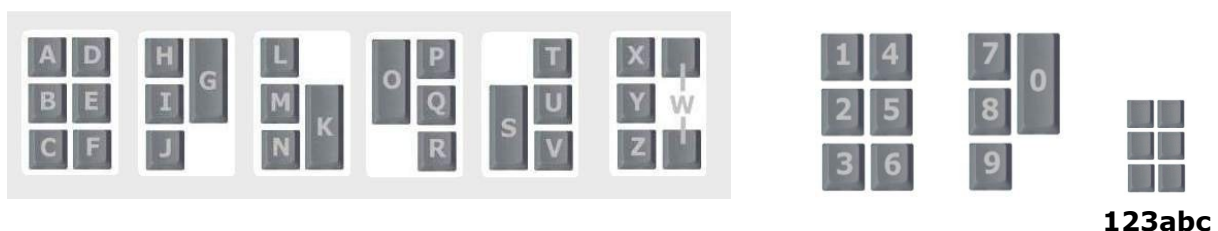
Seppo Tiainen  
Veikkola, FINLAND

# 1. Quick Start

Hold the device by two hands so that the index finger, middle finger and ring finger of each hand are on the six GKOS keys ABC and DEF on the back panel. Do not move these fingers from their 'home' keys while typing. There are single keys for letters A to F. You need to press two keys simultaneously for letters **G, K, O, S** and **W** as shown below. These five letters are also used as **Shifts** to select alternative letters on the three single keys of the other hand. The **Shift** and a letter key are pressed and then released all at the same time. Thumbs can be used for pointer control etc and pinkies can help supporting the device.

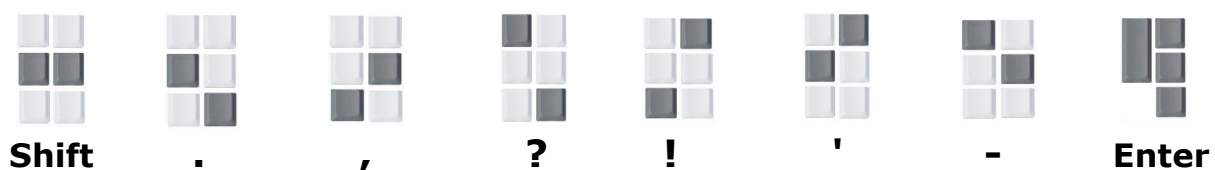


## Letters and Numbers:



Switch between **letters and numbers** by pressing all six keys down briefly.

**Space:** Press all 3 keys on the **right** hand side ('Spacebar' = DEF)  
**Backspace:** Press all 3 keys on the **left** hand side ('Backspacebar' = ABC)  
**Punctuation:**



**That's it!**

Now you can use the GKOS keyboard to enter basic text for emails and text messages!

## Draft contents list

Basic things:

There will be more instructions here for selecting **more characters** etc...

- National layouts (switching between English and national: Alt 123abc)

Advanced things:

Instructions get more specific towards the end of the document:

- Word Shortcuts
- GKOS Keys as a mouse
- Special Functions of the PC Keyboard
- Text formatting hints and tricks
- GKOS Keys as Mouse
- Special Functions of the PC Keyboard
- GKOS Modes
- GKOS Symbol Sets

## Character Lists

For now, please see the figures at the end of this manual for complete character lists.

## National Layouts

If you are using a national layout of the GKOS keyboard, you can always switch to the English layout and back by Alt 123abc. Each national layout has a list of 781 pre-programmed basic shortcut words.

# Text Formatting Hints and Tricks

There are several ways to speed up typing by using Chordons properly.

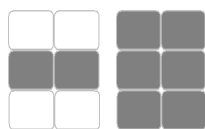
1. A capital letter will follow automatically these Chordons\*: `._Sp ?_Sp !_Sp`. They are practical when a new sentence is started. ("...today? **N**obody had...")
2. You can type a space and just a single word in numbers by `Sp_123abc`. Next space will turn letters back on. ("...but in **2015** it should...")
3. A space and a capital letter can be entered by `Sp_Shift` ("...meet **J**ohn.")
4. You can type just a single word in capitals by `Shift_WordRight`. Next space will turn capitals off. ("...that **GKOS** can be...")
5. You can delete the next whole word by `Shift_Del`.
6. You can delete the previous whole word by `Shift_Backspace`.
7. You can type single digits within text quicker by using Chordons e.g. `SYMB_a` to get "1" instead of typing two separate characters `SYMB` and `a`. ("... **7**th May..."). The same can be applied to other `SYMB` characters as well ("R**&**D").
8. you...

\*Chordon = Two or more chords (characters) are typed one after the other without releasing common keys (that belong to both of those chords) during the change of the chords, or if there are no common keys, overlapping the chords so that there is no condition of 'all keys up' between the chords. There are more examples of using chordons further in the manual.

# GKOS Keys as a Mouse = Mouse Mode

The six GKOS keys can also be used to emulate mouse operation. You can move the mouse pointer in several speeds, scroll the page and click mouse buttons including object dragging.

## Start the Mouse Mode



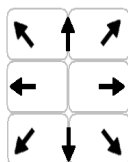
**Shift** **123abc** or just Shift\_123abc

## End the Mouse Mode



**123abc**

**Move the mouse pointer** to 8 directions by pressing single keys **a, b, c, d, e, f** or **Up** (UpArrow) or **Dn** (DownArrow). Hold down the key(s) for continuous movement.



Move the mouse pointer **faster** to the same 8 directions by pressing o, Bs (BackSpace), s, Sp (Space), g, k, PgUp (Page Up) or PgDn (PageDown).

## Left Click



**TH**  
(or Shift)

## Middle Click



**s + w**  
= scroll wheel click

## Right Click



**w**

## Dragging with GKOS Mouse:

### Action on a standard mouse

Left button down  
Move pointer to drag object  
Left Button up to release object

### How to do that on GKOS in Mouse Mode

? (=Type '?')  
See above how to move the mouse pointer  
! (=Type '!'), or click by TH (or Shift)

## Scroll Wheel:

Scroll Up  
(view down)



**z**

Scroll Up faster



**of\_**

Scroll Down  
(view up)



**x**

Scroll Down faster



**a\_**

### Optional way to scroll:

In Mouse Mode, the display can also be scrolled by **SYMB Up/DnArrow** or **SYMB PgUp/Dn** in the same way as it can be done in the normal typing mode.

# Special Functions of the PC Keyboard

Several functions found on the PC keyboard can be selected on GKOS by using simple 2-character Chordons, i.e. two characters are tied together, as indicated by \_ below. Type the first character (dark grey keys), and then hold down those keys while the next character is entered (dark grey + light grey keys).

## Based on SYMB:

**AltGr**



?\_SYMB

Shift + AltGr



!\_SYMB

Function Keys **F1** to **F12**



Up\_SYMB followed by  
A to M (= **1-9**, **#**, **1/2**, **&**)

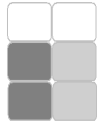
Spare



Dn\_SYMB

## Based on PgUp and PgDn:

Left Windows Key  
**Start/Flying Win**



**s\_PgDn**

Right Windows Key  
**Flying Window**



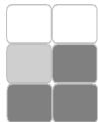
**k\_PgDn**

Right Windows Key  
**Applications Menu**



**m\_PgDn**

**Num Lock**



**n\_PgDn**

**Scroll Lock**



**c\_PgDn**

**Print Screen**



**p\_PgUp**

**Break/Pause**



**b\_PgUp**

**Bold**



**b\_PgDn**

***Italics***



**i\_PgUp**

**Underline**



**u\_PgDn**

**Help (= F1)**



**h\_PgUp**

(To consider:  
System Request  
**F**ont  
**F**ind  
Copy  
Paste

**q\_PgUp**  
**f\_PgDn**  
**f\_PgDn**  
**c\_PgDn**  
**v\_PgDn**)



# GKOS Modes



Several (62) *Modes* of the GKOS are can be activated by entering **a character or a function followed by Mode** without releasing the keys between (as a chordon, e.g. m\_Mode). Mode is the **same key combination as 123abc**, i.e. **all keys down**. Any Mode stays on until Mode is pressed again.

| Press              | Mode entered   |
|--------------------|--|
| 123abc (=Mode)     | <b>123</b> Mode, and <b>Return from any Mode</b> to abc Mode             |
| a_Mode             | reserved   |
| b_Mode             | reserved   |
| c_Mode             | reserved   |
| d_Mode             | reserved   |
| e_Mode             | reserved   |
| f_Mode             | reserved   |
| g_Mode             | reserved   |
| h_Mode             | reserved   |
| i_Mode             | reserved   |
| j_Mode             | reserved   |
| k_Mode             | reserved   |
| l_Mode             | reserved   |
| m_Mode             | GKOS <b>Mouse</b> Mode (optional)  |
| n_Mode             | reserved   |
| o_Mode             | reserved   |
| p_Mode             | reserved   |
| q_Mode             | reserved   |
| r_Mode             | reserved   |
| s_Mode             | reserved   |
| t_Mode             | reserved   |
| u_Mode             | reserved   |
| v_Mode             | reserved   |
| w_Mode             | reserved   |
| x_Mode             | reserved   |
| y_Mode             | reserved   |
| z_Mode             | reserved   |
| ā_Mode (a__Mode)   | reserved   |
| ä_Mode (the__Mode) | reserved   |
| ö_Mode (of__Mode)  | reserved   |
| Up_Mode            | reserved   |
| Dn_Mode            | reserved   |
| PgUp_Mode          | reserved   |
| PgDn_Mode          | reserved   |
| \_Mode             | reserved   |
| /_Mode             | reserved for mathematical symbols mode                                   |
| -_Mode             | reserved   |
| '_Mode             | reserved   |
| ~_Mode             | reserved   |
| '_Mode             | reserved   |
| Sh_Mode            | GKOS <b>Mouse</b> Mode   |
| Ins_Mode           | reserved   |
| ~_Mode             | reserved   |
| ^_Mode (to__Mode)  | reserved   |
| _Mode (and__Mode)  | reserved   |
| Sp_Mode            | Space and then <b>123</b> Mode active <i>until the next Space</i>        |
| Bs_Mode            | reserved   |
| RightArrow_Mode    | reserved   |
| LeftArrow_Mode     | reserved   |
| WordRight_Mode     | <b>123</b> Mode active <i>until the next Space</i>                       |
| WorfLeft_Mode      | reserved   |
| Tab_Mode           | reserved   |
| End_Mode           | reserved   |
| Home_Mode          | reserved   |
| Alt_Mode           | Reserved for switch between native and English chararcter sets / layouts |
| Del_Mode           | reserved   |
| Ctrl_Mode          | reserved   |
| Enter_Mode         | reserved   |
| Esc_Mode           | reserved   |
| SYMB_Mode          | reserved   |
| !_Mode             | reserved   |
| ?_Mode             | reserved   |

# GKOS Symbol Sets



Several (62) parallel *Symbol sets* of the GKOS can be used by entering **a character or a function followed by SYMB** without releasing the keys between (as a chordon, e.g. a\_SYMB). After this the next symbol will be picked from a parallel symbol set of 30 symbols (62 x 30 = 1860 extra symbols available).

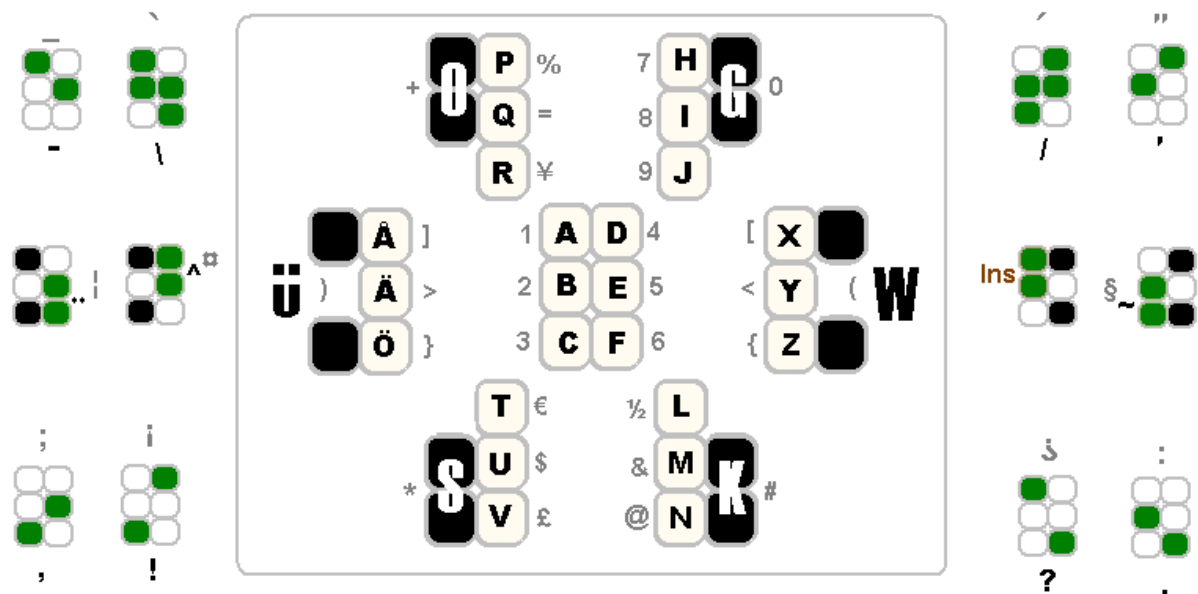
## Press

## SYMB Set Used

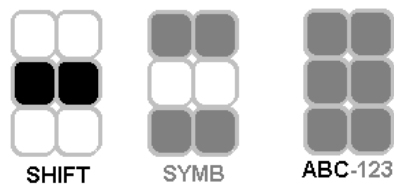
|                    |   |
|--------------------|---|
| SYMB               | <b>Standard parallel set</b> (= Numbers and Symbols found on QWERTY)                |
| a_SYMB             | reserved  |
| b_SYMB             | reserved  |
| c_SYMB             | reserved  |
| d_SYMB             | reserved  |
| e_SYMB             | reserved  |
| f_SYMB             | reserved  |
| g_SYMB             | reserved  |
| h_SYMB             | reserved  |
| i_SYMB             | reserved  |
| j_SYMB             | reserved  |
| k_SYMB             | reserved  |
| l_SYMB             | reserved  |
| m_SYMB             | reserved  |
| n_SYMB             | reserved  |
| o_SYMB             | reserved  |
| p_SYMB             | reserved  |
| q_SYMB             | reserved  |
| r_SYMB             | reserved  |
| s_SYMB             | reserved  |
| t_SYMB             | reserved  |
| u_SYMB             | reserved  |
| v_SYMB             | reserved  |
| w_SYMB             | reserved  |
| x_SYMB             | reserved  |
| y_SYMB             | reserved  |
| z_SYMB             | reserved  |
| ä_SYMB (a__SYMB)   | reserved  |
| ä_SYMB (the__SYMB) | reserved  |
| ö_SYMB (of__SYMB)  | reserved (up to this, more than 900 special characters can be selected)             |
| Up_SYMB            | Function keys <b>F1</b> to <b>F16</b>   |
| Dn_SYMB            | reserved (recommended for special use from this down...)                            |
| PgUp_SYMB          | reserved  |
| PgDn_SYMB          | reserved  |
| \_SYMB             | reserved  |
| /_SYMB             | reserved (recommended for mathematical symbols set)                                 |
| -_SYMB             | reserved  |
| '_SYMB             | reserved  |
| -_SYMB             | reserved  |
| '_SYMB             | reserved  |
| Sh_SYMB            | reserved  |
| Ins_SYMB           | reserved  |
| ~_SYMB             | reserved  |
| ^_SYMB (to__SYMB)  | reserved  |
| _SYMB (and__SYMB)  | reserved  |
| Sp_SYMB            | reserved  |
| Bs_SYMB            | reserved  |
| RightArrow_SYMB    | reserved  |
| LeftArrow_SYMB     | reserved  |
| WordRight_SYMB     | reserved  |
| WordLeft_SYMB      | reserved  |
| Tab_SYMB           | reserved  |
| End_SYMB           | reserved  |
| Home_SYMB          | reserved  |
| Alt_SYMB           | Reserved for picking single symbols and words from native/English char set / layout |
| Del_SYMB           | reserved  |
| Ctrl_SYMB          | Reserved for function keys F1 to F16 optionally (see also Up_SYMB)                  |
| Enter_SYMB         | reserved  |
| Esc_SYMB           | reserved  |
| Mode_SYMB          | reserved  |
| !_SYMB             | Shift + AltGr on QWERTY   |
| ?_SYMB             | AltGr on QWERTY   |

\*\*\*\*\*This is just material to be used in the detailed instructions above\*\*\*\*\*

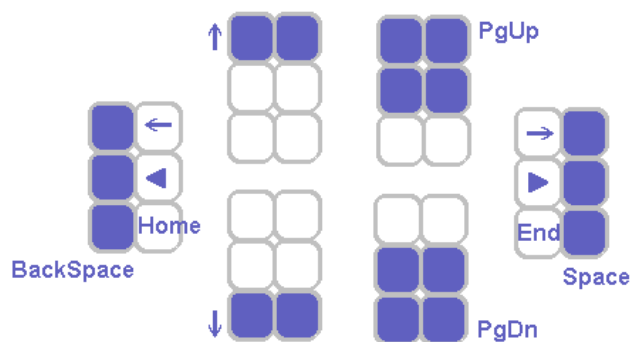
## 1 The complete character set



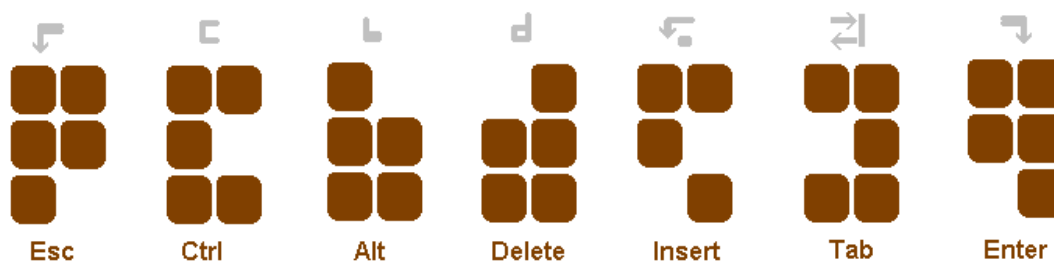
Each black 2-key combination above is a shift function (simultaneous) to obtain the rest of the letters in each group, or just produces the letter marked on it when pressed alone. The main principle is that for frequently used characters, only 1 to 3 simultaneous key presses are needed but for functions more. This way typing is lighter and functions will not be activated by mistake if typing carelessly. The four national characters vary in different national versions of the keyboard.



The **123-ABC** mode change toggles between the two character sets, black and grey, inside the frame shown above. With **SYMB**, single characters can be picked from the parallel set, even outside the frame. For example, *semicolon* is **SYMB** followed by *period*. **SHIFT** is used only for upper case letters. Two consecutive SHIFTS set CAPS LOCK and one SHIFT has an effect only on one character or turns CAPS LOCK off.



Navigation, including space and backspace, is a self evident set. The blue triangles depict *word left/right* (= CTRL + Arrow Left/Right on QWERTY).



Each control function has an appearance that helps to remember its meaning.

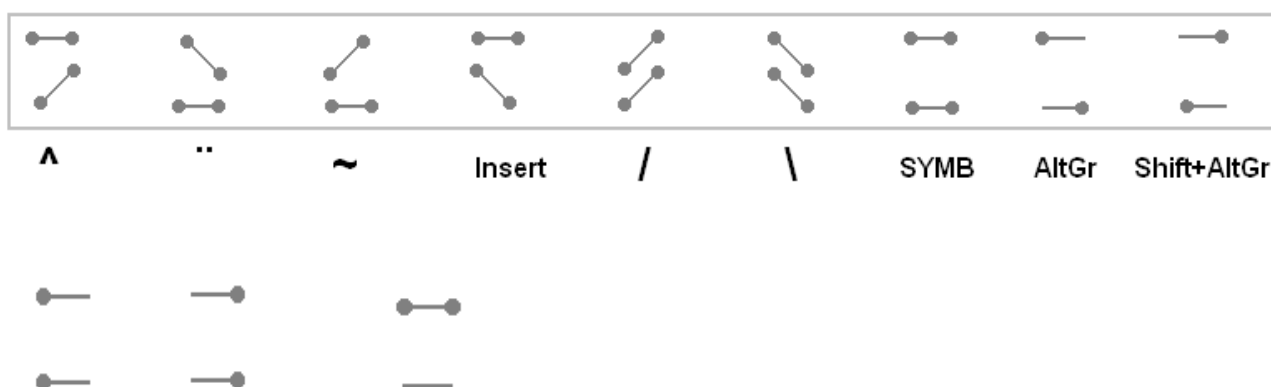


For clarity, the numbers are shown here second time to indicate the position of all number pad symbols.

## 2 The national character sets

The character locations for letters Ü Ö, Å and Ä above can be different in national versions of the GKOS keyboard layout. They can even be used as shortcuts to common whole words or as shifts to be followed by a letter to get four new sets of 26 characters/words, or even both if the GKOS chordon technique is used: national shift + letter gives a stored word or a special character if typed as a chordon, else it will give directly the word/letter marked on it followed by the next letter(s). See <http://gkos.com> for more detailed national layout descriptions.

Alternative way to describe some functions (DRAFT material):



- letters:



- numbers:



Keyboard help on the screen:

