



FONDATION SUISSE POUR LES TELETHESES  
STIFTUNG FÜR ELEKTRONISCHE HILFSMITTEL  
FONDAZIONE SVIZZERA PER LE TELETESI  
SWISS FOUNDATION FOR REHABILITATION TECHNOLOGY

La technologie au service de la personne en situation de handicap  
Die Technologie im Dienste des Menschen mit Behinderung  
La tecnologia al servizio dei disabili  
Technology for handicapped people

# Manuel B-Key v2.5

## Installation and Utilisation



La technologie  
pour les personnes  
en situation  
de handicap

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# B-Key

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# Our Foundation

## History and aims

The Swiss Foundation for Rehabilitation Technology (FST), established in 1982 by Jean-Claude Gabus, aims to make technology serve the disabled. The Foundation makes available to every disadvantaged person the electronic aid (rehabilitation technology) that suits his or her needs.



FST believes that every human being has untapped resources: it wants - and in this particular case, it is able – to help everyone to become more autonomous. The Foundation has a culture of interdisciplinary working, transparency and individual responsibility.

Imaginative and innovative techniques, quality performance and rigorous management are the professional values of our Foundation. In its day-to-day activity, FST is in touch with a wide range of individuals, be they physically disabled, multiply disabled or mentally disabled.

Our organisation works in four separate sectors:

- **“Improved and Alternative Communication” (IAC):**  
improving the communication of people with no verbal language.
- **“Environmental Control” (EC):**  
controlling the personal environment.
- **“Ergonomic Computer Access” (ECA):**  
seeks to offer an alternative form of accessing the computer when the mouse and the keyboard cannot be used.
- **“Better living”:**  
deals with the safety of people suffering from Alzheimer's disease for example, especially when they are liable to wander. “Better living” also offers a range of small, simple devices: simplified telephones, eating aids, medication aids... These aids are more especially for the elderly, who sometimes lose some of their abilities with age.

FST is the official partner of the *Bundesamt für Sozialversicherung* (BSV – Swiss Federal Social Insurance Office). It provides information, training and monitoring services and does all the work involved in maintaining the technologies used.

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# Installation

## Foreword

Thank you for choosing B-Key ! B-Key (Bimanual-Keyboard) is a software program to enable 5-finger typing for people who use one hand. Thanks to its configurable toggle key, B-Key allows you to use all the keys of an ordinary keyboard with just one hand. As a result, you will more efficient and type more quickly, and you will do so of course in a less tiring way because your wrist will hardly move at all!

## Program installation

Note that with most operating systems, only a computer administrator can install B-Key. Insert the CDrom into the CD (or DVD) reader of your computer and the installation assistant should automatically start. If it does not, open the CDrom from your desktop and double-click on "setup.exe".

Once the installation assistant has begun, choose the language of the assistant and follow the installation instructions. You should be able to select where to save the program (although it is recommended to let the default path)choose the group name in the Start Menu and indicate whether or not you want a desktop shortcut.

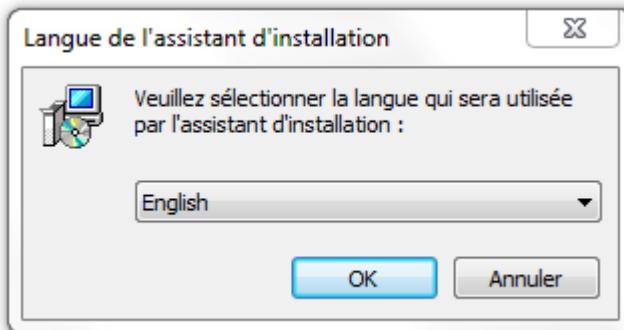


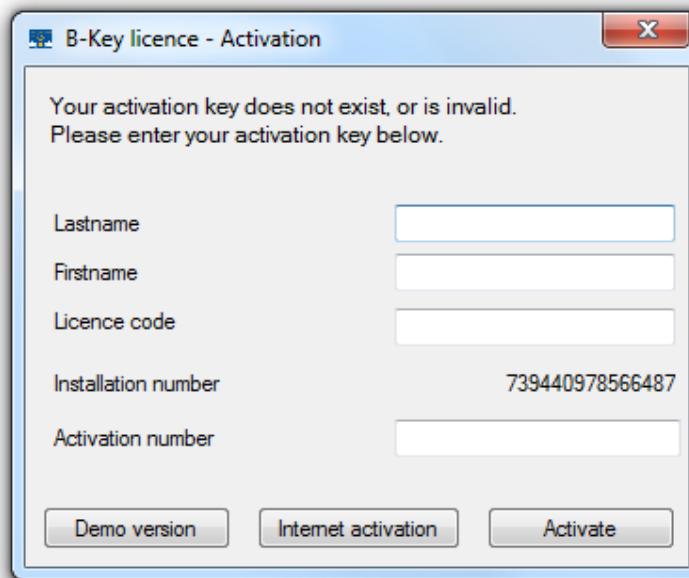
Figure 1 Choice of installation assistant language



**Figure 2 B-Key installation assistant**

## Program activation

Once the installation of the program is complete, to open it, you must either open Start Menu, then "All Programs", where you should find the group you created during the installation (default is "B-Key") and which has a shortcut to launch B-Key, or open the desktop shortcut if you agreed to create one during the installation.



**Figure 3 Licence activation**

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When B-Key starts for the first time (and until the licence has been activated), the licence activation window will appear before the program loads. You must enter your activation key (which you can obtain from FST) to activate the licence and be able to make unlimited use of the software. Note that in most operating systems only a computer administrator can activate the B-Key licence definitively.

If you do not have the activation key and just want to try the software out, click on the "Demo Version" button. This version allows B-Key to be tried out, but after 200 keyboard keys have been pressed, the program will stop.

The activation of the program can be done in two ways:

- **Internet activation**

Internet activation is accomplished by completing the fields "Name", "First Name" and "License Code". This is the back of the box in which the CD was contained and has the format "BKEY12345." The fields "Name" and "Name" are meanwhile completely free, knowing that they will be used for subsequent activations (it is possible to achieve three activations with a single box).

Then click "Internet Activation" to activate your version of B-KEY.

- **Activate**

Manual activation is possible if you have the activation key for your computer (an asking must be made to the FST). All fields have to be filled according to the information that the FST provided to you.

Then click "Activate" to activate your version of B-KEY.

In case you do not want to activate the program or you just want to try it, click the "demo version". This version allows you to test B-Key, but after pressing 100 keys, the program will stop.

## Keyboard key stickers

You have stickers to put on the keys of your keyboard to change your standard keyboard into a B-Key keyboard. You can use the pictures below to help you to see where to put the various stickers. (The key to the left of 'Z' on the English keyboard (USA) is not usually there. But if you have a different keyboard with this key configured as in an English (USA) keyboard, you can use this sticker.)

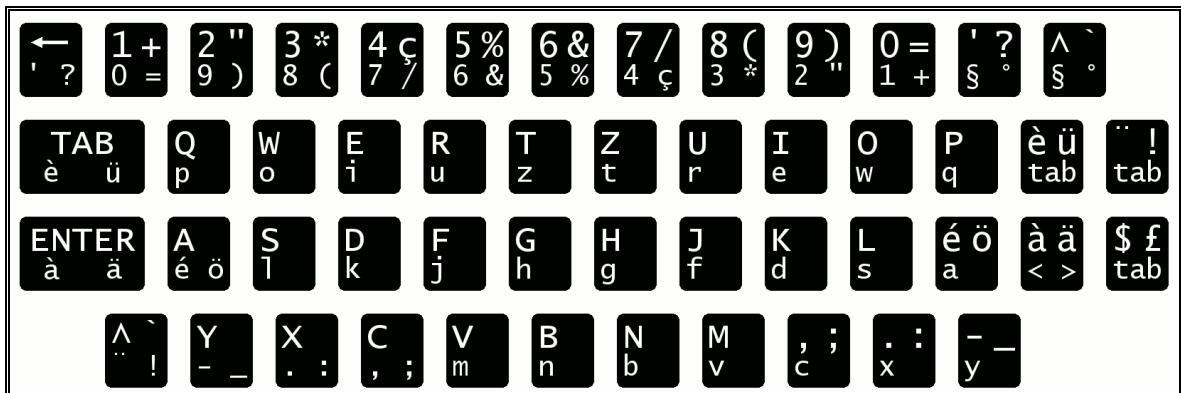


Figure 4 French Keyboard (Switzerland)

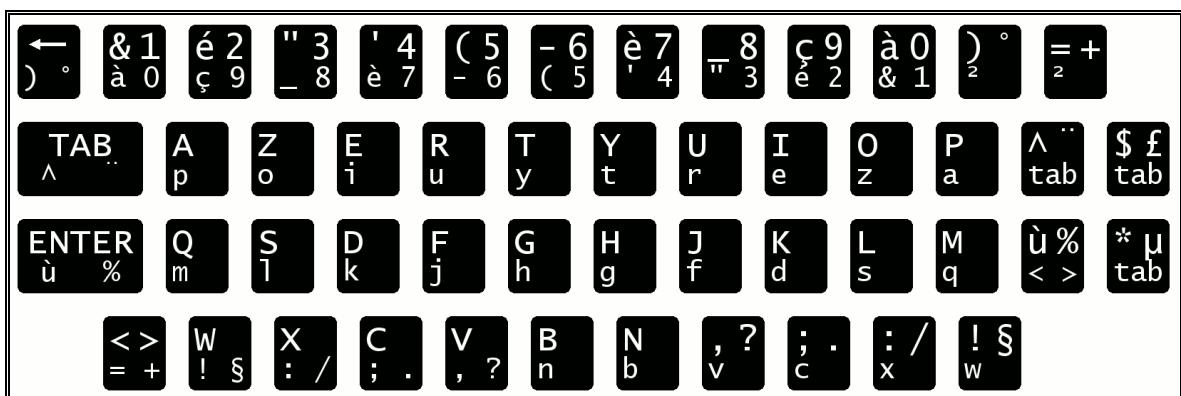


Figure 5 French Keyboard (France)

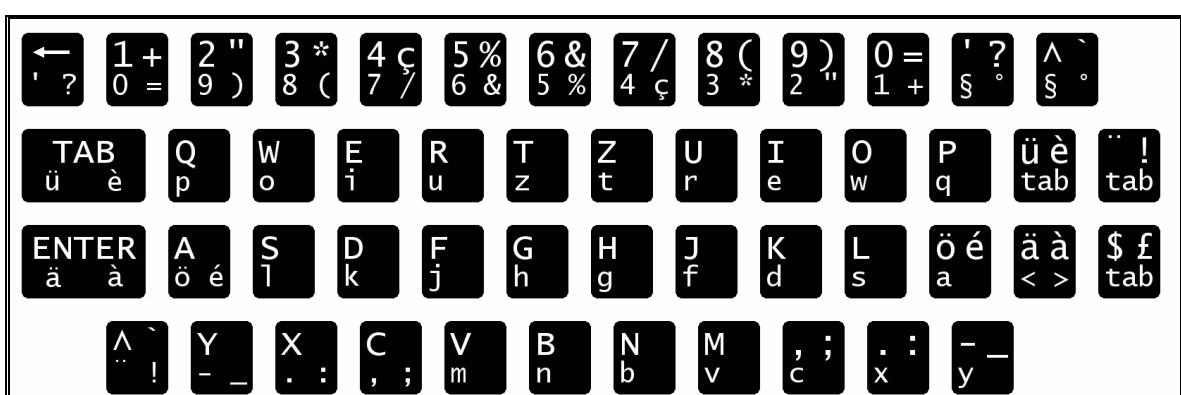


Figure 6 German Keyboard (Switzerland)

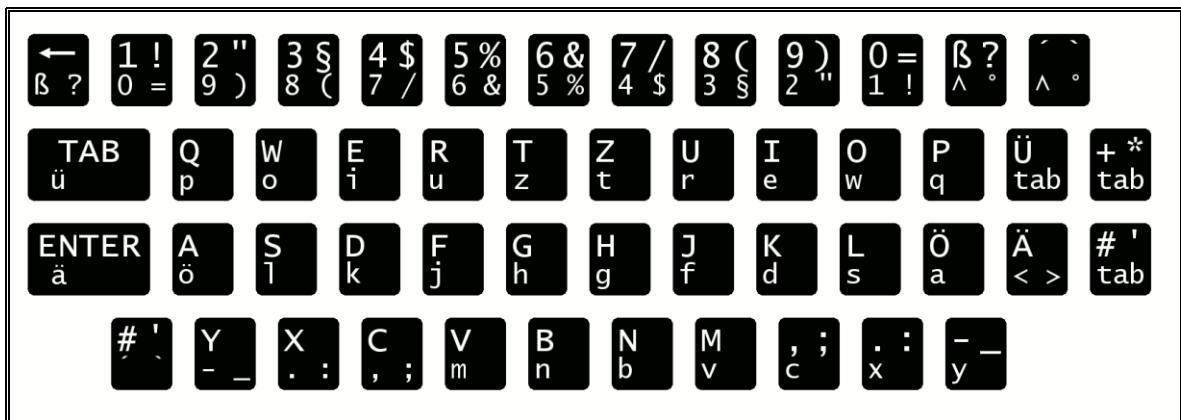


Figure 7 German Keyboard (Germany)

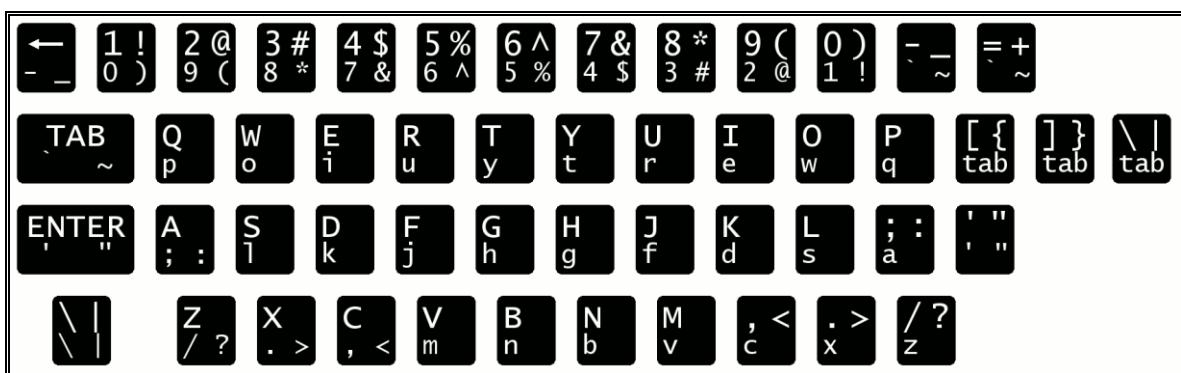


Figure 8 English Keyboard (USA)

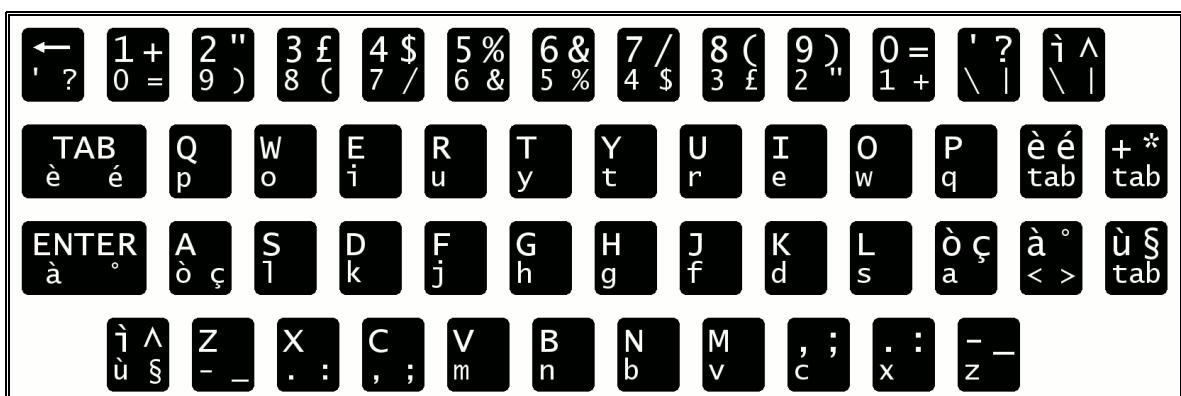


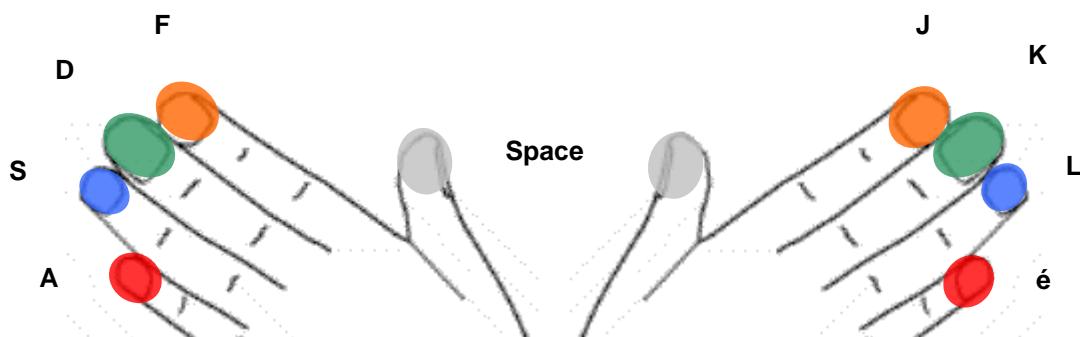
Figure 9 Italian Keyboard (Italy)

# Utilisation

## General Introduction

Because of our regular contact with patients, we were able to see that new needs were emerging. It made us think of developing a software program to enable typing with one hand that could be installed on a standard laptop, thus improving and promoting the reintegration of people who use only one hand into professional and student life. When the software has been properly mastered, B-Key enables the user to become as efficient as an able-bodied person, which is essential in today's labour market.

B-Key can be used with two hands, like a normal keyboard, or with one hand. It is suitable for both left-handed and right-handed one-hand typists. A toggle key (space, right-click of the mouse or F11 key) allows the user to access the keys that are further away without moving the wrist. For example, when "A" is depressed, "A" is normally keyed in. The same key changes to "é" when "A" and the toggle key are depressed at the same time.



The positioning of the hand and the working range of the fingers are shown in the above diagram. The starting position for the fingers in order to begin typing with the left hand is: little finger on "A", ring finger on "S", middle finger on "D", forefinger on "F" and the thumb is free to use the space key (toggle key). For the right hand: the little finger starts on "é", the ring finger on "L", the middle finger on "K", the forefinger on "J" and the thumb is free to use the space key (example based on a French (Switzerland) keyboard).

## Startup

To start B-Key, you must either open Start Menu, then "All Programs", where you should find the group you created during the installation (default is "B-Key") and which has a shortcut to launch B-Key, or open the desktop shortcut if you agreed to create one during the installation.

## B-Key pop-up menu

The pop-up menu is found by right clicking the FST icon on the toolbar.

This pop-up menu allows you to leave B-Key program definitively (Quit), get help regarding B-Key (Help), open the Windows Character Table (Character Table), switch the B-Key function on or off (Activate or Deactivate), or open the B-Key configuration window (Configuration...).

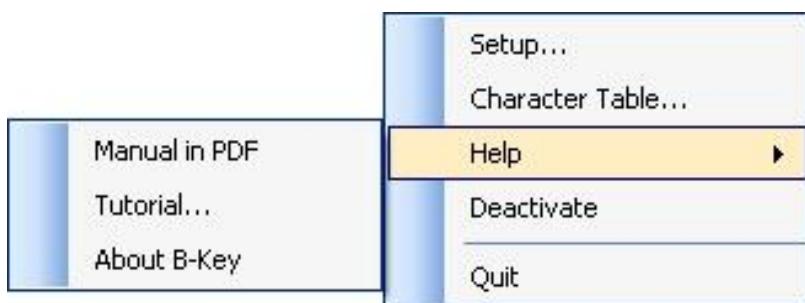


Figure 10 Pop-up menu

## Configuration window

The B-Key configuration window is opened:

- Either by double-clicking the left mouse button on the FST icon in the toolbar,
- Or by clicking the "Configuration..." item of the pop-up menu.

In this window, there are four tabs

- **General**

This tab allows you to configure the application language (French, German, English or Italian), enable or disable Splashscreen (image) at startup, activate B-KEY, launching the application automatically at Windows startup, perform updates automatically and activate the abbreviations.

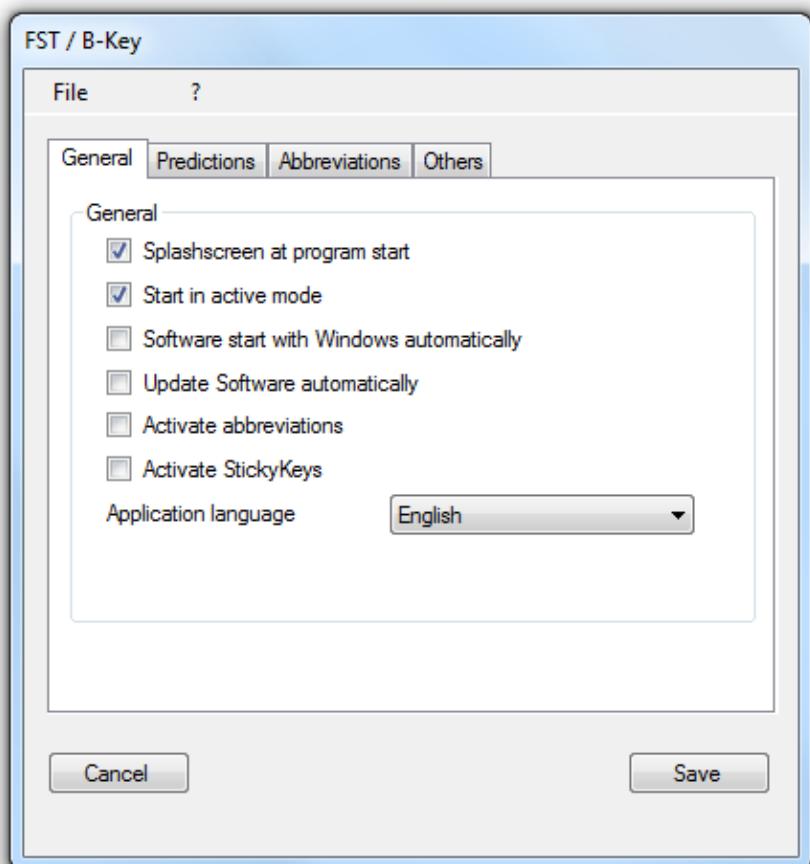


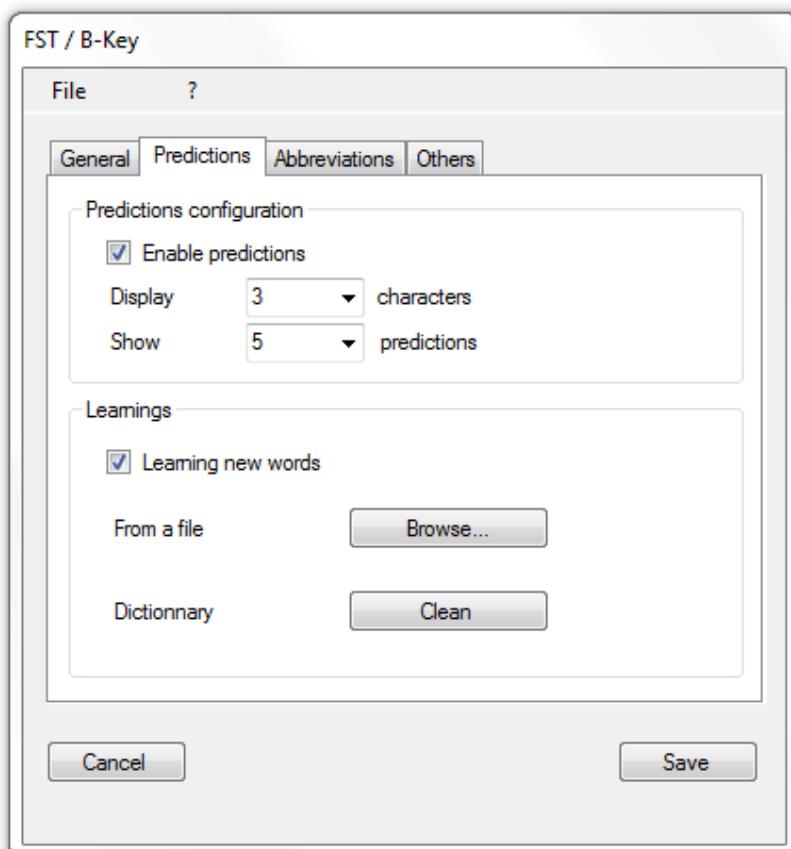
Figure 11: B-Key – General Tab

- **Predictions**

It allows the configuration of the module that handles word predictions. You can chose to enable predictions, which will bring up a window on your screen that you can position and resize as you wish.

You can also define how many characters from the words displayed via "Display X characters" and set the number of suggested words by "Show X predictions".

The word prediction module offers to enable the learning of new words, implying that everything that is entered from the keyboard will be stored and propose in the next keystrokes. To learn new words automatically, you simply select a text file on your computer by using the button "Browse...". It is also possible to clean the dictionary if you feel it does not offer concrete words. This action is irreversible and will result in the dictionary back to its original state as it was when you installed the application.

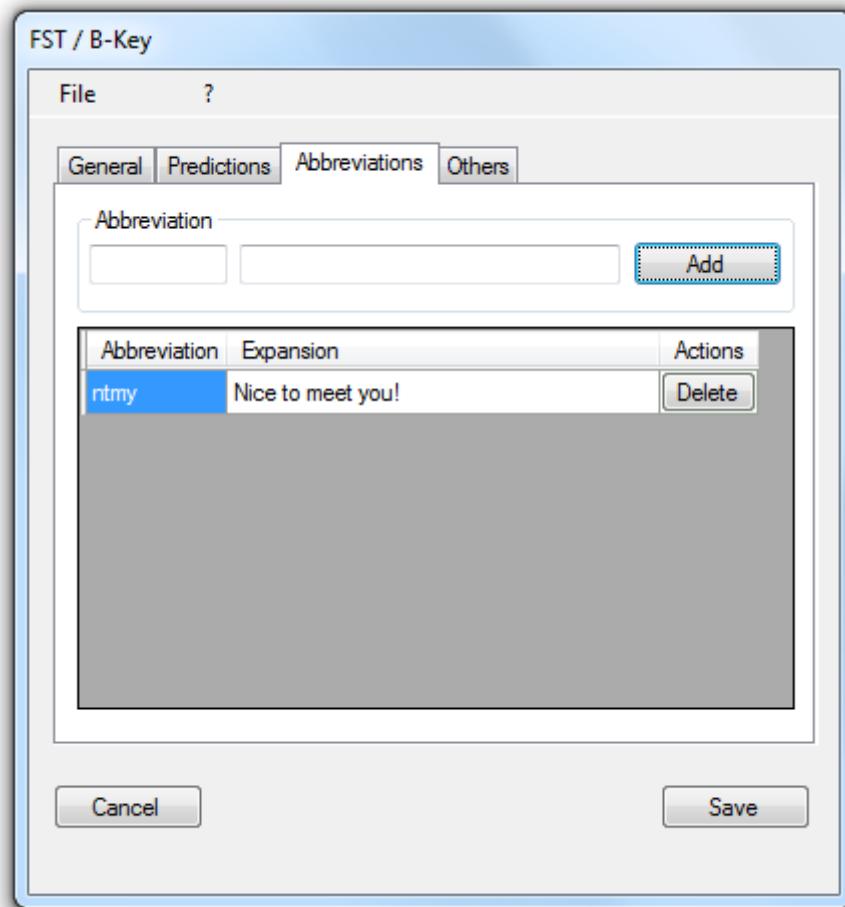


**Figure 12 B-Key – Predictions Tab**

- **Abbreviations**

Abbreviations tab allows you to create shortcuts on the words or phrases that you use regularly. To do this, simply enter in the first field the desired abbreviation and the correspondence to his right.

In the example below, if the word "ntmy" is entered, it will be replaced by his correspondence is "Nice to meet you".

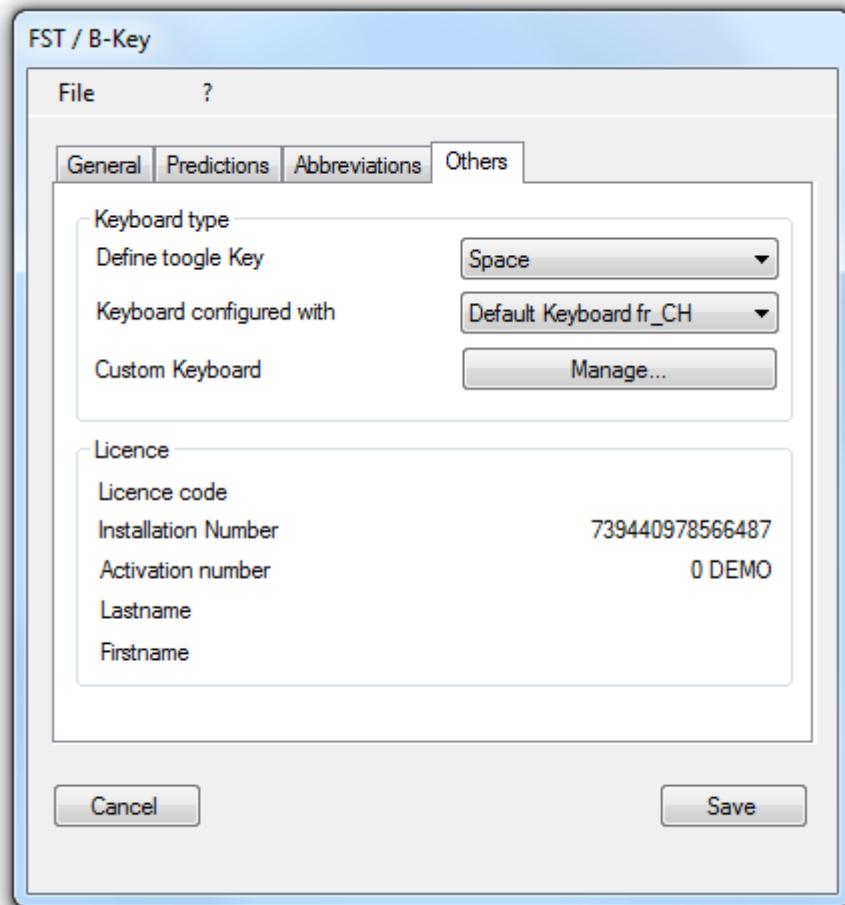


**Figure 13 B-Key – Abbreviations Tab**

- **Others**

The "Advanced" tab allows you to configure the shift key and gives information about the keyboard currently used as well as data on your license.

It is also on this screen you can create custom keyboards, if the default keyboard is not sufficient. This is done with the button "Manage".



**Figure 14 B-Key – Others Tab**

- Word predictions

The window displays the most frequently used words in relation to input characters. In the case of the letter "m", it would find the elements "more", "man", "may", "must" that are statistically the most commonly used words in the English language.

To write the words proposed in this window, use the function keys (F1-F7). In the following case, if the user wants to write the word "must", he simply presses the F5 key.

After writing the first word is search in the dictionary to highlight the associations you have used most commonly. The following example illustrates how this research works.

| Word predictions |
|------------------|
| F1 : more        |
| F2 : man         |
| F3 : may         |
| F4 : made        |
| F5 : must        |

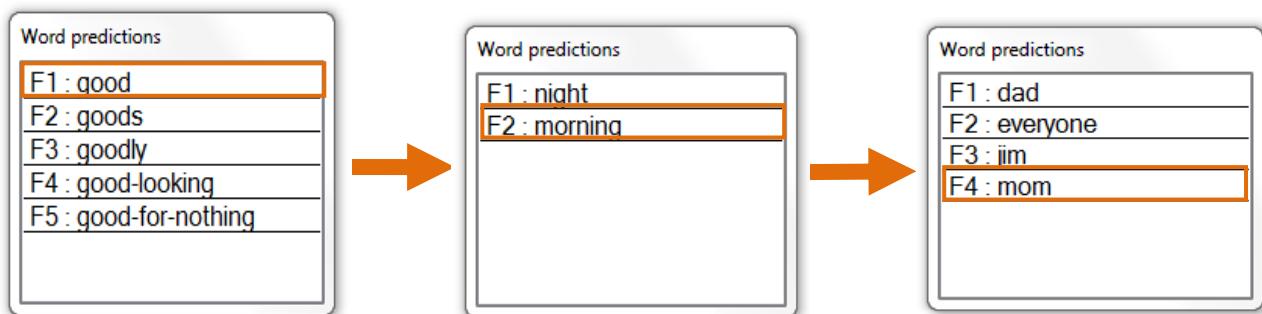


Figure 15 : Operation of the prediction

## Quitting the program

To quit the program definitively, open the pop-up menu by right-clicking on the FST icon on the toolbar, then click on "Quit" in the menu. (See Figure 10, p.10)

## Switching toggle mode on and off

Toggle mode can be switched on or off (return to a standard keyboard) in two different ways:

- either by opening the pop-up menu by right-clicking on the FST icon of the toolbar, then clicking on "On" or "Off" in the menu (see Figure 10, p.10).
- or by opening the configuration window by double-clicking the left mouse button on the FST icon on the toolbar, then clicking the checkbox Enable or Disable the General tab. (see Figure 11, p. 11).

## Opening the Windows Character Table

If one of the characters you want to key in is not available on the keyboard, you can display the Windows Character Table. From this window, you can write the text you want to add in the text box at the bottom by using the keyboard and clicking on the characters you want. Press "Copy", go back to your application window, select the "Edit" tab, then click on "Paste" or press "Ctrl+V".



Figure 16 Character Tables

To open this character table, you can:

- Either open the Pop-up menu and click on Character Table (see Figure 10, p.10).
- Or open the B-Key configuration file and click on Character Table in the File tab (see Figure 11, p. 11).

## Changing the program language

To change the program language, open the B-Key configuration window, then select the language you want from the "B-Key current language setting is" drop-down menu in the "General" tab. The languages available are French, German, English and Italian. Then quit the configuration window by clicking on "Save".

## Changing the toggle key

To change the toggle key, open the B-Key configuration window, then go to the "Advanced" tab and select the right toggle key from the "Define toggle key" drop-down menu. The toggle keys available are the space bar (Space), right-click mouse button (Right Click), the F11 key (F11) and the F12 key (F12). Then quit the configuration window by clicking "Save". (see Figure 14, p.14)

## Choosing a B-Key keyboard layout

To choose a B-Key keyboard layout, open the B-Key configuration window, then select the desired keyboard layout from the "Keyboard configured with" drop-down menu (see Figure 11, p. 11). Then quit the configuration window by clicking "Save".

Available layouts are the default keyboard and the custom keyboards that have been created.

Default keyboard selects the keyboard configuration as a function of the Windows keyboard configuration selected in the language bar (see Figure 17). B-Key can work with the following keyboards:

French (Switzerland), French (France), German (Switzerland), German (Germany), English (USA), Italian.

Note that when you use a custom keyboard, the Windows keyboard configuration must be the same as it was when your custom keyboard was created.

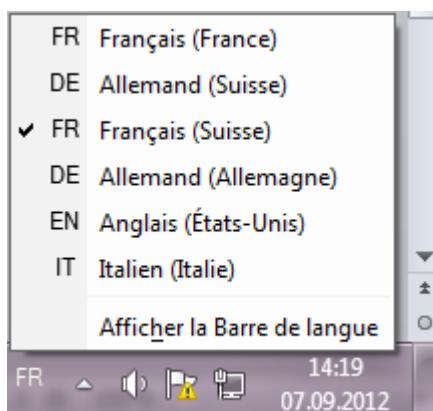


Figure 17: Windows language bars

## Custom keyboard

When you want to create, delete or modify a custom keyboard, click on the Add button beside “Custom Keyboard” in the B-Key configuration window and the window shown in Figure 18 will appear.

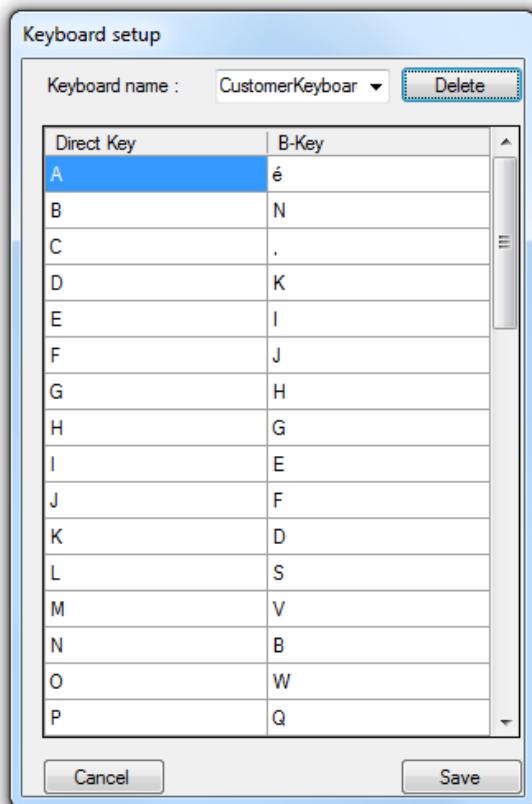


Figure 18: Keyboard Configuration

To create a new keyboard, first make sure that the Windows keyboard configuration in the language bar is the one you use most often. Then write its name in the “Keyboard name:” dropdown menu with no spaces or special characters. From there you can change the right-hand column so as to choose the symbol that will appear when you tap the right-hand key with the toggle key pressed down. Once the keyboard has been created and configured to your satisfaction, click on Save to save your keyboard (if you click on Cancel, your new keyboard will be deleted).

To change a keyboard, select the keyboard to be changed, then alter the values in the left-hand column according to what you want and click on Save (if you click on Cancel, your changes will be lost and the keyboard will go back to its old layout).

To delete a keyboard, just select the desired keyboard in the “Keyboard name:” dropdown menu, then click on Delete and then on Save (if you click on Cancel, the keyboard will not be deleted).

## Displaying or cancelling the startup splashscreen

To select or cancel the splashscreen (startup image) display at the start of the program, you must tick or untick the “Splashscreen at program start” box in the B-Key configuration window then click on Save (see Figure 11, p. 11).



# B-Key

Figure 19 Splashscreen

### Switch B-Key on or off at startup

For B-Key to be activated from the program start, tick the “Start in active mode” box then click on Save. If you do not want B-Key to be switched on from the start of the application, untick the box (see Figure 11, p. 11).

### Automatic B-Key launch when Windows starts

If you want B-Key to launch automatically when Windows starts, tick the “Windows automatic program startup” box then click on Save. If you do not want B-Key to begin to run when Windows starts, untick the box (Figure 11, p. 11).

### Automatic B-Key updates

If you want, B-Key to check to see whether an update is available on the web and be automatically installed every time the program starts, tick the “Automatic program update” box (if not, untick the box), then click on Save (see Figure 11, p. 11). If you do not want to activate the automatic update check, but want to check manually so see whether there are updates, you can open the configuration window File menu and click on “Check for Updates ...” (see **Erreur ! Source du renvoi introuvable.**, p. **Erreur ! Signet non défini.**).

## **Activate or deactivate abbreviations**

If you want to switch the abbreviations mode on (see Abbreviations Section), tick the “Activate abbreviations” box (if you want to switch Abbreviations off, untick the box) then click on Save (see Figure 11, p. 11).

## **Activate or desactivate StickyKeys**

If you want to activate StickyKeys Feature, i.e. the effect of the keys “Ctrl”, “Shift” and “AltGr” persists after release, tick the “Activate StickyKeys” box (if you want to deactivate StickyKeys Feature, untick the box) then click on Save (see Figure 11 p. 11).

## **Active or desactivate CapsLock**

If you want to activate the Caps Lock, hold switch and press the Shift key, then release both keys.

# Troubleshooting

## Installation program does not start

If you have put the CDrom into your computer and the installation program has not started: open your "Desktop", then open the B-Key CDrom and launch "setup.exe" by double-clicking on the icon. If the installation program still does not start, enter the following address in your internet browser: <http://www.fst.ch/soft/bkey/setup.exe>, save the file, then launch it by double-clicking on the icon.

If the problem persists, contact FST.

## Problems with administrator rights

If you are in Windows Vista and cannot switch off the UAC as explained in the "Windows Vista" sub-section of the "Installation" Section: ask your computer administrator to do it from his account.

## Other problems

B-Key cannot operate (is switched off) when you are in the B-Key configuration windows (main window, Keyboard Configuration and Manage Abbreviations windows). Also, for the program to run properly, it is strongly advisable to close the B-Key configuration windows, otherwise there may be typing problems.

Alt+Tab does not work when B-Key is activated.

# Disclaimer

**Please note: FST declines all responsibility for any problem - physical, IT or of any other kind – resulting from the utilisation or installation of this software.**