

# EK-7000

## Programmable keyboard

### Users manual

version 1.0.1



This manual was not subject to any language revision.

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**BASIC INFORMATION**

Power supply	5V DC $\pm 5\%$ (from USB)
Consumption	PS2: 275 mA USB: 500 mA
Working temperature	0 - 45 °C
Communication interface	USB PS2 (by reduction)
Number of buttons	
Number of buttons	56 for Single keyboard 112 for Double keyboard
Single keyboard: 1 layer	56 keys
2 layers	111 keys
Double keyboard: 1 layer	112 keys
2 layers	222 keys
Numbers of signs to key	
Single keyboard: 1 layer	max. 16
2 layers	max. 8
Double keyboard: 1 layer	max. 16
2 layers	max. 8
Possibility of connecting a scanner	yes (PS/2)
Possibility of connecting a keyboard	yes (PS/2)
Optional accessories	RFID module
LED control	
Indicates the presence of power, that is lit when the keyboard is turned on	green
Indicates that there is an active second keyboard layout	red

**INSTALATION OF PROGRAM**

To program the keyboard EK-7000 is necessary to install the program EKProg.

This program can found on the support CD, which is included or on the website [www.elcom.eu](http://www.elcom.eu) in the section / Support / Download files.

EK-7000

## The installation procedure

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1. step

Please select a language



2. step

If you accept the terms of the agreement please click I agree to continue.



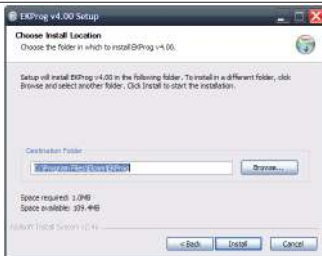
3. step

Check the components which you want to instal and press next.



4. step

Select the destination folder.

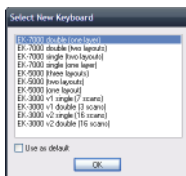


5. step

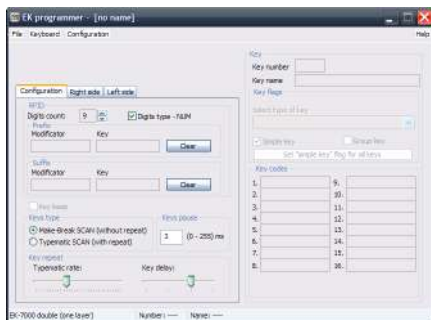
Finish the installation by CLOSE

## CONTROLLING THE PROGRAM

Before the first run, you will be prompted to select the type of your keyboard.



Main view to program



Main application window

## Keyboard types

### Non-programmed keys (grey color)

Key has no function assigned/no access of scan-codes.

### Programmed key (blue, orange, green color)

Key has an assigned/accessibility of a scan-code which is visible in the application window. The color differentiation of keys is dependent on the type of keyboard and is different depending on the mode of the key.

### Current selected key (dark grey, dark blue, dark orange, dark green)

The currently selected key (its data is depicted in the main application window) is darker than other keys.

### Programmed keys

In the upper part of the application is a list of keys in a telescoping menu. As you work with the program, the programmed keys are stored in this menu. The list is cleared with the opening of a new project or the closing of the program. Keys marked with a star are those which are currently assigned. Keys without stars are keys which were programmed but which have already been cleared from the main area of the application. Keys from this list can be used when copying keys from a list (see: „Operations over a key“).

### Shift through the keyboard

If the cursor is active on the keyboard element, it can be moved using the arrow keys. It is also possible to shift through the keyboard by using the functional buttons located beneath the item „Programmed keys“. The buttons << and >> are used to move to the next or the previous key (according to the index and only in the course of the current tab).

## File menu

Individual items on the file menu fulfill the following functions:

### New

Opens a new dialogue window in which the user can select a new type of keyboard. Subsequently a new file is created.

### Open

Opens an existing file. Select a file using a standard Windows dialogue window.

### Save, Save as...

Saves an updated file. If a new file is involved or if you use the command „Save as...“the dialogue window for saving a file appears.

When saving a file, it is possible to select its format on the basis of the type of keyboard used. The EK-7000 uses only one type of file.

### Close

Closes the program.

A list of the most recently opened files is found between the items „Settings“ and „Close“.

## Keyboard menu

This menu is different for different types of keyboards. Each type of keyboard contains a different possibility in this menu, and therefore these will be described in the individual chapters.

Individual items on the file menu fulfill the following functions:

### Programming...

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Serves for programming the updated data from the program to the keyboard.

Read the keyboard programming...

Serves for reading the programmed values from the keyboard to the program.

Renew the firmware...

Serves for putting a new version of the firmware onto the keyboard.

Notice

All of these possibilities require connecting a keyboard to a computer using a USB port.

Clear all keys

Serves for clearing the current programmed keys in the program on the computer.

Changes to the keyboard

A change to the keyboard serves to allow the user to change the type of keyboard from the current to the new type (change the number of layers used).

Notice

Reducing the number of layers causes a loss of data for removed layers as well as the switched layers which are not appropriate for the new type of keyboard. Changing the keyboard back does not allow for the recall of such data.

Change in layers

If a user needs to change individual layers, this is possible to do using this functionality.

### Setting keyboard parameters

The keyboard parameters can be changed on the first tab.

#### Setting RFID parameters

Some keyboard models also contain an RFID (Radio Frequency Identification) module, which serves for detecting codes from an RFID key. On the basis of a scanned 13-place numerical code, a sequence will be generated for pressing the corresponding numbered keys.

In the window with the scrollbar „Number of digits“, set the number of valid digits which will be used from the entire 13-place code which you obtain from the RFID key.

The row „Prefix“ sets the key and the modifier, which will be sent prior to the code itself obtained from the RFID key.

The row „Suffix“ determines the key and modifier which will be sent after sending the RFID code.

The „Clear“ buttons are used to clear the set values.

Using the field „Use numerical keys“ you can set the type of numbers generated: a checked field means that the codes for the keys will be generated in the numerical part of the keyboard.

#### Types of keys

Select a mode for the keys:

- Make-Break: key does not repeat (implicitly).
- Typematic: allows for the repeating of a key upon its being held down.

#### Pause between codes

Time between sending of two scan-codes from the keyboard: 1–255 ms, implicitly 3 ms.

#### Rapid repeating

Setting for the speed of repeating of keys: 2–30 characters/s (valid for Typematic types), implicitly 11 characters/s.

#### Break between repeating

The time from pressing a key after its first repeating. Values are from 1 s–250 ms (valid for the Typematic types), implicitly 500 ms.

#### Programming a key

A number of instruments which make working with the keys and programming easier are available to a user when programming the keys.

##### Informational elements

By using the secondary dialogue, a user has available indicators for properly choosing a key (with the help of a mouse in the main part of the application window). A „number“ contains a serial number. Enter the name for the programmed key to the text line „Name“. In the numbered lines of the „Code for keys“ section, the individual characters of the programmed sequence of keys is found.

The type of key is determined by the method of its use. The meaning of individual types is as follows:

- Key:  
Serves for the programming of the exact sequence of pressing keys (including modifiers and their release).
- Modifier:  
Serves for the programming of keys which change the meaning of other keys (for example „shift“ or „control“).
- Layers switch:  
Serves for switching the current layer on the keyboard and thus changing the current layout of data.

Checking the item „Simple keys“ sets it so that a key which has this character set will not accept the pressing of another key at the same time. This setting is implicit. The item „Connected keys“ indicates that the given key is affiliated with other keys. The button „Set for all keys“ sets the currently selected value of the „Simple key“ character for all the keys.

##### Special programming of a key

Programming by oneself can be activated in a number of ways. Whether the programming begins immediately or after confirmation from the user, it is also possible to set what role the double-click of a mouse will play.

- By double-clicking the mouse on the relevant key (depending on the program setting and type of key) the application is switched to the state of programming a key or altering the name of a key.
- By clicking onto a part of the code for a key (in the dialogue with values).
- With the help of a tabulator, by switching through elements.

During editing and up to the confirmation or cancelling of changes, there are functional buttons in the lower part of the screen. „Confirm“ saves changes to the current position. „Cancel“ clears all changes made. „Clear the last code“ erases only the last code programmed (repairs mistakes). When the program stops accepting the pressing of keys, this means that the maximum number of codes has been entered.

#### Settings menu

Individual items of the settings menu fulfill the following functions:

##### Rapid editing

Serves as an accelerated editing mode. It is suitable, for example, when used with a mouse so that a user doesn't always have to confirm entry into the mode for editing codes.

##### Automatic confirmation of a change in a key sequence

Selecting this optional program after leaving the programming of codes for keys immediately saves the changed values. If this choice is switched off, exiting from the editing field will cause the changes made to be erased.

##### Using ESC to close the application

If this option is active, pressing the ESC key will close the program (doesn't apply during key programming).

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#### Confirm clearing of a key

If this option is switch on, the program will request confirmation before clearing a key. If it is switched off, clearing will be performed without asking for confirmation from the user.

#### Confirm overwriting of a key

If this option is switched on, the program will ask for confirmation before overwriting a programmed value for a key. If it is switched off, the overwriting will take place without asking for confirmation from the user.

#### Launch with a standard type of keyboard

This setting means that upon starting up, the application will not ask the user which type of keyboard to use and will simply start with a standard type.

#### Launch with the last used type of keyboard

This setting means that after launching of the program, a new project is created based on the last type of keyboard used.

### Operations over a key

By pressing the right mouse button, you call up a context menu which offers operations for the keys. The individual menu items are described below.

#### Program a sequence

With the help of the menu item „Programming the current key“ it is possible to program a key the same as with the use of a double-clicking with the left mouse button on the key.

#### Copy

Programmed values for the currently selected key are saved into the memory for later use. The content of the original key remains unchanged.

#### Edit

Programmed values for the currently selected key are saved into the memory for later use, and the key is cleared.

#### Save

Remembered values (with the help of the Copy and Edit functions) are saved to the current position.

#### Replace

Inserts remembered values (with the help of the Copy and Edit functions) into the actual position, and the previous values of the key will be remembered in the memory for later use.

#### Save from a list of functions

Programming of the current key with values of a key selected from a list of programmed keys. This list of programmed functions is created during the course of the program. Functions used which are or were programmed are stored into the temporary memory. These codes from the list can then be used when there is a need to change the layout of the keys on the keyboard. If some of the keys (or all) are cleared, the list of originally programmed keys can always be found in the list of codes and can be copied to other keys. This list is preserved only until the opening of a new file or until the program is closed.

#### Simple

The position of the new simple key is set according to the position of the cursor when selecting a function.

#### Doubling

Affiliating of the current key with a neighboring key according to the direction chosen. It is only possible to connect a programmed key with an unprogrammed one.

**Quadrupling**

Affiliating of a current key with adjacent keys (as available) to form a quadruple key. It is possible to directly expand a simple key, as well as an associated double key. It is only possible to connect a programmed key with unprogrammed ones, however.

**Clear, Clear all**

Clearing of a key, or clearing of all keys. The function of individual keys remains in the list of programmed keys.

**USE WITH CASH REGISTERS**

**Basic layout of the keys**

Depictions of keyboard layouts for individual cash registers are located on the Support CD (from number 2/2013) and on the homepage in the support section.

**Layout of functional keys on PC keyboards for different types of Elcom cash registers**

**Note**

The layout of symbols concurs with classic Slovak/Czech „QWERTZ keyboards“ (only the Slovak keyboard is depicted on screens).

**Euro-2000 Alpha, Euro-1000**

A PLU can be programmed into keyboards as a direct PLU by a method other than a PLU number, by the following code of a PLU key. Cash registers have standardly assigned direct PLUs on the keyboard letters (characters) of a standard PC keyboard.



There are 48 of these direct PLUs available. They are defined in the cash register program, so that if one of the keys of direct PLU is pressed on the PC keyboard, the PLU is automatically registered without the need for

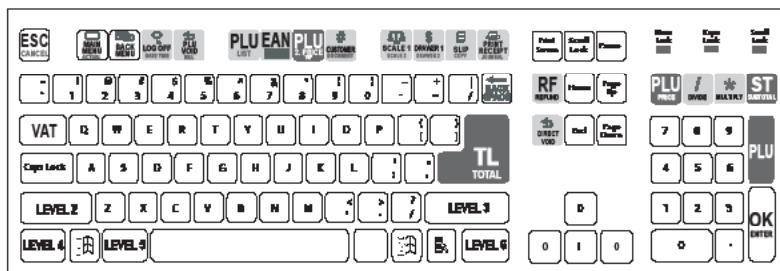
further pressing of the PLU key. The keys beginning with the key „;“ in the left upper corner through the „-“ key in the right lower corner next to the „SHIFT“ key are used as direct PLU keys. The PLU number is increased through the rows from left to right, and at the end of a row it is necessary to continue up to down. The following keys are not defined as direct PLU keys: „TAB“, „CAPS“, „SHIFT“, „CTRL“, „ALT“, „SPACE“ and „ENTER“.

Euro-500 Handy, Euro-2100, Euro-200



For a direct PLU the same applies as for the Euro-2000 Alpha cash register.

Euro-2500TX



POS-3000, POS-4000

