# Macro Key, by Alain Birtz version 1.1 Reference manual

#### **Presentation**

Macro Key is a text tool to write (and repeat a certain number of times) a word or a sentence with a single key stroke. The tool is very simple to use. You record a sequence to the keyboard: a word, a sentence or a series of any characters. Then you link the sequence to a special keystroke (or key combination with shift, option, command,...). The next time you press this special key, named caller key, the sequence will write by itself. Moreover, you can choose to repeat the sequence many times. The sequence and the caller key are known as a **macro**. You can restrict the macro to a single application when the sequence has no meaning outside the application.

Macro Key records and replays any sequence of character, but doesn't record any mouse movement or button state. There is no limit to the number of macros you can record.

## **Installation**

Put the file Macro Key in the System Folder. For System 7 or higher put the Macro Key file in the Control Panel inside the System Folder. You can easily identify the file by its icon:



Macro Key has two main parts: a CDEV resource and an INIT resource. The CDEV is used to record the macro sequence and the caller key. The INIT loads and executes the code to replay the macro sequence when the caller key is struck.

The INIT resource is loaded in memory only at startup. The icon above appears at the bottom of the screen if the INIT is not correctly loaded. If some problem occurs you will see the icon below instead:



You can disable the loading process by keeping the  $\underline{\mathbf{m}}$  keys pressed at the startup. Even if the INIT is not loaded in memory, you can record a macro. You record the macro from a dialog box instead of a document window. When you open the control panel and the INIT resource is not loaded in memory, Macro Key displays the following dialog:



## **How to use Macro Key**

Macro Key works via the control panel window:



The two CDEV radio buttons **ON** and **OFF** enable or disable Macro Key. The **Show startup icon** check box shows the CDEV icon, at the bottom of the screen, when the INIT is loaded, at startup. This icon is crossed if Macro Key cannot be loaded correctly. The **Cancel** button is used to quit without changing anything. If the **Everywhere** radio button is selected the recorded sequence will be replay in every application. By selecting the **Only for...** radio button you will make the following files slector box appear:

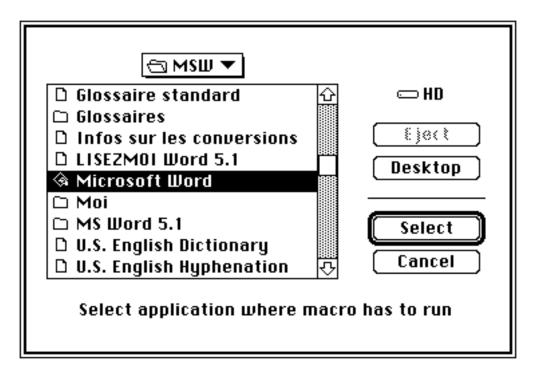


figure 1

You select the application in which the recorded sequence will be replayed. The sequence will be replayed only for this application. When the file selector dialog box is closed you return to the control panel and the **Only for...** radio button name changes for the name of the application selected.

<u>Note:</u> if two sequences refer to the same caller key, and the first is selected for only one application while the second can be replayed anywhere, the first one is used inside the application

The **Record one macro** button prompts to record a macro. If the INIT resource is not loaded in memory, the recording is done from this dialog box:

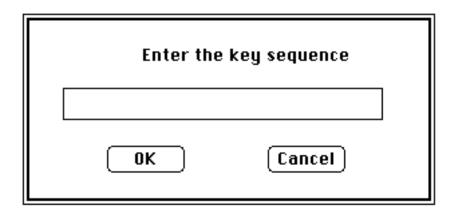


figure 2a

Just enter the sequence you wish. You can use any key or key combination with shift, option, command, etc, including carriage return. In this last case the cursor goes to the next line. Click on the **ON** button to stop recording or on the **Cancel** button to avoid the recording process.

If the INIT resource is loaded in memory you see the dialog box below. Click the **OK** button. <u>WARNING</u>, do not press **Return** or **Enter**, because this key will be recorded in the macro.



figure 2b

For now on, Macro Key records every keyboard input. With the help of the mouse (and mouse only) select a document window and enter the sequence you wish. You can use any key or key combination with shift, option, command, etc. You can also use the numeric keypad, the arrow keys, the **F1** to **F15** keys, **TAB**, **ESC**, **Return** and **Enter**, in short, everything found on the keyboard (except the power on key). When you have entered all the keys in the macro sequence, return to the Macro Key control panel and click on the **Stop recording...** button. You can return to the control panel with a single click inside the control panel window if you can see this window. If the CDEV window is masked by other windows, first return to the Finder. Don't forget to use only the mouse for this operation.

You then see another dialog box used to record the caller key of the previous sequence.



The **Cancel** button avoids the macro recording process. The **OK** button, purely cosmetic, is not used: as soon as the caller key is hit, this dialog box disappears and it is replaced by the following one, asking for the macro name and the number of times (**X**) the sequence must be replayed each time the macro caller hey is hit.

macro name: my name	
play the macro X times	H: 1
ОК	Cancel

figure 4

Here again, the **Cancel** button avoids the macro recording process. Clicking on the **OK** button returns you to the control panel.

You now have the choice to close the control panel (the macro is automatically saved on disk), or to proceed to a new macro recording. If, before this new recording, you want to save the previous macro, use the **Save** button. This operation is only a measure of precaution since all macros are always saved on disk (in a resource inside Macro Key itself) when you close the control panel. You can, however, discard all currectly recorded macros, except the one saved by the **Save** button, with a single click in the **Cancel** button. This button closes the control panel without the usual saving.

The **Macro...** button allows you to modify some macros previously recorded. This button displays the following window:

```
{deb} 'F13' {MPW Shell} #1 " _Debugger"
                                                                  む
{my name} 'sht-~' {Microsoft Word} #3 "Alain Birtz"
{mk title} 'sht-|' {Microsoft Word} #1 "MacroKey"
{a grave} 'F6' {Everywhere} #1
{o circonflexe} 'F7' {Everywhere} #1
{i circonflex} 'F8' {Everywhere} #1
{e aigue} 'F9' {Everywhere} #1 "é"
<u>{o arano} 'F1O' {Fnormuhoro} #1 "ò"</u>
                          Application..
                                            Sequence..
                                                           Remove
Name...
              Caller...
Maximum number of key in sequence
                                      ||32
                                            Stop Key..
                                                              0K
```

figure 5

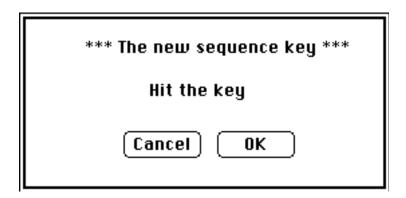
The upper part of this window gives the scrolling list of all recorded macros. Every line is built in the same manner. At the beginning of line, between braces, you see the name of the macro. The next field, between single quotes, shows the caller key. Next, again between braces, the name of the application where the macro will be replayed, or the word **Everywhere**, if the macro can be played anywhere. The fourth field, beginning with the **#** symbol, gives the number of times the sequence must be replayed each time the macro caller hey is hit. The last field, between double quotes, is the ascll representation of the macro sequence.

When you select a line, the button under the macro scrolling list becomes active.

- The OK button closes the window.
- The Remove button removes the selected macro.
- The **Name...** button displays the dialog box of figure 4 asking for the macro name and the number of times (**X**) the sequence must be replayed each time the macro caller hey is hit.
- the **Caller...** button displays the dialog box of figure 3 which is used to record the caller key for the selected macro.
- The **Application...** button displays the file selector box of figure 1 to restrict the macro to a single application
- The **Sequence...** shows the dialog box below which is used to modify, one by one, the keys of the selected macro.

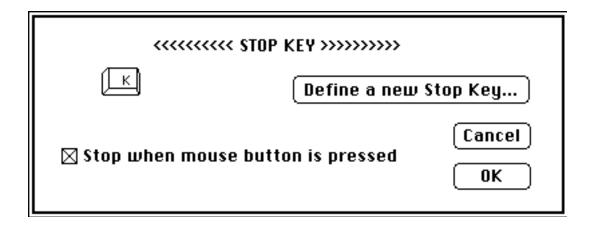
MACRO SEQUENCE KEY	
the key is: <b>i</b>	
Redefine) (Previous) Next OK	

The **Previous** and **Next** buttons of this dialog box switch to the previous and next key respectively. The **OK** button closes the dialog box and the **Redefine** button allows you to change this key in the following dialog:



In the window of figure 5, the edit field named **Maximum number of keys in sequence** determines the maximum number of keys that can hold a macro sequence. By default this value is set at 32; this means that if you hit more than 32 characters, only the first 32 are recorded (and replayed) in the macro. If you think of using a sequence holding more than 32 characters, increase this value.

The **Stop Key...** display the dialog below. You can stop a macro in two way. if the **Stop when mouse button is pressed** box is checked, you stop the macro when you press the mouse button. The **Define a new Stop Key...** button is used to define a special key combination. If, for example, you have a macro in which the sequence must be repeated 200 times and you press this special key combination (or the mouse button) when the sequence is replayed, you immediately stop the repetition. You can also break a long macro when you quickly press the special key combination.



The **Define a new Stop Key...** button open the following dialog box in which you define the special key combination.



The default special key combination is **Control Option K**.

### **Technical detail**

Macro Key is completely written in assembler. To run, it need less than 1K (in fact 740 bytes) of memory, plus the space to store your macros. To open the control panel you need a little bit more memory, but this memory is restored when you close the control panel. On disk, Macro Key takes less than 20 K.

To function, Macro Key modifies one and only one system call (GetOSEvent). This modification is done at startup and cannot be inverted. However you can avoid this modification when you bypass the INIT loading (holding the **m** key at startup). The **OFF** radio button of the control panel disactivates Macro Key, but does not invert the modification.

Macro Key stops replaying the macro sequence as soon as the control panel is opened. So, a new macro recording is done independently of the macros previoulsy recorded. Moreover a macro is not recursive: if a sequence of a

macro holds the caller key for another macro, the sequence for this macro is not replayed.

## **Distribution**

Macro Key is free. You can make as many copies of it as you like, and give it to interested friends, but please keep the 3 files together (the French documentation, the English documentation and the Control Panel file).

Tested on SE, SE-30, LC, LC II, LC III, Si and all QUADRA.