

# Macintosh User's Guide

- So Easy, It's Intuitive
  - The Fastest Speed • A Programmable Keypad
    - Stationary, Saves Space
      - Draw, Trace, Doodle

# The UnMouse™ User's Guide

Version 4.0

for all ADB Macintosh computers

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#### I. INTRODUCTION

The UnMouse is a compact, touch-sensitive tablet that connects to the ADB (Apple Desktop Bus) Port of your Macintosh computer. It is not only a replacement for the mouse, but acts as a function keypad and graphics tablet as well. The UnMouse is faster and easier to use than mice or trackballs and takes a minimum amount of space on your desk.

The glass surface of the UnMouse has a transparent conductive coating fused to it. The UnMouse electronics senses the capacitive effect of a finger touching the glass, averaging out the entire area of finger contact to a single touch point, which is used to position the cursor. When you move your finger over the surface of the UnMouse, this averaging function moves the cursor smoothly over the display. (You won't believe how smooth and precise this cursor control is until you try it.)

There are two basic ways of using the UnMouse. The first is as a cursor control device and the second is as a Power KeyPad. When using the UnMouse to control the cursor you simply touch the glass and move your finger to move the cursor. Pressing the tablet activates a microswitch under the glass (the "UnMouse button") which allows you to "click" or make selections. The UnMouse driver provides three types of cursor control which give the UnMouse the "feel" of either a graphics tablet, a mouse, or a trackball.

When the Power KeyPad is activated, keyboard commands may be entered by simply selecting "function keys" on the UnMouse surface. This is especially handy when applying a command to a selection, such as highlighting a word and changing the text style to bold. The supplied preprinted template cards (or templates which you create and label yourself) slide under the UnMouse touch surface to label the different keypad functions. You can activate the Power KeyPad in one of two ways: Either by hitting the red button

and then selecting a function key or, using a more advanced method, clicking on a function key directly without making a cursor movement first.

A full-featured software Control Panel permits you to choose a cursor control mode, select the Power KeyPad method you prefer, and to adjust or enable any of the features of the UnMouse.

A stylus is also included with the UnMouse, which allows you to draw, sketch or trace pictures when using one of the ABSOLUTE modes. With a resolution of 1,024 x 1,024 touch points, the UnMouse can be used in place of much larger and more expensive graphics tablet.

NOTE: Aside from your finger, only a conductive instrument may be used to touch the UnMouse, such as the UnMouse stylus or a mechanical pencil with a metal shaft. Plastic pens will not work. If you do use a mechanical pencil, be sure that you hold it by the metal shaft which will ensure that your hand is in capacitive contact with the tablet.

The UnMouse can be used simultaneously with a mouse, trackball or other ADB input device and may be used with any Mac display, including the Macintosh SE, AppleColor, AppleColor-compatible monitors, and large-screen displays. The UnMouse uses an averaging algorithm to increase the effective resolution beyond the 1,024 x 1,024 points digitized by the UnMouse tablet. Using Absolute mode for very large displays or multiple monitors may result in some visible cursor jitter.

The UnMouse must be used with Apple system software level 6.0 or higher. (The UnMouse diskette includes level 6.0.3 and the Installer.) If you do not have level 6.0 or higher, be sure to install the supplied Apple system software before you attempt to install the UnMouse.

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## II. INSTALLING THE HARDWARE

Quantity	<u>Description</u>
1 1	<u>Hardware</u> : UnMouse tablet UnMouse stylus
3	Templates: Pre-printed Power KeyPad templates with one standard with 16 commands and two with 60 commands for Microsoft Excel or Microsoft Word.
1 3	MacPaint tracing template Blank Templates
1	Software: 3.5" diskette including: -The UnMouse driver -Apple System 6.0.3 and Installer -MacDraw file for printing out new UnMouse templates
1 1	Miscellaneous: This manual Registration/Warranty card

## Hardware Setup

Place your UnMouse beside your keyboard. Plug the cable from the UnMouse tablet into the ADB port on the back of your Macintosh.

- 1. We do not recommend you plug it into the keyboard's ADB port as this may negatively affect its performance.
- 2. Besure your Macintosh is turned off before you plug you UnMouse into the ADB port.

## III. INSTALLING THE SOFTWARE

Once the hardware has been installed, you may install the UnMouse software driver. Be sure that you have Apple system software version 6.0 or higher on your Macintosh. If you do not, install the system software supplied on your UnMouse diskette, using the Apple Installer which is also provided. (See your Macintosh documentation for information on using the Installer.)

The following instructions will enable you to install the UnMouse software driver. If you have a working mouse in your system, follow the instructions in the section titled "Installation Using a Mouse". Otherwise, follow the instructions in the section titled "Installation Without Using a Mouse".

## Installation Using a Mouse

- 1. Make a backup copy of your UnMouse diskette and place it in a safe place.
- Insert your UnMouse diskette into the Macintosh disk drive.
- 3. Double-click on the UnMouse diskette icon.
- 4. Now double-click on the UnMouse system folder.
- 5. Drag the UnMouse driver icon (labeled "UnMouse") to the system folder on your hard disk.
- 6. Eject and remove the UnMouse diskette.
- Restart your system being sure the UnMouse is plugged into your Macintosh before starting up. If the UnMouse is not plugged in, the driver will not load properly.

- 8. As the driver is loading, the UnMouse icon will appear momentarily in the lower left-hand corner of the screen. If the driver is not loading properly or the UnMouse cannot be found (e.g., because it is not plugged in) the UnMouse "failure" icon will appear in the lower left-hand corner of the screen momentarily and the UnMouse will not work (see Chapter IX "Troubleshooting").
- 9. You may now use the UnMouse. Slide your finger over the glass to move the cursor and press anywhere on the tablet to activate the UnMouse button. To drag, maintain pressure on the glass as you slide across the tablet. (See Chapter IV Using the UnMouse for Pointing, for a more detailed explanation of how to use the UnMouse.)



The UnMouse "failure" icon



The UnMouse "success" icon

## Installation Without Using a Mouse

- 1. Make a backup copy of your UnMouse diskette and place it in a safe place.
- 2. Turn the Macintosh OFF.
- 3. Insert your UnMouse diskette into the Macintosh disk drive.
- 4. Be sure the UnMouse is plugged into your Macintosh before starting up. If the UnMouse is not plugged in, the driver will not load properly.

- Turn your Macintosh on. The Macintosh will now restart using the Apple System 6.0.3 supplied in the UnMouse system folder. This system folder also contains the UnMouse driver which will automatically load allowing you to start using your UnMouse.
- 6. As the driver is loading, the UnMouse icon will momentarily appear in the lower left-hand corner of the screen. If the driver is not loading properly or the UnMouse cannot be found, (e.g., because it is not plugged in) the UnMouse "failure" icon will appear in the lower left-hand corner of the screen momentarily, and the UnMouse will not work (see Chapter IX "Troubleshooting").
- 7. You may now use the UnMouse. Slide your finger over the glass to move the cursor and press anywhere on the tablet to activate the UnMouse button. To drag, maintain pressure on the glass as you slide across the tablet. (See Chapter IV Using the UnMouse for Pointing, for a more detailed explanation of how to use the UnMouse.)
- 8. You will now want to move the UnMouse driver to the system folder on your hard drive. Do this by clicking on the UnMouse diskette and clicking on the system folder it contains. Drag the UnMouse driver from this system folder to the system folder on your hard disk. Your UnMouse will now be ready to use each time you restart your Macintosh.
- 9. Eject and remove the UnMouse diskette.

## IV. USING THE UNMOUSE FOR POINTING

#### **Cursor Control Modes**

Three methods of cursor control used by the UnMouse are explained below: Absolute, Mouse and Trackball. Each method offers at least two modes which work in slightly different fashions. You may select any one mode by clicking on the appropriate target in the Control Panel.

#### Absolute Modes

There are two Absolute modes: Absolute for Pointing and Absolute for Drawing. Absolute for Pointing is designed to give you maximum speed and control when pointing and clicking in general applications. It is the preferred mode for most users, most of the time. Absolute for Drawing is recommended whenever you are drawing or tracing.

When using either Absolute mode, your initial touch on the UnMouse will correspond in a one-to-one fashion to a similarly located point on the Macintosh screen. This is similar to how a graphics tablet works. If you touch the lower left-hand corner of the UnMouse, for instance, the cursor will immediately appear in the lower left-hand corner of the display. In Absolute for Drawing mode, movements over the glass after the initial touch will continue to be mapped to the display in a one-to-one manner allowing for exact drawing and tracing.

After the initial touch in **Absolute for Pointing**, however, if you slow down or stop moving your finger, the UnMouse software assumes that you are trying to locate an exact point. It then "switches gears" to a more sensitive "relative" mapping of finger and cursor movements. When this happens, a given finger movement will result in an even smaller cursor movement on the display giving you extrafine control over the cursor. The level of sensitivity of this relative mapping is controlled with the Speed/Sensitivity option on the Control Panel.

When you speed up your finger movement, in the Absolute for Pointing mode, the UnMouse returns to true absolute control and any offsets from an exact one-to-one mapping that have built up will quickly go away. If you lift your finger off the glass, the offsets will also go away.

Absolute mode is desirable for several reasons. First, is the same finger position will always give you the same cursor location. Second, is that the cursor movement is not affected by how fast your finger moves (except when it is moving very slowly in Absolute for Pointing mode). This eliminates the "undershooting" and "overshooting" common to mice and trackballs.

Using the UnMouse in an Absolute mode will, at first, feel quite different from a mouse. It may take a little practice to get used to the quick jump the cursor makes when you first touch down, however, you will soon appreciate the speed and predictability of movement the Absolute modes offer.

The "More Features..." button in the control panel provides a special dialog including many options that may be used to personalize the behavior of the **Absolute for Pointing** mode.

#### Mouse Modes

There are two Mouse modes, both of which give the UnMouse the feel of a mouse—without taking up as much desk space or requiring the user to locate, orient and manipulate another object. A Mouse mode will have a familiar feel and may be the best mode to start with if you are used to a mouse.

When you first touch the tablet in either of the Mouse modes, the cursor will not move at all (unlike Absolute mode, where the cursor will go to your finger location). When you start to move your finger across the tablet, the cursor will move in the same direction and relative speed as

your finger. When you move faster, the cursor accelerates. When you move slower, the cursor decelerates, permitting extremely fine control. When you stop or lift your finger from the surface of the UnMouse, the cursor stops.

The two Mouse modes, Mouse Standard and Mouse Edge Liftoff, differ only in how they handle a dragging motion when you hit the edge of the tablet. (See Dragging in this chapter for complete details.) If your finger hits the edge of the tablet while dragging in Edge Liftoff mode, you may lift your finger off the surface without "unclicking" the UnMouse button. The button will stay down for about 1.5 seconds, giving you time to move your finger to the center of the tablet to continue the drag. If your finger does not hit the edge of the tablet, the button will unclick normally. (See the more detailed explanation on dragging later in this section.)

#### Trackball Modes

The Trackball modes are oriented primarily for game playing and, in fact, feel much like the trackball on an arcade video game. They are identical to the Mouse modes in most respects. When you start to move your finger across the surface of the UnMouse, the cursor will move in the same direction and relative speed as your finger. When you move faster, the cursor accelerates and when you move slower, the cursor decelerates permitting extremely fine control.

The Trackball modes differ from the Mouse modes in that the cursor has "momentum". That is, if you move your finger over the glass and then lift up, the cursor will continue to move, gradually slowing until it stops, just like an arcade trackball. If you touch the surface of the UnMouse while the cursor is moving, it will stop.

The amount of time necessary for the cursor to stop is determined by the speed at which it was moving and the setting you select with the Friction option. The settings range from minimum (-) friction, which will cause the cursor to move across the entire screen with the slightest finger movement, to maximum (+) friction, which will cause the cursor to stop much sooner.

In Trackball mode there are a couple of ways of continuing a drag once you hit the edge of the tablet. Either unclick and move to the center to get more running room, or retrace your steps with greater velocity. While the edge liftoff technique is not available, you will notice that the icon being dragged will continue to move with its own momentum when you lift up at the edge of the glass.

## Clicking

To click or select with the UnMouse, simply press down anywhere on the glass. The UnMouse is constructed with a special microswitch beneath the glass. Pressing with equal pressure anywhere on the glass will activate this switch. A mechanical sound can be heard when the switch opens and closes.

At certain times you may prefer to use a separate button for clicking. For instance, in a painting program you may find it easier to draw if the stylus is not drawing and controlling the button at the same time. The UnMouse comes with options that allow you to use the control key on the keyboard or the red button on the UnMouse for clicking. (See Chapter VII "Using the Control Panel" for details.)

## Double Clicking

To double click with the UnMouse, press down on the glass surface twice in rapid succession Again, audible clicks will be heard when you press down and let up.

Similar to the mouse, there is a time and distance "window" within which you must make both clicks. If you take too long, or move too much, between clicks the driver software will interpret your action as two separate single clicks. You may adjust this time and distance tolerance in the UnMouse Control Panel.

## Dragging

To drag with the UnMouse, simply click at the desired location and slide your finger across the surface. If the "Auto button hold" feature is enabled, you may "let up" on the the mechanical button and continue dragging as long as you don't lift your finger off the glass. This allows you to drag without continually having to apply pressure.

Occasionally, when you are in one of the Mouse modes, you may find that your finger will hit the edge of the UnMouse during a drag. You have several ways to complete the drag if this happens:

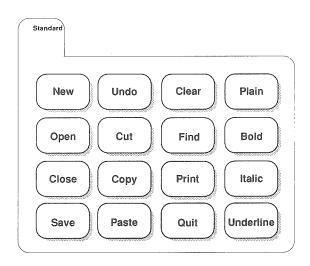
- If you are using the Mouse Edge Liftoff mode, simply lift your finger when you drag to the edge of the UnMouse. The switch will not "unclick" for a second or two if you have gone to the edge. Move back to the center (giving yourself some "running room"), and continue the drag.
- If you are using the Mouse Standard mode, you
  may drag back to the center and then retrace your
  motion, this time going much faster. By moving
  quickly enough, you will accelerate the drag to the
  desired location without hitting the edge again.

With a little practice, you will learn to automatically use enough speed when making large dragging motions in a Mouse mode to avoid hitting the tablet edge.

## V. USING THE UNMOUSE POWER KEYPAD

The UnMouse surface is divided into sixteen keys, and a different keyboard command may be assigned to each key. The control panel allows the user to assign these commands, and build any number of stored templates. A command consists of up to two modifiers and a character key. Most menu options may be invoked using the command key (eg. Command-Q for Quit). Some special commands may require two modifiers (eg. Command-Shift-B for Bold).

A number of keypad templates are provided with your UnMouse. The printed templates may be used for the preprogrammed configurations, and several blank templates are provided for user-defined configurations. These templates slip under the glass surface through a slot on the top of the UnMouse. Drawing files are also provided so the user can print professional templates on any Macintosh printer.



Keypad Template for the "Standard" Configuration

## Using 60 Power KeyPad Option

The 60 preprogrammed configurations are a series of function keys. These may be used in conjunction with a program like MacroMaker or QuicKeys. Macros allow almost any combination of keystroke sequences, commands, data entry and cursor movements to be replaced with a single keystroke combination or function key.

With the UnMouse's Power KeyPad, an extended keyboard becomes unnecessary. The Power KeyPad also offers the advantage of having your function keys and pointing device in the same place, thus avoiding trips back and forth between a mouse and a keyboard. And because your commands will be well labeled, you won't have to memorize the meaning of function keys or keyboard combinations.

## How to Select a Function Key

The Power KeyPad may be programmed through the control panel to operate using either Red Button or Quick Access mode. You select your preferred method, either Red Button or Quick Access in the control panel.

#### Red Button

When in **Red Button** mode, activating a function key is a two step process: You must first click the red button (which activates the Power KeyPad for about 1.5 seconds) and then touch one of the UnMouse's function keys. If you wait more than 1.5 seconds to make a selection after hitting the red button, the UnMouse will "time out" and revert back to its cursor control function.

NOTE: You do not need to hold down the red button while making a selection.

## Quick Access

When in Quick Access mode, activating the Power KeyPad is a one step process: You simply click on a function key to activate it. To have your action register as a Power KeyPad selection and not as a cursor movement, you must click the UnMouse button immediately after touching the glass (similar feel to immediately selecting a key). You also may not make any movements over the tablet before clicking. If you delay clicking after touching the glass or move the cursor before clicking, the UnMouse driver will interpret this as a cursor control motion with a subsequent click.

When using the Quick Access option, the red button acts as an additional UnMouse button. Also note that when you select a function key in this mode, the cursor does not move. That is, the function key is selected, the cursor will not jump to the Absolute position of the function key.

The Red Button mode is ideal for less experienced users or those not using the keypad very often. While it requires an extra step to activate a function key, there is little chance of confusing a cursor movement with a function key selection. In general, however, most KeyPad users do not have any trouble separating cursor movements from KeyPad selections and prefer to use the Quick Access option because of its speed.

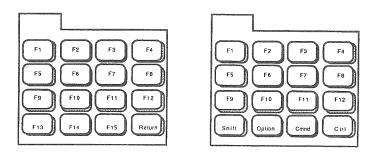
The Power KeyPad may also be turned off by selecting the "Disable" option in the control panel.

## 60 Key Option

In 60-KEY mode, function keys F1 through F12 are out across the top three rows. The bottom row has four "shift" keys: SHIFT, OPTION, COMMAND and CONTROL(see below). To select from keys F1 through F12, you just click on one of the keys in the first three rows. To select from keys 13

through 60, you must click on one of the shift keys on the bottom row and then touch one of the keys in the first three rows within a short period of time.

**NOTE:** It is assumed in these instructions you are using the Quick Access mode when using the **60** Key mode as this minimizes the total keystrokes needed to activate all 60 keys.

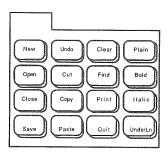


16-Key template layout

60-Key template layout

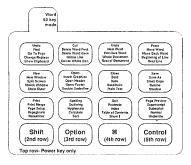
## Your Pre-Programmed Configurations

Your UnMouse comes with the following pre-programmed configurations and templates:

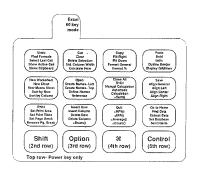


Keypad Template for the "Standard" Configuration

The standard configuration sends many useful commands directly by using the menu command-key equivalents. See "Power Keypad Configuration" (p. 28) for information about redefining the keys or creating a new keypad configuration.



60-Key Word Processing



60-Key Excel

Keypad Templates for 60-Keys with MacroMaker

The 60-Key templates are designed to work with the supplied MacroMaker files. The different macros are assigned to F1, shift-F1, option-F1, command-F1, and control-F1 so each of the top twelve keys can invoke five different macros.

# VI. USING THE UNMOUSE FOR DRAWING AND TRACING

With a resolution of  $1,024 \times 1,024$  touch points, the UnMouse is ideal for use as a small graphics tablet. You can use a stylus (or your finger) to draw, sketch, trace or even sign your name. When drawing or tracing, you must set the UnMouse to the **Absolute for Drawing** mode using the control panel.

NOTE: When you draw or trace using a stylus, be sure that only the stylus touches the UnMouse surface. If any part of your hand also touches the surface, the cursor will jump to a position between these two touch points.

To draw, enter a graphics program (such as MacPaint) and select a drawing tool from the toolbox. Press on the glass surface of the UnMouse and begin drawing. Once you begin, you may let up on the UnMouse and continue drawing (in the same way that you can let up on the glass while dragging).

Optionally, you may use the control panel to allow the Control key on your keyboard and/or the red button on the UnMouse to activate the mouse button. This eliminates having to press the glass down with the stylus while drawing. (This Control key option is actually built in to many painting programs to eliminate having to click with the mouse when drawing.)

If you are using MacPaint, or a similar program, you might find it helpful to insert the MacPaint template into the UnMouse template holder. This template is a facsimile of the MacPaint screen, and will help you to locate your drawing so that your image appears in the MacPaint "easel" area.

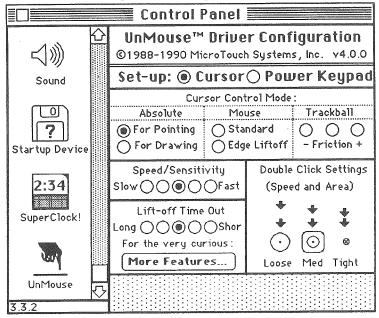
The UnMouse can also be used to trace images. Using a copier, reduce the image to be traced until it fits into the easel space on the MacPaint template. Cut out the image and tape it to this area on the template, then insert the template into the UnMouse. Trace the image using a stylus, and it will appear exactly as you trace it in the MacPaint "easel" area. If the image does not fit in the drawing area, MacPaint and many other drawing programs will autoscroll, creating irregularities in the image. For best results, trace only simple images that fit comfortably in the drawing area.

For the greatest accuracy when tracing, be sure to keep your eye directly over the stylus - otherwise, you may encounter parallax errors due to the thickness of the glass tablet.

You may wish to trace with a mechanical pencil that has a conductive shaft. This will leave a slight trace of graphite on the tablet which can be useful in guiding your hand. The marks are easily removed with a tissue.

## VII. USING THE CONTROL PANEL

The UnMouse Control Panel is used to configure the UnMouse and let you take advantage of its extra features. To access the Control Panel, click on the Apple icon, select the Control Panel menu item, and click on the UnMouse icon. The following screen will appear:



The UnMouse Control Panel contains two screens, selected by the "Cursor" and "Power KeyPad" buttons.

The following section describes the adjustments and options available in the Control Panel. See previous Chapters on Using the UnMouse for Pointing and Using the UnMouse Power KeyPad for details on cursor control modes, Power KeyPad usage, etc.

NOTE: Any changes made to the UnMouse will be automatically saved in the UnMouse driver and used in your current and future Macintosh sessions until changed again.

#### **CURSOR CONTROL**

## Speed/Sensitivity

The Speed/Sensitivity setting allows you to set the speed at which the cursor moves relative to your finger when the UnMouse is being used in a Mouse or Trackball mode. It also controls the level of precision you will get when moving at slow speeds in the Absolute for Pointing mode.

#### Liftoff Timeout

The Liftoff Timeout setting allows you to set the time permitted for repositioning after lifting off of the UnMouse surface. This setting is used by the Mouse Edge Liftoff and Absolute for Pointing modes.

## **Double Click Settings**

When you double click using the UnMouse, there is a time and distance window within which you must make both clicks. When you first start using the UnMouse, your finger may move too far, or take too long, between the first and second clicks resulting in two single clicks being entered. You may expand the time and distance window using the DOUBLE CLICK SETTINGS option. Three settings are available: LOOSE (longer time and larger distance), MED (medium time and medium distance) and TIGHT (shorter time and smaller distance).

#### More Features...

More	Features			
Absolute for Pointing Parameters				
Transition Speed:				
Slow 🔘 🔘 🔘 Fast				
Extra perimeter (absolute region)				
○0% ●10% ○20% ○30%				
Allow lift-off				
○ Everywhere   At Edges   Nowhere				
Auto Button Hold	Hardware %C			
Control Key Click	Calibration (60)			
Cancel	OK			

Dialog provided by the "More Features" button.

## **Transition Speed**

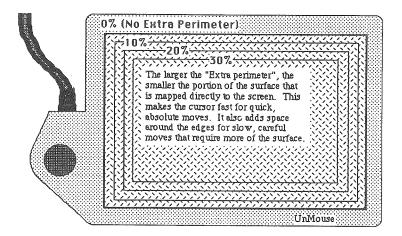
This setting controls the rate at which the cursor "switches gears" in **Absolute for Pointing mode**. The faster the transition speed, the more relative motion is used.

**NOTE:** This has the contradictory effect that a "Fast" setting results in a slower cursor! A slower transition speed keeps the cursor in absolute motion for all but the most careful movements.

## Extra Perimeter (absolute region)

This setting controls the degree of software scaling applied in **Absolute for Pointing** mode. By scaling down the region used for absolute control, an active perimeter is introduced. This has two effects: the absolute motion is faster, and the perimeter region makes it easier to reach the edges without requiring liftoff.

NOTE: If you scale down above 10% it will effect the accuracy of the Power KeyPad.



#### Allow Lift-Off

This setting determines where lift-off is permitted in Absolute for Pointing mode. The default setting is "At Edges", which works just like Mouse Edge Liftoff mode. If "Nowhere" is selected, the liftoff feature is disabled. If "Everywhere" is selected, the mouse button will always be held until the timeout has elapsed. If this option is used, the "Liftoff Timeout" should be set to be very short.

#### **Auto Button Hold**

If this feature is enabled, the button will be held down during a dragging motion until your finger or stylus is removed from the glass. The mechanical button under the glass may be released once the dragging motion is started.

## Control Key Click

You may prefer to use a separate button for the "mouse button", especially in a painting program where it may be inconvenient to use the stylus to click the UnMouse button. When the Control Key Click option is turned on, the Control key on the keyboard may be used as the UnMouse button. In addition, the red button on the UnMouse may be used as the UnMouse button if you have selected the Quick Access option for the Power KeyPad.

NOTE: You must be touching the UnMouse surface at the time you press the Control key or it will not work as the UnMouse button. When using the red button as the UnMouse button, this restriction does not apply.

#### Hardware Calibration

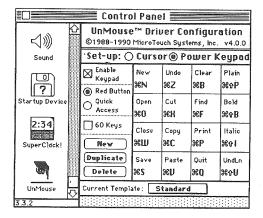
When you receive your UnMouse, it is already calibrated. You may wish to recalibrate it, particularly if you find it hard to reach the edge of the tablet. You can test the suitability of your calibration as follows:

In Absolute mode try locating the cursor in each corner of your display by sliding your finger into the corresponding corner of the UnMouse. Do this for each corner. If the cursor does not move all the way into any of the corners of the display, or if the cursor reaches the corner of the display before your finger reaches the corner of the UnMouse, you should recalibrate the UnMouse as follows:

- 1. Click on the **Hardware Calibration** button. The calibration screen will appear.
- An arrow will appear in the lower left-hand corner
  of the UnMouse picture. Touch the lower left-hand
  corner of your UnMouse. The touch point which
  will be registered will be a single point under the
  center of your finger and will map (as an absolute
  position) to the lower-left hand corner of the display.

- Do not "slide" into the corner of the tablet as the first position you touch will be taken as the calibration point.
- b) Do not squeeze your finger into the corner of the UnMouse when calibrating or it will be difficult to get the cursor into the corner of your display later. Instead, touch the surface of the UnMouse slightly in from the edge when calibrating.
- 3. In several seconds, a similar arrow will appear in the upper right-hand corner of the UnMouse picture. Touch the upper right-hand corner of the UnMouse just as you did in the lower left-hand corner.
- 4. The UnMouse Control Panel will reappear. Retest your UnMouse by trying to reach all the corners of your display. If you are not able to, recalibrate your tablet moving the calibration points even further from the edge of the tablet. Once properly calibrated, your UnMouse should not need to be recalibrated.

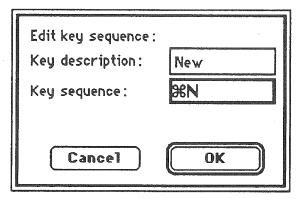
## Power KeyPad Configuration



Control Panel display when the "Power Keypad" button is selected.

## **Key Buttons**

To change the definition of a key, just click on the key to be changed. The following dialog is provided:



Edit the key description, and then click on the region to the right of the words "Key sequence:". Now type any keyboard command, like the sequence Command-N shown in this picture.

## Enable Keypad

If this check-box is disabled, the Power Keypad will not function.

## Red Button or Quick Access

When using the **Red Button** option, clicking the red button will activate the Power KeyPad. You then have 1.5 seconds to touch a function key before the UnMouse returns to its cursor control function.

The Quick Access option allows you to select a function key without using the red button. With this option, you can simply click directly on a function key to activate it. You may not move across the glass at all before clicking or the sequence will be interpreted as a combined cursor movement and click instead of a function key selection. The red button will now act as an additional UnMouse button.

The OFF option deactivates the Power KeyPad at which point the red button acts as an additional UnMouse button.

## 60-Keys

With the 60-Key option, the Power KeyPad has three rows of four command keys. The bottom row consists of 4 "shift keys" corresponding to the Shift, Option, Command and Control keys. This may be used with the "MacroMaker" template to provide up to 60 different command codes. Selecting a key from the first three rows without using a shift key will send a function key from F1 through F12. Hitting a shift key first, then selecting a key from the first three rows will give you one of another 48 macros. For example, the key in the upper-left corner of the keypad could be used to send F1, Shift-F1, Option-F1, Command-F1, and Control-F1.

**NOTE:** You must install macromaker into your system to allow this to work.

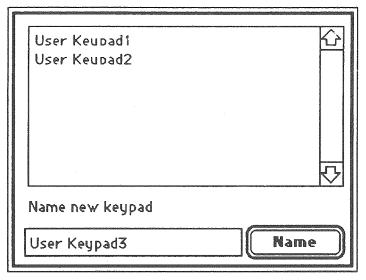
## **Current Template**

This pop-up menu contains all of the different Power KeyPad configurations stored by the Control Panel. When a different keypad configuration is selected, the key definitions are displayed and the new key functions are immediately available.

## Managing Keypad Templates

#### New

To make a blank keypad template, press the New button. A list is provided showing the templates that have already been defined. Type a unique name and press Name.



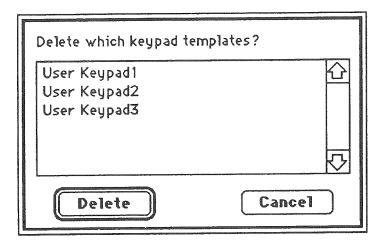
Dialog provided to name a new keypad.

## Duplicate

This button works just like the New button, except that the new template contains a copy of the current key definitions.

#### Delete

To permanantly delete one or more keypad templates, press the **Delete** button. A list of templates is provided; one or more of these templates may be selected. To delete the selected templates, press **Delete**. To quit without deleting anything, press **Cancel**.



Dialog provided to delete keypad templates.

## VIII. MAKING YOUR OWN TEMPLATES

To help you create and print new templates, a MacDraw file has been provided on your UnMouse diskette which can be used. This file is located in the Blank Template Folder on the UnMouse diskette. The file will produce a properly-sized template with a 4 x 4 matrix of function keys when printed out.

The template file is sized to fit into the UnMouse template holder when printed out on either an Apple ImageWriter II or and Apple LaserWriter II. Most other Apple-compatible printers should work, although some dot matrix printers may modify the width of the printed image. If this is the case with your dot matrix printer, then you will need to modify the file to alter the size of the template when it prints out.

The template file can be used in two ways: You can print out blank templates and write in the function key descriptions, or you can type in text while you are in the paint program.

## IX. TROUBLESHOOTING

## 1. I can't get the cursor to the edges of the screen.

Your UnMouse needs to be recalibrated. See the calibration instruction in Chapter VII "Using the UnMouse Control Panel" for information on this procedure.

## 2. Nothing happens when I touch the UnMouse.

This may be a hardware or a software problem. You can check for a number of software problems by restarting your system. If no UnMouse icon appears in the lower left corner of your display upon restarting, the UnMouse driver is not installed in your system folder. If the driver is installed but not loading properly (or the UnMouse cannot be found), the UnMouse "failure" icon will appear in the lower left-hand corner of the screen momentarily.

If you believe the UnMouse driver is in your system folder, but no icon appears, you may have more than one system folder. In this case, either consolidate your folders, or load the UnMouse driver into the active folder.

If you have no UnMouse driver anywhere on your system, then you will need to install it from the UnMouse diskette. (See Chapter III "Installing the Software" for more information.)

If the UnMouse failure icon is appearing, you may have a hardware set up problem. Review Chapter II "Installing the Hardware" in the manual. Be sure that your UnMouse is correctly connected to the ADB port before you turn on your Macintosh.

**NOTE:** The UnMouse will not work if plugged in after you turn on your Macintosh.

If your UnMouse still does not work properly, you may require service. Contact the MicroTouch Technical "Hotline" at (508) 694-9900.

3. The cursor "jitters", especially in the corners.

This may be the result of improper grounding of the UnMouse. Be sure that the Macintosh is plugged into a grounded (3-prong) wall socket, and not simply plugged into a 2-prong adapter. Sometimes older homes may have outlets that are not well grounded. Try another outlet if you are using the UnMouse at home and are experiencing jitter.

4. The cursor seems to be "jumpy" or doesn't move at all when I draw with a stylus.

Be sure that your are using either the UnMouse stylus or a mechanical pencil that has a conductive outside shaft. The best contact will be obtained if the pencil lead is in contact with the glass. If only metal is in contact, the capacitive coupling may be intermittent as the harder metal will skip over the conductive coating. This will cause the cursor to be jumpy. Recommended pencils include the Faber-Castell UB-120 and Cross mechanical pencils.

5. Sometimes the cursor makes large, sudden movements when I am using either my finger or a stylus.

Be sure that you are touching the UnMouse at only one location at at time. Some users may unknowingly let a second finger touch the UnMouse. This will cause the cursor to jump to a point halfway between the two touch points. The same problem may occur using a stylus. Don't rest your hand on the surface of the UnMouse while drawing.

## I can't get the Power KeyPad to work.

The simplest test for the Power KeyPad is to use the "Standard" keypad template in the Macintosh Finder.

Try invoking "New", the key in the upper-left corner. A new folder should appear.

If some of the function keys on a template work, and others do not, you may have programmed the commands incorrectly. If you are in the Red Button Power Key Pad mode, be sure that you make the function key selection within 1.5 seconds after pressing the red button on the UnMouse, or the UnMouse will return to its cursor control function. If you are in Quick Access mode, be sure you click the UnMouse button immediately after touching the glass and before making any cursor control motions across the tablet.

7. I am having problems using other CDEV files when the UnMouse driver is installed.

The UnMouse driver is a Control Panel program (CDEV) and has been tested with many third-party Desk Accessories, initialization files and Control Panel devices that may reside in your system folder.

If you experience difficulty using your Macintosh after installing the UnMouse driver, temporarily remove all third-party software from the system folder and boot from the UnMouse diskette. Restore the files one by one to the system folder to isolate the problem. If the problem persists, MicroTouch recommends the purchase of a commercially available Init Manager Program, in order to guarantee trouble-free operation.

## 8. My system crashed.

System crashes can be caused by many things, including CDEV conflicts (see above). Be sure you are using system software 6.0 or higher and be especially sure that it was properly installed using the Installer program.

## My UnMouse doesn't work with my MicroTouch touch screen.

At this time, the Mac'n Touch Screen and the UnMouse cannot be used simultaneously. Take one of the drivers out of your system folder.

## 10. How do I clean my UnMouse?

Your UnMouse does not require a lot of care and maintenance. Because it uses a capacitive sensing mechanism, it will operate well even if it gets dirty. However, you should not let large particles get caught underneath the bezel where they may interfere with the microswitch. You may clean the glass tablet with any type of window or glass cleaner.

In addition, the UnMouse may be treated with a silicone spray to make it easier to slide your finger over the glass. If you wish to give your UnMouse a more "slippery" feel, apply a silicone spray to the glass surface. A recommended brand is Rain-X, which is manufactured by Unelko Corp., Scottsdale, AZ. 1-800-524-6424. (Rain-X is available at most hardware stores.)

# 11. It keeps the button down when I expect it to release.

The "Liftoff Timeout" may be too long, or the "Allow Liftoff" parameter may be set to "Everywhere" (which may be confusing if you don't know what to expect).

## 12. How do I get my UnMouse serviced?

First, call our Technical "Hotline" to see if the problem can be resolved over the phone. They will advise you if the unit should be returned for service. If your unit does need to be sent back, they will give you a Service Return (SR) number which we will use to keep track of your unit. You must have an SR to return a unit and it must be prominently displayed on the outside of the box when it is returned.

**NOTE:** To be covered under the warranty you must have returned the registration card with your receipt for proof of purchase to MicroTouch.

You can reach the MicroTouch Technical "Hotline" at (508) 694-9900. Our mailing address is:

MicroTouch Systems, Inc. 55 Jonspin Road Wilmington, MA 01887 ATTN: UnMouse Service Department

# MicroTouch

MicroTouch Systems, Inc. 55 Jonspin Road Wilmington, MA 01887 508 694 9900 FAX 508 694 9980