

M A T I A S C O R P O R A T I O N © 2 0 0 1

MATIAS

WEARABLE PALM KIT

A L L R I G H T S R E S E R V E D

PALM OS® HANDHELDS

The Matias Wearable Palm Kit comes with everything you need to turn your Palm or Handspring into a wearable computer, at a fraction of the cost of an industrial wearable PC.

For applications ranging from collecting field data to inventory to writing on-the-scene reports, nothing is faster than a wrist-worn Half Keyboard.

This kit includes: Wearable Half Keyboard, all necessary cables, wrist straps, and screen rotation software.

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GETTING STARTED

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INSTALLING FROM A PC

- ❶ Start up the Palm Desktop application.
- ❷ Insert the Matias Wearable Palm Kit CD.
- ❸ Click on the "Install" button. Click on the "Add..." button. Click on the "Look in:" drop-down menu and select "Matias Wear".
- ❹ When your computer is ready, you will see several files in the dialog box. Select them all and then click on the "Open" button. Next, click on the "Done" button and then click on the "OK" button.
- ❺ Now put your Palm PDA in the cradle and click the HotSync button on the cradle. When the HotSync is complete, the driver software will be installed on your Palm.
- ❻ You may now remove your Palm from the cradle. Please turn to pg 7.

INSTALLING FROM A MACINTOSH

- ❶ Start up the Palm Desktop application.
- ❷ From the "HotSync" menu, choose "Install Handheld Files".
- ❸ Click on the "Add To List" button.
- ❹ Insert the Matias Wearable Palm Kit CD.
- ❺ When your computer is ready, you will see a list of files in the dialog box. Select the first one and click the "Add File" button. This adds the driver file and returns you to the "Install Handheld Files" window.
- ❻ Click on the "Add To List" button, select the next file in the list, and then click on the "Add File" button.

⑦ Repeat step ⑥ until all the files on the disk are listed in the window.

⑧ Click the close window box.

⑨ Now put your Palm PDA in the cradle and click the HotSync button on the cradle. When the HotSync is complete, the driver software will be installed on your Palm.

⑩ You may now remove your Palm from the cradle.

CONFIGURING THE SOFTWARE

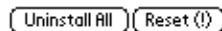
① On your Palm, open the "Half Keyboard" application.




② The **On** button should be selected. If it is not, click on it to select it.

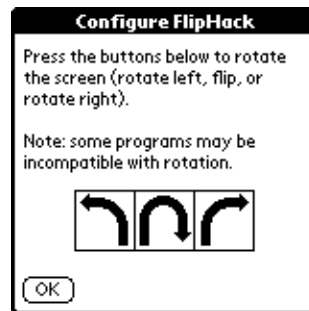



③ Next, open the "HackMaster" application. If you have no other "Hacks" installed, you should see the following:



④ The checkboxes to the left of "FlipHack" and "Flip Graffiti Hack" should be selected as shown. ☒ If not, click on them to select them.

⑤ Next, click on the  icon to the right of FlipHack. The following window should appear:



⑥ Click on the  button once, to rotate screen to the desired orientation, and then click on the button.

WEARING THE GEAR

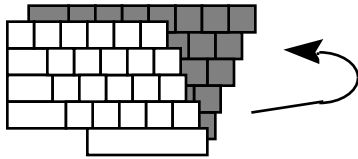
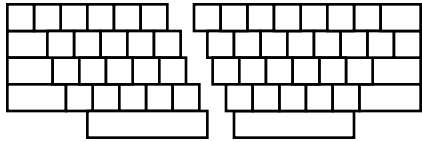
- ❶** Pull back the velcro to loosen the straps on the Half Keyboard; then slide the keyboard over your RIGHT wrist and tighten the straps.
- ❷** Next, run the cable up your sleeve (under your clothing), across your shoulders, and down your other arm, so that the end of the cord hangs loosely off your LEFT wrist.
- ❸** The sealed plastic bag contains an Ergodyne wrist strap and piece of velcro.
- ❹** Remove the plastic tab from the back of velcro and attach the velcro to the BACK of your Palm. Be careful NOT to cover the hole for the reset button on your Palm.
- ❺** Attach the Ergodyne wrist strap to your LEFT wrist. If needed, instructions for this are on a separate leaflet.

- ❻** Attach your Palm to your LEFT wrist, by pressing the velcro onto the Ergodyne wrist strap.
- ❼** Attach the keyboard connector to your Palm, and tuck the excess cable back up your sleeve.
- ❽** Adjust the straps on the Half Keyboard as necessary for maximum comfort.

HOW IT WORKS

- 17 Typing a Space or Backspace Character**
- 19 Switching Keyboard Modes**
- 21 Typing a Capital Letter**
- 23 Typing a Special Symbol**
- 23 Typing More Special Symbols**
- 25 Typing a Accented Characters**
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Regular desktop keyboards have two sides (left and right), one for each hand:



The Half Keyboard has only one side, for the left hand:

→	q	w	e	r	t	
←	a	s	d	f	g	
	z	x	c	v	b	

The other side of the keyboard is accessed using the space bar.

When you hold down the space bar, the Half Keyboard remaps to the layout of the right side of a regular keyboard:



TYPING A SPACE CHARACTER

To type a space, simply tap the space bar, just as you would on a normal keyboard.

TYPING A BACKSPACE

Space-Tab

To type a backspace, simply hold down the space bar and tap the Tab key.

TYPING A FORWARD DELETE

Ctrl-Space-Tab

To type a forward delete: tap the Ctrl key; hold down the space bar; then tap Tab.

→	q	w	e	r	t	↕
←	a	s	d	f	g	
	z	x	c	v	b	

→	-	9	8	7	*	↕
←	+	6	5	4	.	
	/	3	2	1	0	

→			↑			↕
←		←	↓	→		



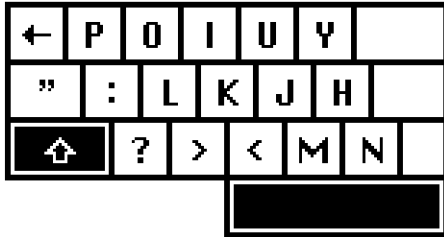
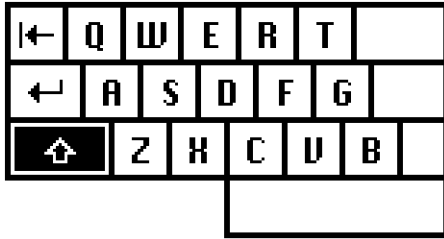
SWITCHING KEYBOARD MODES

The key labelled "A-Z 0-9 <->" is the Mode Switch Key. It allows you to remap the keyboard into a numeric keypad or cursor keys.

For the (default) letter mode, tap the mode switch key once.

For the number pad, tap the mode switch twice.

For scroll mode, tap mode switch 3 times.

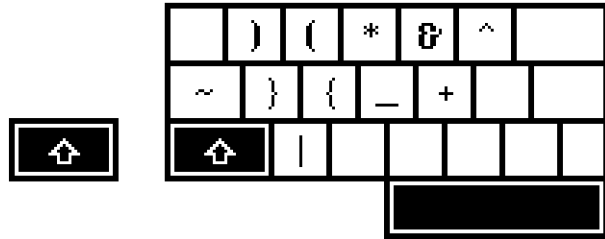
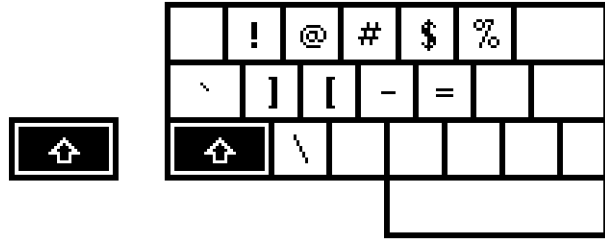


TYPING A CAPITAL LETTER

The Half Keyboard has a feature called Sticky Keys, which lets you use modifier keys without holding them down.

To type a capital-A, you don't need to hold down the Shift key. Simply tap the Shift key once and then tap the key you want capitalized.

Sticky Keys also works for the Ctrl and Alt keys.



TYPING A SPECIAL SYMBOL

The special symbols in the lower left corner of each key are typed by tapping the Shift key twice. Tap the Shift key twice and then tap the key with the desired symbol.

TYPING MORE SPECIAL SYMBOLS

More special symbols can be typed using the Alt key, in combination with other keys.

Note also that you don't need to physically hold down Alt. Simply tap it once, then tap the key to be modified.

¥	Atl-y	Japanese Yen
£	Atl-p	Pound Sterling
€	Atl-e	Euro
•	Atl-w	Bullet
°	Atl-d	Degrees

©	Atl-g	Copyright
®	Atl-r	Registered Trademark
™	Atl-t	Trademark
¶	Atl-Return	Pilcrow
¿	Atl-?	Inverted ?
¡	Atl-!	Inverted !
æ or Æ	Alt-a or Alt-A	AE Ligature
ß	Alt-b	Beta
ç or Ç	Atl-c or Alt-C	Cedilla
ø or Ø	Alt-o or Alt-O	Oslash
§	Atl-s	Section
μ	Atl-u	Micro
1/2	Atl-2	Half
3/4	Atl-3	Three Quarters
1/4	Atl-4	One Quarter
±	Atl-+	Plus or Minus
÷	Atl-/	Divide

TYPING AN ACCENTED CHARACTER

First, type the letter to which you want to add an accent.

Next, tap the Alt key.

Finally, type the accent character.

'	Atl-'	Acute
`	Atl-`	Grave
^	Atl-^	Circumflex
~	Atl-~	Tilde
¨	Atl-;	Umlaut
°	Atl-o	Aring (with letter à only)

For example, to type é, first type the e, then tap Alt, and then type ' (apostrophe).

TYPING MENU SHORTCUTS

The Ctrl key allows you to issue popular menu commands directly from your Half Keyboard.

Note also that you don't need to physically hold down Ctrl. Simply tap it once, and it will be active for the next key you type.

Cut ... Ctrl-x Copy ... Ctrl-c Paste ... Ctrl-v

Forward Delete:
Ctrl-Backspace

Move Cursor Back or Forward 1 Word:
Ctrl-Left or Ctrl-Right

Select Character Left or Right:
Shift-Left or Shift-Right

Select Word Left or Right:
Ctrl-Shift-Left or Ctrl-Shift-Right

Select Line Up or Down:
Shift-Up or Shift-Down

TUTORIAL FOR TWO-HANDED TYPISTS

LEFT HAND TYPING

This tutorial is written for a person who wishes to type with their left hand only. Generally, right-handed users should type using their left hand — this leaves the dominant hand free to use a mouse or stylus.

- ❶ Place your left hand on the keyboard, and type the following words. Try not to think about the other side of the keyboard.

safe wax serve gas case sew taste fax

- ❷ Hold down the Space bar with your thumb, and type the following words, remembering that the keyboard is now in right-side mode.

jump poll hop milk noun hum lump kin

- ❸ Type the following words. Some **words** will require you to hold down the Space bar, while others will not.

safe poll care oil feed kin star hum

- ❹ Type the following words. Some **letters** will require you to hold down the Space bar, while others will not. Try to concentrate on the left side of the keyboard. If the letter you want to type is not on the side you are thinking of (left), you know you have to hold down the Space bar to type it.

the that rock corporation perfume inform

TIPS, QUESTIONS & ANSWERS

SET THE KEYBOARD MODE FIRST

Before you start typing, tap the A-Z/0-9/<-> key to put the Half Keyboard in letter, number, or scroll mode, as desired.

HOTSYNC TURNS OFF THE KEYBOARD DRIVER

The Half Keyboard driver is switched off every time you do a HotSync. Simply turn it back on after the HotSync is complete.

WHY DOESN'T BEAMING WORK ANYMORE?

You will have to turn off the Half Keyboard driver (temporarily) to do a beam operation. You can turn the driver back on after you're done beaming.

WHY HAS MY HALF KEYBOARD STOPPED WORKING?

Is the cable properly attached to your Palm/Handspring?

Is the keyboard driver on? The Half Keyboard driver is switched off every time you do a HotSync. Simply turn it back on after the HotSync is complete.

Weak batteries can cause the Half Keyboard to stop working. Try either recharging or replacing the batteries.

WHERE IS THE CAPS LOCK KEY?

The Half Keyboard doesn't have a Caps Lock key. Instead, tapping the Shift key once will lock it for the next letter typed. This makes it very easy to capitalize a word, since you don't have to physically hold down the Shift key.

AVOIDING COMPUTER INJURIES

With increased computer use, computer-related injuries have increased as well. There are many reasons for this. We've listed a few below so that you can watch out for them, and avoid getting injured yourself.

Much as with normal computer use, posture plays an important role in minimizing the fatigue of using a wearable. Proper typing posture is shown in the figure.

The operator's arms rest against the body, with the shoulders relaxed. The elbows are bent at 90 degree angles, and the wrists are kept straight.

This posture can be maintained for the short time periods typical of most mobile text entry tasks. When not performing such tasks, the operator's arms can rest at their sides.



Wearable worn by an operator: Proper typing posture is shown. Operator's arms rest against the body, with shoulders relaxed. Elbows are bent at 90 degree angles, and wrists are kept straight.

A certain percentage of the population is physiologically predisposed to injury. Some people are just less sturdy than others. If you have small wrists, or long thin bones, you are more likely to sustain an injury, typing or otherwise, and therefore should be extra careful.

The psychology of computer use makes it easier to sustain an injury. In particular, it is very easy to lose track of time while using a computer. Combined with bad posture, injury becomes more likely. To counteract this, take periodic breaks from your work. Frequent short breaks (several an hour) help reduce fatigue and the risk of injury.

Bad work-area ergonomics is another major cause of computer-related injuries. Try to organize your work area so that commonly used items are within easy reach, and don't require a lot of bending forward or stretching to reach them.

When typing, your shoulders should be relaxed. Your upper arm and forearm should form a right angle, with your wrist and hand in roughly

a straight line. Use a soft touch on the keyboard and keep your hands and fingers relaxed.

Finally, keep in mind that you are typing with only one hand. You are using one hand to do the job most people use two hands for. So, be extra careful. If you're sore, take a break; stretch a bit. If you're in pain, please see a doctor. Don't wait; go right away. Waiting could turn a minor injury into a more serious one.

The general rules are preventative:

1. Keep your wrists straight, elbows at right angles, and shoulders relaxed.
2. Take frequent short rest breaks (several an hour).
3. Don't spend long periods of time in one position.
4. Notice when you're tense and consciously try to relax.

5. Occasionally rest your eyes. From time to time focus your eyes on a distant object, and blink often while you work.
6. Get plenty of sleep at night.

HELP

If you have questions, comments, or suggestions, you can contact us at:

Tel: (905) 265-8844
10:00 AM to 6:00 PM (Eastern Standard Time)

Email: help@halfkeyboard.com

Regular mail:

Matias Corporation
129 Rowntree Dairy Road #20
Vaughan, Ontario, L4L 6E1, Canada

LEGAL STUFF

LIMITED WARRANTY

Matias Corporation ("Matias") warrants to the original end user ("Customer") that this product will be free from defects in workmanship and materials, under normal use, for one year from the date of original purchase from Matias or its authorized reseller. Matias' sole obligation under this express warranty shall be (at Matias' option and expense) to repair or replace the product or part with a comparable product or part. All products or parts that are replaced become the property of Matias.

LIMITATION OF LIABILITY

To the full extent allowed by law, Matias excludes for itself and its suppliers any liability (whether based in contract or in tort, including negligence) for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, loss of information or data, or other financial loss arising out of or in connection with the sale, installation, maintenance, use, performance, failure, or interruption of this product, even if Matias or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement, repair, or refund of the purchase price paid, at Matias' option. This disclaimer of liability for damages will not be affected if any remedy provided herein shall fail of its essential purpose.

SAFETY STATEMENT

Warning: Prolonged or improper use of a keyboard may result in discomfort or injury.

You should use the method of inputting data into your computer that is most comfortable for you.

This keyboard is not intended for extended or intensive use. If discomfort develops, consider changing your method of input or the manner in which you use the keyboard or stylus/mouse/trackball. If discomfort or pain persists, either decrease usage or consult a medical or ergonomics professional.

FCC STATEMENT

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This devices may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

TRADEMARKS AND PATENTS

Matias, the Matias logo, and Half Keyboard are trademarks of Matias Corporation. Other names may be trademarks and their owners are respectfully acknowledged. The Half Keyboard is patented in Canada (1,336,418), United States (5,288,158), Europe (489,792), Australia (647,750), and Japan (3,001,628).

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Congratulations folks! The dream has been realized. You all helped make it happen . . .

A handwritten signature in black ink, appearing to be 'EM' with a stylized flourish.

Edgar Matias, May, 2001