



MessagePad 100
Setup and Handwriting Guide



Apple Computer, Inc.

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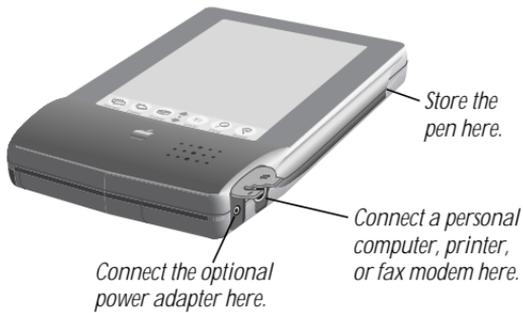
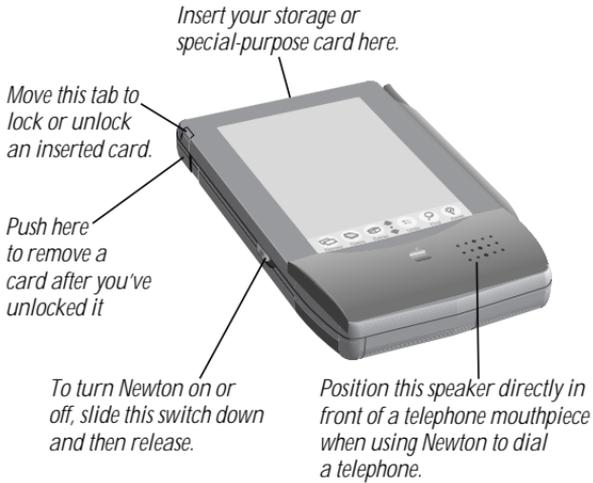
1

Meet Newton

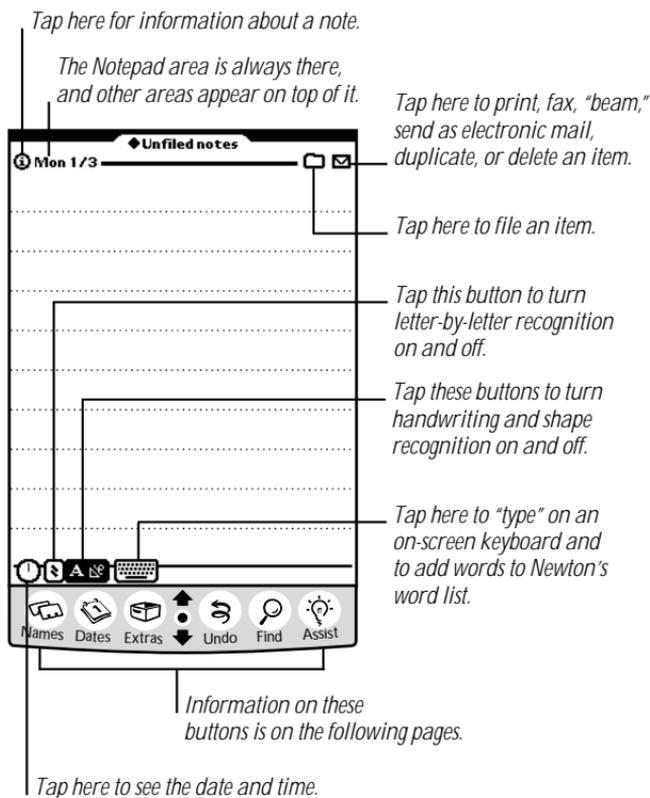
A quick look

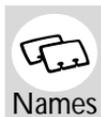
The next few pages highlight the basic features of your Newton device.



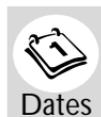


On the screen





Tap Names  to go to the Name File area (a directory of names, addresses, and phone numbers).



Tap Dates  to go to the Date Book area (for to-do lists and appointments).



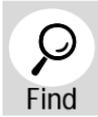
Tap Extras  to open the Extras Drawer, which contains almost everything else, including your In Box, Out Box, and items that appear when you use a special-purpose card.

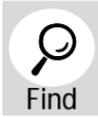


Tap the up or down arrow to see more of the area that's on screen. Tap the dot between the arrows  (the Overview button) to see a list of the area's contents.



Tap Undo  to cancel the last thing you did. Tap again to cancel the next-to-last thing.



Tap Find  to look for information in any area of your Newton.



Tap Assist  and you can ask Newton to do certain things for you. You can also get instructions on how to use Newton.

2

Using Newton the First Time

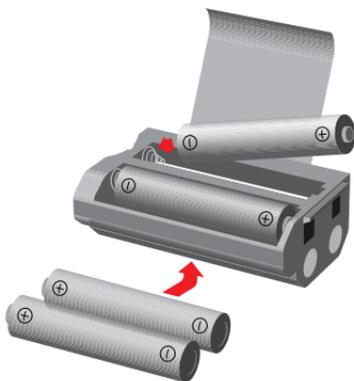
- 1 Put your Newton screen-side down on a smooth, clean surface that won't damage the screen.
- 2 Slide off the battery compartment cover.



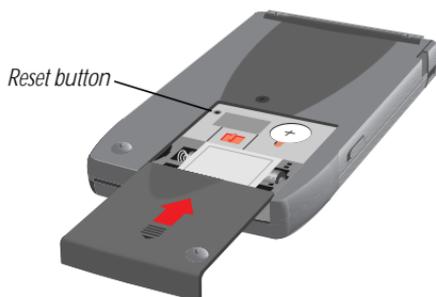
- 3 Slide the battery switch to the left (Replace Main).
- 4 Remove the battery holder by inserting a coin in the slot on the left and gently prying the holder from its compartment.



- 5 Insert the AAA batteries in the battery holder. Make sure you position the + and - ends of each battery as indicated on the holder.



- 6 Put the battery holder back in its compartment. Slide the battery holder in right side first, with the metal door facing up and the coin slot on the left.
- 7 Slide the battery switch to the middle (In Use, between Replace Main and Replace Backup).
- 8 Use the Newton pen to press the reset button.



- 9 Slide the battery compartment cover back on.

Optional: If you have the Newton power adapter, connect it to your Newton and plug it in whenever you're near an electrical outlet. Doing so conserves battery power for when you really need it.



- 10 To turn Newton on, slide the on/off switch down and let it go. It slides back to its original position. (You turn Newton off the same way.)



If instructions appear on the screen asking you to tap the center of several marks, use the Newton pen to tap them. After a few moments, your Newton is ready to use. Newton is a completely new type of electronic product. To learn how to use it, take a few more minutes to go through the rest of this setup guide.

3

Quick Course: Writing and Drawing

You put information into your Newton by writing and drawing with the pen. (You can also purchase a Newton Connection Kit to transfer information that's on a personal computer.)

Knowing the best writing and drawing techniques and a few handy tips is vital to using your Newton effectively. This chapter introduces you to those techniques.

Important This chapter explains recent improvements to Newton that are not covered in your handbook.

Make sure you practice these techniques on your Newton as you go through this chapter.

Using the recognizer buttons

Use the Notepad to experiment with the recognizer buttons. You tap a recognizer button to turn it on or off. (A button that's darkened is on.)



Text recognition on, shape recognition off:
Changes your writing to text.



Text recognition off, shape recognition on:
Cleans up your drawings.



Both buttons on: Reads your handwriting and cleans up your drawings.



Both buttons off: Leaves your writing and drawings alone as “electronic ink” (a good way to jot down notes—you can have Newton convert your handwriting later).

How Newton reads your handwriting

Newton uses two methods to read your handwriting.

- **Word-based recognition:** Newton compares what you write against its word list—more than 13,000 words stored in memory. Word-based recognition is faster and more accurate than letter-by-letter recognition, but it's limited to the words in the list. You can, and should, add your own words to the list. (You can add up to a thousand words.)
- **Letter-by-letter recognition:** Newton tries to recognize each letter that you write. Letter-by-letter recognition is slower and less accurate for most words, but more effective if the word you're writing is not likely to be in the word list.

When to use word-based recognition

You should use word-based recognition almost all the time. Word-based recognition is faster and more accurate than letter-by-letter recognition, as long as the words you are writing are in Newton's word list. (See your handbook for instructions on adding your own words to the list.)

When you first take Newton out of its box, it is set so that word-based recognition is on and letter-by-letter recognition is off except in the Name File, where you are likely to write person, place, and company names that are not in the word list.

The original settings are best in most situations. You can change the settings (see your handbook for information), but changing them is not recommended until you've used Newton for a while and have a better understanding of how it works.

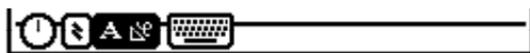
When to use letter-by-letter recognition

You should use letter-by-letter recognition only in exceptional cases. Letter-by-letter recognition is most effective when you're writing numbers or words that are not in the word list (such as unusual or foreign words and person and place names).

You can turn on letter-by-letter recognition whenever you need it. You can keep letter-by-letter recognition on as you write, or you can use it to correct a word you've already written.

As you write

If you're about to write a word that is probably not in the word list, or numbers like dates and times, tap the text recognizer toggle .



In the box that appears, you can tell Newton whether you're writing text or numbers. You can move the box by holding the pen on the gray border and then moving the pen.



Tip: Letter-by-letter recognition works best when you write in lowercase letters and don't connect your letters.

Letter-by-letter recognition is on only while the toggle is selected and the box is open. Tapping  to close the box turns off letter-by-letter recognition, and Newton asks if you want to add the words you've written to the word list.



When Newton misreads a word

You can also turn on letter-by-letter recognition after you've written a word that Newton misreads. Tap the word twice. If the correct word is not in the list that appears, tap the "Try letters" button. Newton tries again to read the word, this time by using only letter-by-letter recognition.



For more information, see the section on making corrections in this chapter.

Handwriting techniques

Remember these tips to get the best handwriting recognition:

- Write at an even pace.
- Don't pause in the middle of a word.
- Don't go back to a word you've finished writing.
- Exaggerate the space between words.

Air it out

- Write simply and neatly.

Be clean

- Write capital letters and tall letters (such as *t* and *l*) so they are twice as tall as small letters.

Stand tall

- When dotting your *i*'s, keep the dot close to and above the *i*. Make sure it doesn't look like an accent mark.

finish

- When you cross *t*'s, make sure you don't cross any other tall letters. Make the cross horizontal, not slanted.

halt

- Don't crowd words at the edge of the screen.

Avoid crowds

- Make parentheses bigger than tall letters.

(if)

- Keep punctuation close to the word. If it turns into a letter, you're leaving too much space between the word and the punctuation.

Who?

- Write colons and semicolons from top to bottom and make them half as tall as capital letters.

Re:

- Write exclamation points the same size as tall letters.

Hello!

- Make slashes long and slanted.

either/or

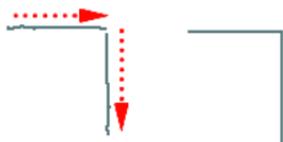
Drawing techniques

Remember these tips for the best shape recognition:

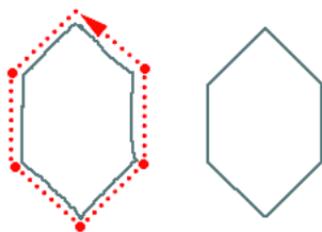
- To avoid having shapes mistaken for letters, turn off the text recognizer while you're drawing.
- To draw circles, use a single stroke and make sure the starting and ending points are close together.



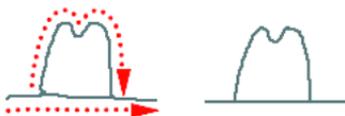
- To draw lines at perpendicular angles, use two separate strokes.



- To draw straight-edged polygons, you can use a single stroke for the whole shape, pausing at each corner, or you can draw a separate line for each edge.



- To draw shapes that have both straight edges and curves, use separate strokes for the curved lines and the straight ones.



Making corrections

There are several ways to correct a word that Newton has misread:

- Tap the word twice. If the correct word is in the list that appears, tap it.



If the correct word is not on the list, you can tap "Try letters" to use letter-by-letter recognition, or tap the keyboard  at the bottom of the list.

If you tap “Try letters,” Newton tries again to read your handwriting, this time by using letter-by-letter recognition.



After a few seconds, Newton replaces the word with its best guess based on reading your handwriting letter by letter. If this reading results in the same best guess as its first interpretation, then the word does not change.

If Newton still misrecognizes the word, you can correct it again by tapping the word twice or using other correction techniques described here. “Try letters” is in the list only the first time you tap the word twice.

If you tap the keyboard  at the bottom of the list, a keyboard appears where you can tap out the correct word or make corrections. (See your handbook for more information on using the on-screen keyboard.)



You can tap the original handwritten form if you want to leave the word in that form.

- If only one letter is wrong, write the correct letter over the incorrect one. Correct only one letter at a time.

fax

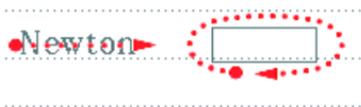
- If you want to erase a single letter or an entire word, scrub it out by drawing a zigzag that goes over the letter or word at least four times.

Do it now

Manipulating text and shapes

Try out the following techniques for manipulating text and drawings.

To select an item, hold down the pen in one place until a heavy mark appears under the pen, then draw the mark over or around the item.

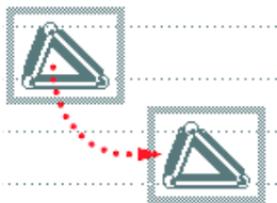


To unselect, tap outside the selected item.

To move an item, select it, hold the pen on it, and move the pen to where you want the item.



To duplicate an item, select it and tap it twice. On the second tap, keep the pen down, then move the pen to move the duplicate away.



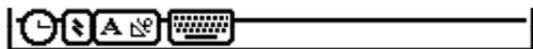
To *stretch or shrink a drawing*, select it and then move a corner of the selection box.



Using deferred recognition

If you don't want to wait for Newton to read your handwriting as you write, you can write in "electronic ink" and have Newton read your handwriting later.

To write in electronic ink, make sure both text and graphics recognizers are off.



Later, select your handwriting by holding the pen in one place until a heavy mark appears on screen, then draw the heavy mark around or across your handwriting.



Tap twice in the selection. Newton then reads your handwriting.

If you want Newton to read a single word, tap it twice.



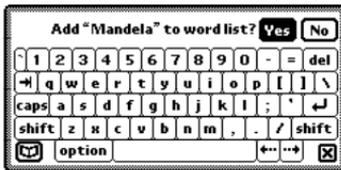
When Newton has read your handwriting, you can correct it in the usual way. However, if you write over a single letter while you're using electronic ink, you have to tap the correction twice before Newton reads it.

Adding words to the word list

Newton can read words more easily if they are in its word list. You can add words to the list in several ways:

- Using the on-screen keyboard to tap out a word

When you use the keyboard and tap  (to put away the keyboard) or the space bar (to start another word), Newton checks to see if the word you typed is already in its word list. If not, Newton asks if you want to add the word to the list.



- Using the text recognizer toggle 

When you write with the text recognizer toggle on and then tap  to turn it off, Newton asks if you want to add each new word you've written to the word list.



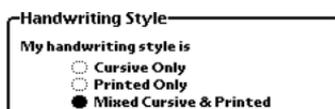
You should tap Yes if you use the word fairly often, so that Newton will be able to recognize the word when you use it again.

You should tap No if the word is a two-letter abbreviation, initials, or acronym, or some other short word—especially if you don't use it often. Newton's text recognizer works more slowly if there are too many short words in the list.

Telling Newton about your handwriting

Newton will be better able to read your handwriting if you tell it the handwriting style you prefer.

- 1 Open the Extras Drawer. (Tap Extras  to open the drawer, or to close it if it's already open.)
- 2 Tap Prefs  in the Extras Drawer.
- 3 In the list of preferences, tap Handwriting Style.
- 4 Tap the description of your preferred handwriting style.



For more information about how to use Handwriting Style and other handwriting-related preferences, refer to your handbook.

4

Important Settings

Before you start using Newton, you need to set the time zone, the date and time, and your preferences for keyboards, paper sizes, and other conventions. You also need to fill in some personal information.

Newton refers to your settings, preferences, and personal information when it prints or sends things, and as it keeps track of your notes and communications.

Setting the time zone

- 1 Open the Extras Drawer. (Tap Extras  to open the drawer, or to close it if it's already open.)
- 2 Tap Time Zones .
- 3 Tap the dot between the up and down arrows  at the bottom of the screen. A list of cities appears. Tap the up and down arrows to see more of the list.

4 Tap a city in the same time zone as yours.

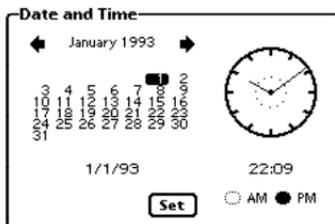


5 Tap I'm Here to set your time zone.

6 Tap to close Time Zones.

Setting the date and time

- 1 Tap **Prefs** in the Extras Drawer (if the Extras Drawer is not open, tap Extras).
- 2 In the list of preferences, tap **Date and Time**.
- 3 Tap the arrows on either side of the calendar to set the month and year.

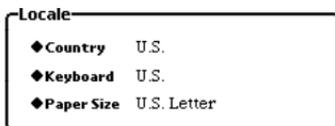


- 4 Tap today's date on the calendar.
- 5 Tap the dotted inner circle on the clock to set the hour.
- 6 Tap the outer circle on the clock to set the minute.
- 7 Tap AM or PM.
- 8 Tap **Set**. The small clock near the bottom of the screen shows the time that you set.

Setting the Locale preferences

Your choices under Locale let Newton know your preferences for keyboard, paper size, and local conventions for spelling, numbering, times, and dates.

- 1 Look for Locale in the list of preferences, immediately below Date and Time. (If you can't find it, tap the dot between the up and down arrows ⇅ and then tap Locale.)
- 2 Tap Country, and then tap a country in the list that appears.



- 3 Tap Keyboard, and then tap the keyboard layout you use.
- 4 Tap Paper Size, and then tap the paper size you use for printing and faxing.

Entering your personal information

- 1 Look for Personal in the list of preferences. (If you can't find it, tap the dot between the arrows  and then tap Personal.)
- 2 Use the Newton pen to fill in the blanks on the personal form. Tap each blank and write in the box that appears. To use the on-screen keyboard, tap twice in the box.

Personal

Name

Company

Address

◆ **Country**

Office

Fax

Home

Set Password

Tap Country and then tap a country from the list that appears.

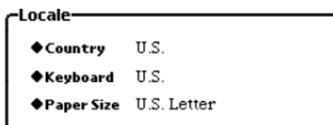
For information on setting a password, go to your handbook. You don't have to set a password. If you do, don't forget it.

You can add your name, company, and other terms to the word list so Newton can read those words the next time you write them. (Tap Extras  , tap Prefs  , tap Recognizers, tap "Review my word list," then tap Add Names.)

On your own

Remember the following as you explore and discover Newton's different areas and capabilities:

- You can tap any diamond to see a list of choices. You then tap your choice in the list that appears.



- If you make a mistake, tap Undo  before doing anything else. You can undo your last two actions.
- Tap  in the lower-right corner of an area to leave the area. You can get back to the Notepad by tapping every  you see. The Notepad is always open, and it does not have an .
- You can tap Assist  to have Newton help you with certain tasks or to get How Do I? instructions.

Putting Newton away

When you're not using your Newton, put it back in its case with the screen facing the front of the case (with the logo on it). The front has a stiff plate that protects Newton's screen.



Make sure you turn off Newton before you put it away.

5

Using Cards

Your Newton came with a plastic card inserted in its card slot. You should always keep either this plastic card or a functioning card in the slot to avoid damaging Newton's circuitry.

You can buy storage cards (which expand the amount of information you can use on your Newton) or special-purpose cards (which contain software titles or application programs) from your Apple-authorized Newton dealer.

- 1 Unlock the card slot by pushing up the locking tab.



- 2 Release the card by pushing the release lever, which pushes the card out of the slot.



- 3 Take the card out. (Remember to put the plastic card back in the slot when you are not using a card.)
- 4 Insert the card in the card slot. The front of the card should face toward the front of your Newton.
- 5 Push the card all the way in to make sure it's connected properly, then lock the card in the slot by pushing down the locking tab.



MessagePad 100

Central processor

- ARM 610 32-bit RISC processor

Clock speed

- 20 MHz

Memory

- ROM: 4 MB
- RAM: 640 K

Display

- 336 x 240 dot-matrix liquid-crystal display

Infrared beam

- Transmission rate: up to 38,400 bits per second
- Range: 8–100 cm (3.15–39.37 in)

Communication port

- 8-pin mini-DIN connector
- Transmission rate: up to 230.4 kilobits per second

Card slot

- PCMCIA 2.0 Type II

Speaker

- Frequency range: 1–10 kHz

Backup battery

- CR 2032 lithium

Main batteries

- AAA alkaline (4) or optional Rechargeable Battery Pack

AC power

- 100–240 V, 50/60 Hz with optional power adapter

Power consumption

- 1.4 W

Operating temperature

- 0°–40° C (32°–104° F)

Weight

- 440 g (0.97 lb) including batteries

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