



# Tech Info Library

## Plaintalk 1.4: Using Speech Recognition ReadMe (8/95)

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TOPIC -----

The following article is the Read Me document for Plaintalk 1.4 Speech Recognition.

DISCUSSION -----

Using Speech Recognition

With the English Speech Recognition package and the proper hardware, your computer can respond to spoken commands. The software that enables your Macintosh to recognize speech is called Speakable Items.

This document explains how to set up and use speech recognition and the Speakable Items software.

What is Speakable Items?

Speakable Items is a software package that lets you speak commands to your computer. It enables the computer to understand commands that do such things as tell you what time it is, close windows on the screen, or tell you a joke. Speakable Items comes with a set of commands ("speakable items") the computer already understands. You can also create your own speakable items.

The Speakable Items software has three parts you'll often interact with: the Speakable Items control panel, the feedback window, and the Speakable Items folder.

- With the Speakable Items control panel, you turn speech recognition on and off and specify when the computer listens and how it gives you feedback.

- With the feedback window (which is open whenever speech recognition is turned on), you check whether the computer is listening and how it has responded to your command. (The command you gave is displayed in italics and followed by the computer's response.)
- The Speakable Items folder contains all the items whose names the computer can recognize. When you say the name of an item in this folder, the computer acts as if you double-clicked its icon. You can adjust the computer's vocabulary by adding and deleting items to this folder or by changing the names of the items. The folder is in the Apple Menu Items folder, which is in the System Folder. You can open it quickly by choosing the Speakable Items command from the Apple menu.

#### What you need to use Speakable Items

To use Speakable Items speech recognition, you need these pieces of hardware and software:

- a Power Macintosh computer
- system software version 7.5 or later
- a 16-bit microphone, such as the Apple PlainTalk Microphone or the microphone built into some Apple audio-visual monitors
- the Speakable Items software, which is included on this hard disk

#### Preparing the microphone

If you don't have an audio-visual monitor with a built-in microphone, you must plug in an Apple PlainTalk Microphone or similar microphone into the microphone jack on your computer. Position the microphone as follows:

- Center the microphone on top of your monitor (if possible), with the microphone's Apple icon facing you.
- Make sure that the microphone is between 1 and 3 feet directly in front of you when you're giving spoken commands.
- Adjust the microphone cord so it is not looped around itself or any other cord.

#### Preparing the sound software

To make sure the microphone is turned on and set up correctly, you must use the Sound control panel or the Sound & Displays controls panel—whichever you have—to select your microphone as the sound input source:

1. Open the Control Panels window by pulling down the Apple menu and choosing Control Panels.

2. Open the Sound (or Sound & Displays) control panel by double-clicking its icon in the Control Panels window.

3. Use the control panel to select your sound input source:

- If you have the Sound control panel, click the Options button. In the Options dialog box that opens, click Microphone; or, if you are using the microphone built into an AudioVision 14 Display, click AV Connector instead.

- If you have the Sound & Displays control panel, click an item in the Sound In list to indicate which source you're using.

Note: If you get an error message while you're using the Sound (or Sound & Displays) control panel, you may need to turn off the speech recognition software (if you've already installed it). To do so, open the Speech control panel and choose Speakable Items from the Options pop-up menu, then click Off. When you're finished setting the sound options, you can turn speech recognition back on.

4. Close the Sound (or Sound & Displays) control panel.

#### Installing the Speakable Items software

You install the Speakable Items software by using the Installer programs, as described in these steps:

1. Print these instructions before you start. You won't be able to view them on screen during the procedure.

2. Quit any programs you are running.

3. While holding down the Shift key on the keyboard, choose Restart from the Special menu. Don't release the Shift key until you see the "Extensions Off" message on your screen.

4. To start the Installer program, double-click its icon. You can find the Installer icon in the same place you found these instructions.

5. In the initial screen that appears, click Continue.

6. In the next screen, click Install. The installation takes a while.

7. When you see a message that installation was successful, click Restart.

8. After the computer restarts, you will notice that speech recognition is on. Shortly after you restart, you will see two windows on the screen at once: the feedback window and an Apple Guide window containing the first panel of a brief introduction to speech recognition. (Note: You may also see a message telling you the standard microphone is not selected. If so, you need to check your sound input settings, as described in "Preparing the Sound Software," above.)

9. To go through the introduction, follow the instructions in the Apple Guide window.

At installation, speech recognition is turned on. You can turn it off in the Speech control panel, within the Speakable Items option.

### Speaking commands

To make the computer respond to your spoken commands, follow these steps:

- Make sure the computer is listening and that you have said the computer's name if that's required. When you first install the software, it's set up so the computer is listening all the time for commands that start with the computer's name. (Note: This listening method is convenient, but it can be confusing if background sounds are mistaken for commands. You may want to change to the most reliable method, as described in "Determining How the Computer Listens," below.)
- Speak clearly. Wait for a moment of silence, then speak in a normal tone of voice at a normal rate of speed. For more information, see "Tips on Speaking to Your Computer," below.
- Use a spoken command that the computer understands. The computer can understand the name of any item in the Speakable Items folder.

### Determining how the computer listens

The computer recognizes spoken commands only when it is listening for them. You use the Speech control panel to determine which of these listening methods it will use:

- The computer listens all the time, but it only recognizes commands after it hears its name. (This is the default method, the method that is standard if you don't change it in the Speech control panel. The default name is "Computer.")
- The computer listens all the time for commands. (This is the most convenient but least reliable method.)
- The computer listens only while you are holding down the listening key. (This method is recommended because it is the most reliable method.)

When the Speakable Items software is first installed, it is set up so the computer will listen all the time. If you want to change it to the most reliable method, follow these steps:

1. Open the Control Panels window by pulling down the Apple menu and choosing Control Panels.
2. Open the Speech control panel by double-clicking its icon in the Control Panels window.
3. Open the Options pop-up menu and choose Listening.

4. Within the Listening option, choose a listening key by pressing a key. You may combine the key you choose with any combination of the Shift, Option, or Control keys. Do not choose a key or key combination that you use in any of your application programs. If accepted, the listening key you choose appears in the Key(s) box.

5. Click the button labeled "Listen only while key(s) are pressed." The control panel will look like this:

Now that you've selected these options, you just press and hold your listening key whenever you speak a command and then release the key when you finish speaking the command. If you forget which listening key you chose, look below the character in the feedback window.

Note: You can also choose another method from the Listening area of the Speech control panel. For more information, see "How do I tell the computer when to listen?" in the Speech topic area of Macintosh Guide, available in the Guide menu on some Macintosh systems.

#### Tips on speaking to your computer

When you talk to your computer, keep the following tips in mind:

- Speak at a normal volume. Don't shout or speak loudly.
- Speak naturally. Don't exaggerate the pronunciation of words.
- Pause before giving a command. Don't give one command immediately after another. (If there are no sound waves drawn next to the feedback character, the computer is ready to hear the command.)
- Speak the name of items in the Speakable Items folder exactly. Don't add extra words or sounds.

#### Finding out more about Speakable Items

You can find out more information about how to use speech recognition by opening Macintosh Guide from the Guide (Question Mark) menu or by clicking the Question Mark button in the Speech control panel.

Within Macintosh Guide, check for the topic "Speech." If it's available, explore the information in that topic area. (The Speech topic is not available on some Macintosh systems.)

If you see a message that there isn't enough memory available

If you see a message that the Speech Recognizer is having trouble due to lack of memory, save all your open documents and quit the application programs you have open.

To avoid running out of memory while using speech recognition

- Quit the application programs you have open.
- Use the Speech control panel to choose a voice that requires less memory, or turn off voice feedback altogether. (The voices named "Agnes," "Bruce," and "Victoria" take up the most memory.)
- Use the Memory control panel to turn on virtual memory. (With virtual memory on, voices may be slightly distorted and, with some programs, speech performance may decrease.)
- Add more memory to your computer. (If you are running System 7.5 or later on a Power Macintosh with PowerTalk, QuickDraw GX, and English speech recognition installed, then it is recommended that your computer have at least 16 megabytes of RAM.)

Note on using the speech recognition software with application programs

Certain programs may interfere with speech recognition. For example, the speech recognition software sometimes cannot recognize spoken commands for 10-15 seconds after you have been typing in Microsoft Word.

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