



SpeechRecorder User Guide

Introduction

SpeechRecorder is an OS X application designed to help the user record a series of utterances from a pre-determined script into individual audio files.

Key concepts

Voice: A voice is a set of recordings of a particular speaker.

Script: A script is a series of text sentences to be recorded.

Language: A language is just a string associated with a script. When creating a new voice you first choose a language then choose scripts associated with that language to be recorded.

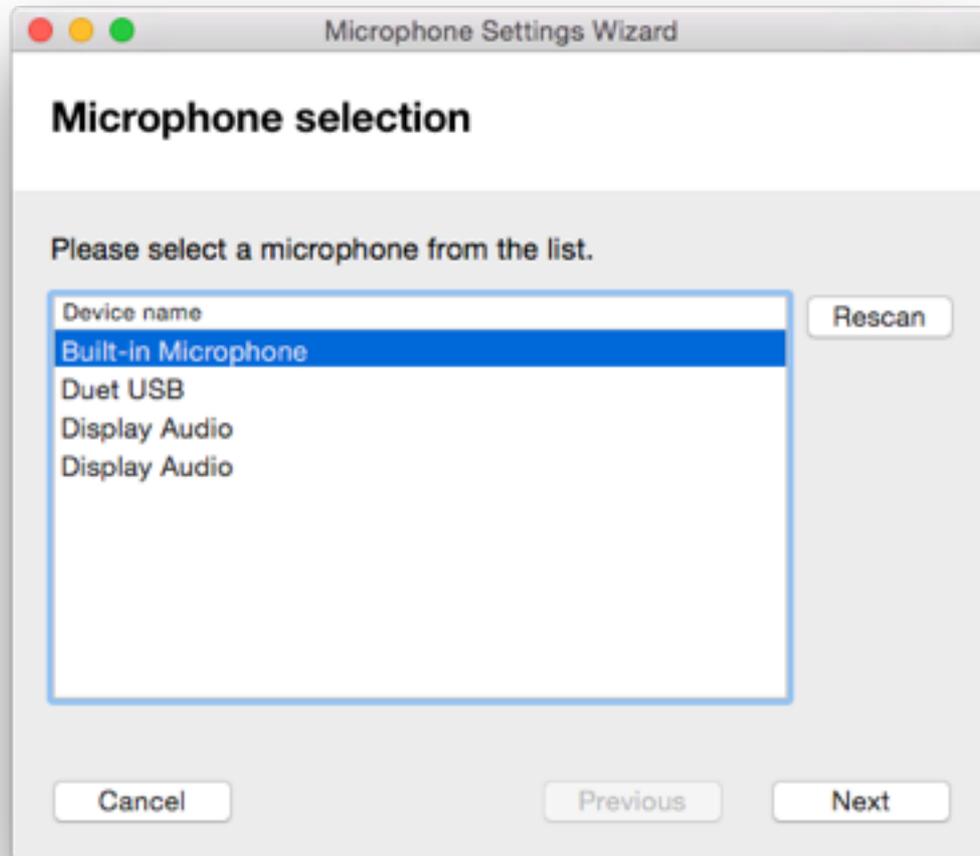
Utterance: An utterance is a sentence from a script and any associated recordings (Takes) for a particular voice.

Take: A take is a recording attempt for a particular utterance. When recording an utterance you can record as many takes as you want until you are happy with the way in which the utterance is recorded.



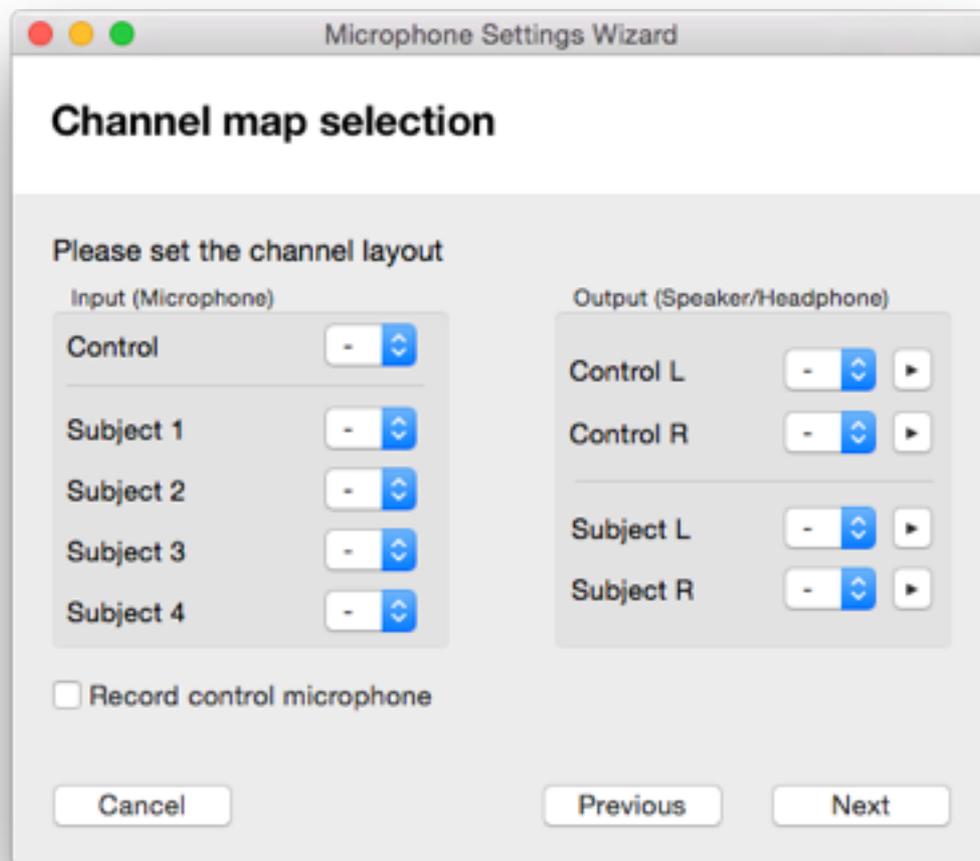
Getting started

When speech recorder is first started you are presented with the Microphone settings wizard:



Here you should first select the audio device you wish to record using. Ideally you should select an audio device which supports both recording and playback. If you select a device that does not support playback, you will not be able to hear the recordings you have made within the application.

Next you will be presented with a channel selection screen:



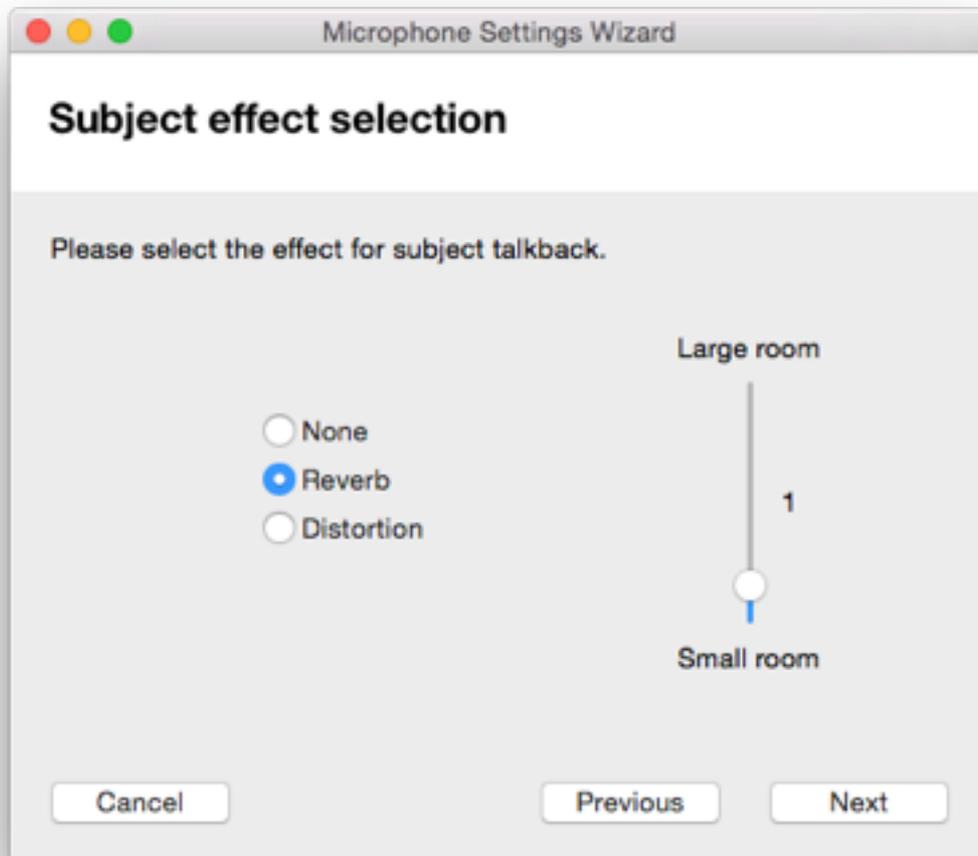
SpeechRecorder allows you record your voice talent using multiple microphones and also facilitates talkback for situations where the technician running a recording session can only speak to the voice talent via headphones.

The simplest way to configure speech recorder for a recording session (with a single microphone and no talkback) is to select the channel your microphone is connected to for *input* **Subject 1**, and optionally *outputs* for **Control L** and **Control R** for playback.

For more complex recording configurations multiple subject channels can selected if you have more than one subject microphone. If there is talkback microphone, set the **Control** *input* to this. **Subject L** and **Subject R** *outputs* should be set to output channels associated headphones worn by the voice talent if appropriate.

There are play buttons next to the output selections, to allow you to test your configuration.

The next screen allows you to add an effect to the how the voice talent hears themselves. A small amount of Reverb is recommended if closed headphones are being worn by the voice talent:



If you don't like the effect, you can always change it later.

After being asked to confirm the audio settings, you will be presented with recoding options:

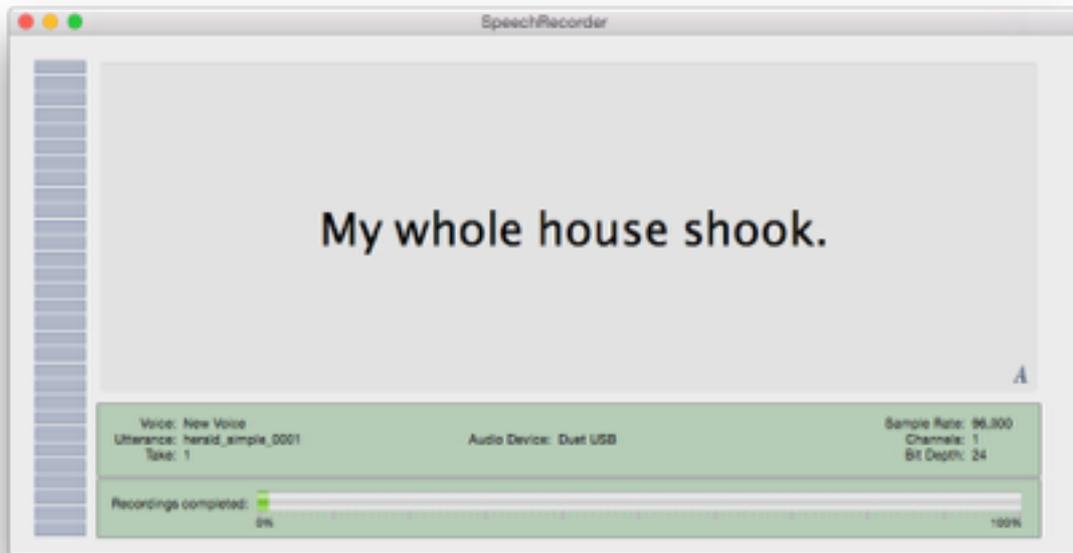


It is strongly recommended that select a sample rate and bit depth that match your audio device setting, and that you adjust audio device settings in the relevant application if necessary.

Within the *preferences* of SpeechRecorder you can directly adjust some of the above preferences, or you can re-run the microphone settings wizard from scratch.

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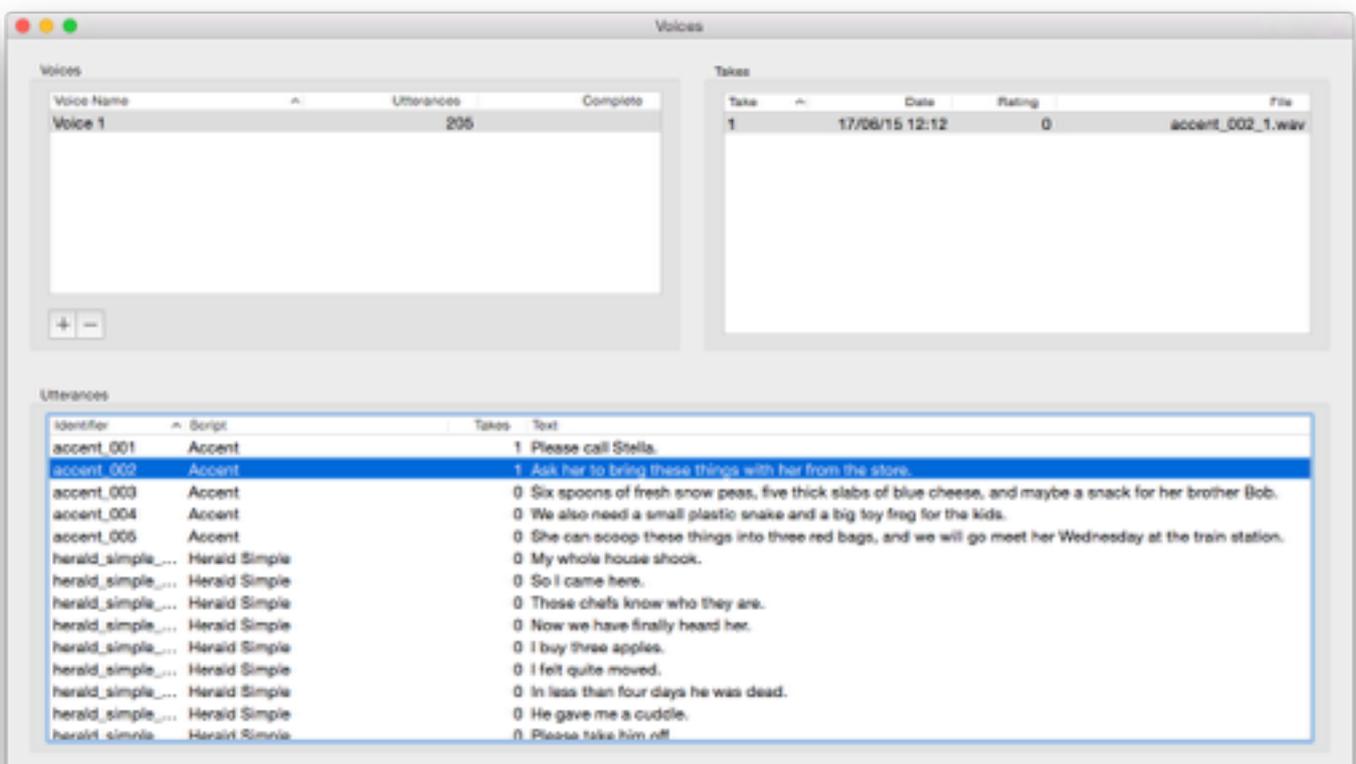
Once SpeechRecorder is configured you should see a the main Recording window, entitled **SpeechRecorder**:



This window shows shows the prompt for the currently selected utterance, along with information about the recoding setup and the percentage of utterances recorder. There is also level meter at the left-hand side which shows the recording level whilst recording.

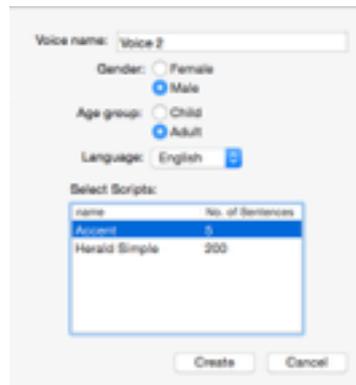
In multi-screen setups it is intended that this window is placed full screen on the display that that voice talent sees.

A secondary database window entitled **Voices** is also opened:



The database window consists of three panes. A **voices** pane at the top left, which lists any existing voices that have previously been recorded. Below this is a **utterance** pane, which lists the utterances from the scripts that were selected to be recorded for the currently selected voice. The top right pane then lists any **takes** of the currently selected utterance of the currently selected voice.

To create a new set of recordings, create a new voice by clicking on the + button at the bottom of the voices pane. This will open a sheet for you to define your new voice.



The dialog box is titled 'Voice name: /voice 2'. It contains the following fields and options:

- Gender: Female, Male
- Age group: Child, Adult
- Language: English (dropdown menu)
- Select Scripts: A table with two columns: 'name' and 'No. of Sentences'.

name	No. of Sentences
Account	5
Harold Simple	200

At the bottom of the dialog are 'Create' and 'Cancel' buttons.

Fill out the fields and select **create**. You can select multiple scripts with command-click and shift-click.

Recording

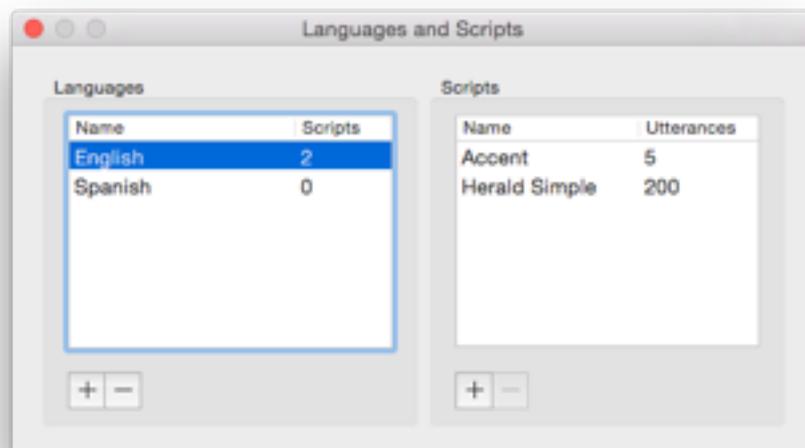
To actually start recording select an utterance that you wish to record and press ENTER on the keyboard. To show that recording is in progress, the selected voice, utterance and newly created take should be highlighted in red in the database window. To stop recording press ENTER again or press ESC. Each time you record an utterance you should see a new take appear in the takes pane of the database window. You can play back a take by selecting it and pressing SPACE.

To record a series of utterances in succession, the DOWN key can be pressed while recording is in progress. This causes the current recording to be finished, the next utterance selected and recording of this utterance to start.

Once a set of recordings has been completed you can export the audio files to directory of your choosing. First select the voice you wish to export and then select **export** from the **file** menu. By default the last recorded take of an utterance will be the one exported. This can be overridden by rating the takes. A take can be rated by pressing one of the key 0-5 whilst the take is selected. If takes are rated, then highest rated take will then be exported. If multiple takes for a given utterance share the highest rating the last one to be recorded will be exported.

Adding new scripts and languages

From the **view** menu and additional Languages and Scripts window can be displayed:



From this window new languages and scripts can be added. The left pane lists defined languages. The right pane shows available scripts for the selected language.

To add a new language click the + below the language pane and then double click on the added text to change its name.

To add a new script click the + below the scripts pane and give the script a name and select a language. You will then be prompted for a script file to import.

For historical reasons the required format of the script file is as follows:

Each line of the file represents one script entry. Each line should have the following format:

- * An open round brace
- * a unique name for the utterance. This is expected to be unique across all scripts you may wish to include in a single voice!
- * A doubly quoted string of the text for the utterance
- * A final close round brace

An example script should look like this:

```
( herald_simple_0001 "My whole house shook." )  
( herald_simple_0002 "So I came here." )  
( herald_simple_0003 "Those chefs know who they are." )  
( herald_simple_0004 "Now we have finally heard her." )  
( herald_simple_0005 "I buy three apples." )
```

If your script file does not comply to the required format an error will occur as SpeechRecorder attempts to import it. If it imports correctly it will appear in the list of scripts available the selected language.



Advanced technical information

SpeechRecorder stores its files in ~/Library/SpeechRecorder. Here can be found an sqlite format database file and an Audio subdirectory. You can completely clear the current database by deleting these files.

The SpeechRecorder binary supports a number of command line arguments. These are primarily designed to launch SpeechRecorder from a separate application to record a single voice.

-mode

If is specified as 'cloning' then the a single voice is recorded with the prompt file specified below using the give recording reference number as it name. On exit the application exports the audio files for this voice to the directories specified below.

-applicationFilesDirectory

Specifies an alternate Library directory to ~/Library/SpeechRecorder

-exportWavDir

Specifies the directory for .wav files to be exported to when in cloning mode

-exportTxtDir

Specifies the directory for .txt files to be exported to when in cloning mode

-recordingReferenceNumber

Name of the voice to be recorded in cloning mode

-promptFile

script file to import and use when in cloning mode

