

Pitcher 1.0 User's Manual

©Ellis Engineering 1986

I. Overview

Pitcher is a musical ear-training program. It teaches you to associate musical notes with their position on the Grand Staff. You may work in four different scales in any of the twelve major keys. The program plays notes from the scale and key selected; you guess them by clicking the corresponding symbols on the staff.

The main program window shows a grand staff with three octaves of notes. The notes are indicated by **sharps**, **flats**, and **natural** signs. Click on these to play the corresponding notes. You don't need to know the meaning of all the musical terms mentioned here to use the program, but you'll get more out of it if you take the time to look them up or get an explanation from a musical friend.

When the program starts, you may "mouse around" playing the notes shown. Click the **Begin** button and the program will play a tone for you to guess. Click the mouse on a tone to respond. The Mac will play your guess.

If you guess wrong, the program will replay the correct tone and ask you to try again. You may hear the tone again before guessing by clicking the **Repeat** button in the lower right hand corner. When you guess correctly, the scoreboard will let you know you got it right.

After your first correct guess, you will notice that the Begin button is now labeled **Continue**. Click it to get the next note to guess. If you find having to click the **Continue** button after each correct answer a nuisance, you can speed things up by selecting **No Pause** from the **Control** menu.

There is a scroll bar labelled **Sequence Length** below the staff. It controls the number of notes the program plays in sequence for you to guess. It is initially set at one. You may set it to play up to ten notes at a time.

The scoreboard keeps track of total tries and total correct guesses for the session. It also tracks the number correct guesses in a row. When you exceed your previous record, a congratulatory dialog box appears and the target is increased by one.

II. MENUS

There are five menus in addition to the "**Apple**" menu that contains the **About...** window: **Control**, **Scales**, **Keys**, **Sound** and **Edit**.

Control

The **Control** menu contains the following:

Reset Score - This zeros the scoreboard.

No Pause - If this is selected, the program plays a new sequence of notes after a correct answer without requiring you to click the **Continue** button.

Flats - Selecting this item enables the keys normally written with flats instead of sharps. See the discussion of the Keys menu below for more information.

Quit - Returns to the Finder.

Scales

The **Scales** menu controls the type of scale displayed. There are currently four choices. In order of decreasing difficulty they are:

Chromatic - The full twelve tone to the octave equal-tempered scale.

Diatonic - The familiar seven-tone major scale that forms the basis of Western classical and popular music.

Pentatonic - A five-tone scale. Equivalent to the diatonic scale with no fourth or seventh tone.

1-3-5 - A three-tone scale consisting of the first, third and fifth notes of the diatonic scale. The program starts off in this scale in the key of C.

Keys

The **Keys** menu selects the key. There are twelve keys, each named for a different tone from the chromatic scale. They are **C, Db, D, Eb, E, F, Gb, G, Ab, A, Bb, B**.

When the program starts the key is set to **C** and the menu items for keys that contain flats are disabled (shown in grey). You must first choose **Flats** from the **Control** menu to enable these items. Rechoose **Flats** to change the display back to sharps.

When you choose an enabled item from either the **Keys** or **Scales** menu, program redraws the staff to display the notes for the new scale or key. You can always determine the current key and scale by pulling down the menus to see which items are marked with a checkmark.

Sounds

The **Sounds** menu has, for now, just one item:

Settings... brings up a dialog box with scroll bars that allow you to set the **Volume** and **Duration** of the musical notes.

Edit

The **Edit** menu exists only to support Desk Accessories. It presently has no function in the application itself.

III. Using the Program

Pitcher 1.0 has been designed to accomodate a wide range of musical ability. At its simplest level (**1-3-5** scale, key of **C**, and **Sequence Length** of one) it is suitable for young children or beginning musicians. At its most difficult level (**Chromatic** scale and **Sequence Length** of ten) it will challenge even professional musicians.

How you use the program will depend on your goals and temperament, but I would suggest the following general approach:

1. After you've played with menus and gotten familiar with the program, find a level of difficulty such that you answer correctly 50% to 75% of the time.
2. As your percentage of correct responses improves to 90% or better, increase the difficulty to a level that is more challenging but not overwhelming. There are four ways to do this:
 - a. Change keys. This generally results in the smallest increase in difficulty. Try to work through all twelve keys.

- b. Change the sound **duration** (via the **Sounds** menu). Shorter is usually harder unless you are working with a Sequence Length of five or more.
- c. Increase the **Sequence Length**. Note that the Sequence Length control is disabled while you are guessing. You can re-enable it by choosing **Reset Scores** from the **Controls** menu, or if you don't want to lose your current score, simply rechoose the present (checked) scale or key from the appropriate menu.
- d. Select a more difficult scale type. **Chromatic** is the most difficult, followed by **Diatonic**, **Pentatonic**, and **1-3-5**.

3. A few minutes every day works better for most people than occasional long sessions. Of course, long sessions every day work even better but surely you've got more important things to do than to spend hours locked in mortal combat with a beeping computer.

4. Respond quickly. Don't agonize over what to guess. You want to make the association between sounds and notation as automatic as possible.

5. Enjoy and study music in as many other ways as you can. Ear-training is only one small part of musical learning.

IV. License Agreement

As the start-up screen points out, this program is distributed on the honor system. You may try it out for ten days with no obligation. Beyond that time you are obligated to either get rid all copies in your possession or send in the very modest license fee of seven dollars and fifty cents (\$7.50). I'll spare the lecture on honesty, trust, and karma. You know as well as I do what's right and wrong.

The address to mail your check to is:

Ellis Engineering
5 Fairland Street
Lexington MA 02173

The license fee entitles you to use one copy of the program at a time. If you are, for example, an educational institution with several Macintoshes, the license fee is \$7.50 for each machine. You may make back-up copies as needed. You may give away copies, but you may not sell them or charge duplication or materials fees. Those who receive such copies must also pay the license fee if they choose to keep the program. Non-profit computer user groups may charge nominal duplication and materials fees after obtaining written authorization from Ellis Engineering.

Future Upgrades

These will be strongly influenced your responses to the program (not to mention my own capricious whims). Please send suggestions and bug reports. I'll incorporate as many as possible in the next version.

Thank you,
Michael Ellis