

Tuning Exam Prep using TuneLab

Here is how to use TuneLab for iPhone to give yourself a mock tuning exam, complete with scoring. The procedure when using the Android version of TuneLab is similar.

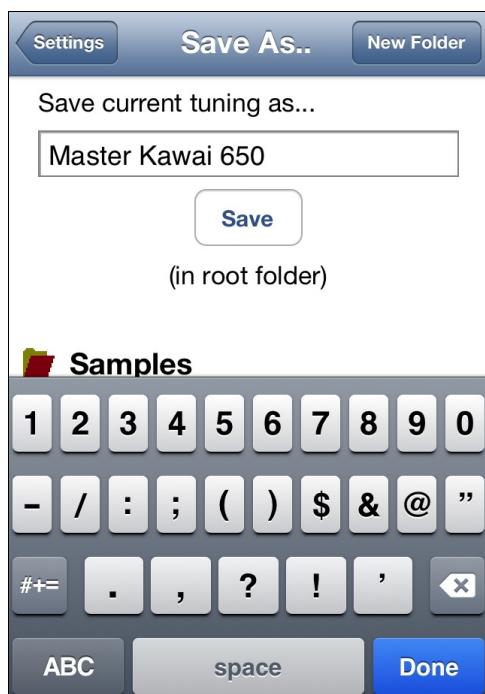
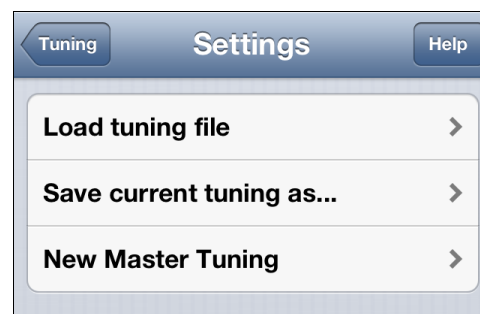
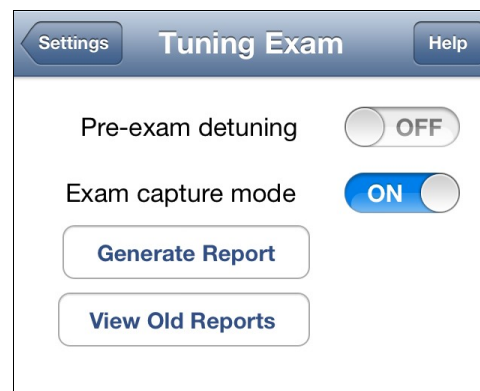
Since Part 1 of the tuning exam does not cover unisons, you can save time by strip-muting the piano from C3 to B4 now and dealing only with one string per note for the remainder of this part of the exam.

Create a Master Tuning

We start by creating a master tuning. In the actual exam, the master tuning is created by a committee of examiners using aural methods. For the mock exam we let TuneLab create a tuning to serve this purpose. Tap on the Settings button in TuneLab, scroll down to **PTG Tuning Exam**, and tap on that. On the Tuning Exam page, switch on Exam Capture Mode so that the page looks like the one shown on the right.

Go back to Settings and tap on **New Master Tuning**, as shown in picture below and to the right. This will start a new tuning as usual, except that the partials used in this new tuning will be the ones specified for the PTG Tuning Exam. Ensure that the tuning curve adjuster is set to Fully Automatic and that the intervals selected in the tuning curve adjuster are the 6:3 octave for the bass and the 4:1 double octave for the treble. Measure

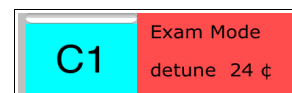
inharmonicities as usual for C1, C2, C3, C4, and C5. Save the resulting tuning by going to Settings and tapping on Save current tuning as... Fill in the name of the saved tuning in a way that reminds you that it is serving as a master tuning, as shown on the left.



Detune the Piano (optional)

If the piano is not particularly well-tuned already, you might want to skip this step for the mock exam. However in the real exam your piano will be detuned in the following manner to ensure you don't get any freebies, so if you want the full exam experience, take the time to formally detune the piano.

Go to the PTG Tuning Exam page as you did above, but this time turn on the **Pre-exam detuning** switch. Go to the main tuning page and roughly tune the piano using TuneLab. As you tune you should see the detuning offsets displayed with a reddish background as shown on the right. These offsets will change for every note so that the average




offset taken over all notes is near zero. After detuning, go back to the **PTG Tuning Exam** page and turn on **Exam capture mode**. This will automatically turn off the detuning switch.

Do Your Tuning

Turn off TuneLab and put it away. Tune the midrange notes from C3 to B4 using your best aural technique. Tune with the strip-muting in place. In the actual exam you will be given 45 minutes to complete your tuning of these notes.

Capture Your Tuning

Turn TuneLab back on. If not already set from before, turn **Exam capture mode** on. For each note that you tuned, select that note and capture your tuning as follows:

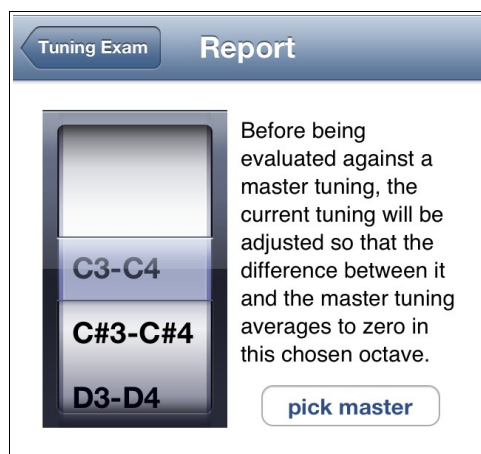
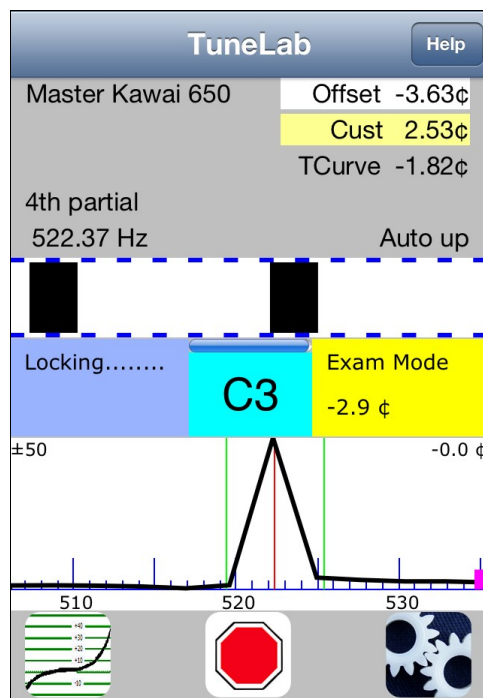
 Tap on the Lock button (shown on the left) so that the screen looks like the picture on the right. The Lock button turns into a red stop sign. Play the note you tuned. TuneLab will adjust the offset (shown here as -3.63) to match your tuning. Keep playing the note until the small progress bar above the current note display (C3 in the picture) fills in completely. As soon as it does fill in, tap on the stop sign to cancel locking mode. If the automatic locking procedure does not zero in on your note well enough, use manual offset adjustments instead. This is done by swiping left or right through the Phase Display. Once a solid lock is achieved for that note, tap in the yellow **Exam Mode** offset box. This will add the offset that was just developed onto the custom offset for this note, and it will also turn the **Exam Mode** background from yellow to green to indicate that the capture is done for this note.

After all relevant notes have been captured, save the resulting tuning by giving it a new name. Go to Settings and tap on **Save tuning as...**, giving the tuning a new name.

Score your tuning

Go to Settings and tap on **Generate report**. This will prompt you to select your temperament octave, as shown on the right. The temperament octave is used in the scoring calculations to compensate for any overall offset between the master tuning and your tuning. After you have selected which octave you want to be used for this purpose, tap on the **pick master** button to proceed to selecting the master tuning.

When you tap on **pick master** you will be presented with the stored tuning files. Select the master tuning that was prepared earlier (**Master Kawai 650** in this case). Then tap on **view report** to see the resulting scoring report that might look something like this:



Examinee Tuning

	1	2	3	4	5	6	7
C	-6.4	-2.4	0.7	0.1	0.8	5.1	11.9
C#	-8.2	-1.6	0.0	0.0	2.0	3.7	12.6
D	-8.8	-3.3	0.3	-1.0	0.6	4.4	13.8
D#	-6.8	-6.4	-1.4	-1.2	0.1	5.0	15.1
E	-7.0	0.7	0.0	0.9	1.0	5.6	15.7
F	-5.1	0.3	0.4	1.4	1.7	6.6	20.0
F#	-6.1	-7.9	-0.4	3.9	3.3	6.5	19.8
G	-4.0	-4.3	2.0	1.3	2.9	6.5	20.9
G#	-0.8	1.4	0.9	2.7	3.4	8.2	24.0
A	-7.1	-0.9	0.8	2.6	3.4	9.0	26.6
A#	-5.9	-1.7	2.4	4.1	3.9	9.0	28.2
B	-2.4	-2.7	1.7	3.6	4.2	12.5	29.8

Master Tuning

	1	2	3	4	5	6	7
C	-9.0	-4.7	-1.8	-0.4	0.5	3.5	11.1
C#	-8.5	-4.4	-1.5	-0.1	0.7	3.9	12.1
D	-8.1	-4.1	-1.1	0.1	0.9	4.3	13.3
D#	-7.7	-3.8	-0.8	0.4	1.1	4.7	14.6
E	-7.3	-3.6	-0.4	0.6	1.3	5.2	16.1
F	-6.9	-3.3	-0.1	0.9	1.5	5.7	17.6
F#	-6.6	-3.1	0.3	1.2	1.7	6.3	19.4
G	-6.2	-2.9	0.7	1.5	2.0	6.9	21.3
G#	-5.9	-2.6	1.0	1.8	2.2	7.6	23.4
A	-5.6	-2.4	1.4	2.1	2.5	8.4	25.7
A#	-5.3	-2.2	1.9	2.5	2.8	9.2	28.2
B	-5.0	-2.0	2.3	2.8	3.1	10.1	31.0

Difference and Points. (C3-C4 adjusted by -0.5)

	1	2	3	4	5	6	7
C	2.1	1.8	2.0 2	0.0	-0.2	1.1	0.3
C#	-0.2	2.3	1.0 1	-0.4	0.8	-0.7	0.0
D	-1.2	0.3	0.9	-1.6 1	-0.8	-0.4	0.0
D#	0.4	-3.1 1	-1.1 1	-2.1 2	-1.5	-0.2	0.0
E	-0.2	3.8 1	-0.1	-0.2	-0.8	-0.1	-0.9
F	1.3	3.1 1	0.0	0.0	-0.3	0.4	1.9
F#	0.0	-5.3 1	-1.2 1	2.2 2	1.1	-0.3	-0.1
G	1.7	-1.9	0.8	-0.7	0.4	-0.9	-0.9
G#	4.6	3.5 1	-0.6	0.4	0.7	0.1	0.1
A	-2.0	1.0	-1.1 1	0.0	0.4	0.1	0.4
A#	-1.1	0.0	0.0	1.1 1	0.6	-0.7	-0.5
B	2.1	-1.2	-1.1 1	0.3	0.6	1.9	-1.7

The first section shows the stretch offsets for your tuning that you captured. The second section shown the stretch offsets for the master tuning. The last section shows the difference between your tuning and the master tuning. In this case all the notes from C1 to B7 were scored. But if you capture only the notes from C3 to B4, this report will show only differences and points for those notes. The points deducted from a perfect score are shown as the numbers just after the difference numbers. In the example above there were two points deducted for C3, D#4 and F#4, and a few one-point deductions for other notes. To calculate your score for the midrange, add up the points for the midrange notes, multiply by 1.5, and subtract from 100. In the example above, that would come out to 80.5. To calculate your score for the 13 notes you specified as your temperament octave, add up the points for those notes, multiply by 2.5, and subtract from 100. The minimum passing score is 80 for both sections. In the example shown above, the temperament octave was C3-C4. There were 7 points taken off, giving a score of 82.5 (just barely passing).