EARPOWER Index

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How to Register

The fee is US \$25 (Compuserve members pay only \$20) If you got the demo, not the full version of Ear Power, then you need the registration number, which is rather some sort of a password.

After you type this number at the beginning, the demo will become the real program. The registration window will not appear anymore.

There are several ways to get this number:

- 1.Internet
- 2.Credit card
- 3.Compuserve
- 4.Regular mail

What else you will get as a registered user:

1. A copy of a little utility - Ear Steady, which will help you with the rhythm, to keep a steady beat at different tempos.

2.Free future upgrades for either Ear Power or Ear Steady.

3.Technical support. Send e-mail to any of the following:

75561.216@compuserve.com

sheep13@aol.com

or visit the **Ear Training WebSite.**

If you have a Web browser installed

You can **Safely** use your credit card to pay the \$25 registration fee to Public Software Library over the Internet,

Click **HERE**.

To insure that you get the latest version, PsL will notify us the day of your order and we will send you the registration number right away, either by regular mail or, more convenient, e-mail, if you have an e-mail address.

CREDIT CARD ORDERS - US \$25.

Product number is #14915.

You can order with MC, Visa, Amex, or Discover from Public (software) Library by calling

800-2424-775

7:00 a.m. to 6:00 p.m. CST Monday-Thursday and 7:00 a.m. to 12:30 p.m. on Friday. Ask for product #14915.

or 713-524-6394 or by FAX to 713-524-6398 or by CIS Email to 71355,470.

You can also mail credit card orders to PsL at P.O.Box 35705, Houston, TX 77235-5705.

THE ABOVE NUMBERS ARE FOR CREDIT CARD ORDERS ONLY. THE AUTHOR OF THIS PROGRAM CANNOT BE REACHED AT THESE NUMBERS.

Any questions about product details, technical support, volume discounts, dealer pricing, site licenses, non-credit card orders, etc, must be directed to Sheep13@aol.com.

To insure that you get the latest version, PsL will notify us the day of your order and we will send you the registration number right away, either by regular mail or, more convenient, e-mail, if you have an e-mail address.

Registration by regular mail

send a \$25 check or money order to:

Nick Baciu 402 Onderdonk Ave. #1R Ridgewood, NY 11385 USA

and I will send you this secret number either by regular mail or, more convenient, e-mail, if you have an e-mail address.

Registration from Compuserve - \$20
This is most convenient. You can use the on-line software registration service. This service will charge your account a \$20 fee for a single-user license and will automatically send me an e-mail message notifying me that you have registered.

To use this service:

type GO SWREG, select Register Shareware, and search for EarPower, or for the ID# 13371.

What this program does

The computer will play random sounds, (melody, rhythm or harmony), and you are supposed to play back what you hear.

Use the piano on the screen or select from the menu (Instrument) either guitar or microphone.

Then your response will be evaluated as correct or wrong. If correct - the computer will continue with a next shot, otherwise will wait until you get it right or press the NEW button.

Select the dificculty level yourself - from Beginner up to Excellent - or let the computer measure your skills. For this you should click on the TEST button.

This program will help you determine your musical abilities and improve them.

Troubleshooting

<u>Tips</u>

Keyboard shortcuts

Basic troubleshooting

Crash soon after start

No sound
Colors messed up
Microphone - no response

Tips, Keyboard

Crash - one the files may be corrupted.

Delete EarPower directory and reinstall the program.

Get the latest version from www.EarPower.com

 $No\ sound$ - go to menu-General Options and select other MIDI out devices beside Midi Mapper. Check also the MIDI volume. If still no sound usually the sound card needs to be reinstalled. Sometimes the wave device works but not the MIDI.

Colors - sometimes colors get distorted with the 256 colors systems. Solutions: restart the program or change the display to 65000 colors.

Microphone - if the indicator does not move, check the recording volume of the sound card. Try another voice recording program. You may need a different microphone.

A few tips

- Make a habit to practice everyday. Short daily sessions are better than lot of practice once in a while. The results will become obvious after several weeks.
- The best way to practice pitch is with the voice, hopefully the microphone works fine.
- You can practice pitch with an acoustic instrument using the microphone. There is some inconvenience though. 'Evaluate' button is hard to reach so you can press instead the right mouse buton (maybe with the toe :))
- There are many possible ways to practice difficult rhythms: with or without metronome, repeatedly playing along with the computer, or repeatedly alone with the computer muted.
- Create custom scales, rhythms or chords according to any desired music style.

Troubleshooting, Keyboard

Keyboard shortcuts

General

Esc = panic button. Cut possible hanging sounds.

Up-Down Arrows = change the timbre of the input sound.

Left-Right Arrows = change the timbre of the computer questioning sounds.

Ctrl = repeat the question.

Melody section

Left mouse button + Shift = create a custom scale.

(Custom scale mode should be on).

Rhythm section

Shift = change MIDI channel (10 or 16)

Delete = After a bad start, press 'Delete' before the computer estimates the wrong answer.

F5 = show the notes of the question pattern.

F6 = loop the pattern and play along.

F7 = read the notes before you can hear them (F5 should be on).

F8 = practice only the custom pattern.

Troubleshooting, Tips

About Ear Training

This program is designed to help anyone who has any interest in music, at any level, from those who like to sing a little or play with an instrument up to well achieved professionals who want to improve their skills. Music students should know how important ear training is for their development. Also experienced professionals still need to stay in shape, especially with the rhythm. Even those not interested in music should realize that a "tone-deaf" ear will somehow affect their personality as a whole.

The very first requirement for a musician is to be able to imitate sounds. You hear sounds in your imagination or from the outside world. You should be able to replay those sounds using your voice or an instrument, and this is the real task for any player or composer.

Technically this is what making music means. Musicianship starts here.

A professional musician, especially one with the perfect pitch may consider this as childish. In fact even a pro should strive to improve the ability to memorize and replay sophisticated rhythm patterns. This contributes a lot to better musical phrasing.

Of course, music comes from the soul, it is not a mere juggling with sounds, but many times players from a lower spirituality platform look better just because they have - a good ear-, and a common misconception is that this cannot be improved. The author of this program has plenty of experience and I can assure you that the attentive ear can be improved to the highest levels, even for someone considered tone-deaf. It requires a lot of practice and discipline, of course.

 $x \quad x \quad x$

It doesnt make sense for somebody to learn how to read music or play a musical instrument, and not be able to imitate sounds with the voice or the instrument.

Being able to reproduce anything you hear, related to pitch or rhythm, is what the program is trying to improve. It's simple: the computer will play something randomly and you have to play (or sing) back exactly what you heard. Interactive indeed, the computer will estimate your answer and it will continue accordingly.

Besides being fast, compact, comprehensive and discreetly helpful, this program is indeed musician friendly.

This package was designed to help you improve your natural ear. No music theory is involved.

The computer becomes your partner in ear training, playing for you random sounds, intervals,

rhythm patterns, melodic lines, chords, and all you have to do is to guess which is which. Your response will be impartially evaluated by the computer.

This program is very easy to use. The goal is to help you improve your natural listening abilities to the point where you will be able to reproduce any sound you hear. And this is actually the bottom line of real musicianship, in a technical sense, of course; not talking about the spiritual dimensions here.

It is not easy to practice these things. It requires a lot of discipline. All the other ear training programs we've checked have their merits, but they lack something most important: MUSICIAN FRIENDLINESS.

That's why we tried to make this program as easy to use as possible, so you can practice daily.

The best part of the program is the rhythm section which will help you improve the ability to deal with rhythm patterns, which in fact, are the framework of music. Very few people, even among pros, are able to memorize and replay some intricate rhythm patterns.

Also, using a microphone you can check and improve the pitch accuracy of your voice.

Special features

There are four important features within Ear Power:

1. Voice pitch recognition using a microphone.

The computer plays one or more sounds randomly, then the user has to sing each note into the microphone and the computer will estimate how accurate the pitch of the user is.

2. Rhythm patterns recognition drills.

The computer will play a random rhythm pattern and the user has to play it back either on the keybord Space-bar or a MIDI instrument. Then the computer will calculate how accurately the rhythm was played regarding the duration and tempo.

3. The possibility to configure any kind of chord of up to six notes and make specific harmonic drills.

The left boxes of chords stay the same for regular use as the basic chords, while those on the right side allow the user to build up any type of chords from different harmonic styles, save them and learn to recognize them.

4. Simple but efficient music reading drills

based on one note at a time. When you play a note on the instrument of choice -guitar or piano- it shows what note it is and also how it looks on the score in

either the G clef or the F clef.

The Interface

For more details about each section see either:

Melody, Rhythm, Intervals or Harmony.

There are not many controls on the window of this program. Besides the tabs where you can select melody, rhythm, etc, and the little buttons where you can select the level (Average, etc), there is also:

NEW button - click on it to hear a new sound, melody, rhythm pattern, interval or chord - depending on what section is selected.

REPEAT - click on it to hear the previous sound. (CTRL key from keyboard does the same).

TEST - after you click on this button it will start blinking, which means the computer is testing your skill level, starting with melody, rhythm, etc.

During this procedure you cannot change the levels or the drill section. To leave the Test mode click the Test button again.

According to your responses, the computer will change the difficulty levels and after a few tries it will skip automatically to the next section, until you reach the last section - Harmony.

Then it will show you the result, and this will be saved as the new configuration.

The next time you start the program, for each section you will have a different difficulty level, according to the skills detected.

For instance someone may score Excellent for melody, but less than average for rhythm.

Of course, in the practice mode you can select any level you want anyway.

The test results may not be that accurate. It depends on many factors. But you should try the test more often and then your strong and weak points will be quite obvious.

MENU (INSTRUMENT) - you can select either piano or guitar (on the screen), or the microphone as an external input. The selection gets into effect only when you are in the 'Melody' or 'Chords' section.

An external MIDI instrument can be used at any time, except when the microphone is selected.

Microphone

This is the best way to practice the <u>melody</u>. Unfortunately it depends entirely on the quality of the microphone, coarseness of voice, sound-card settings, computer speed, etc.

1. How it works: Select Microphone from the menu.

Sing a long note in front of your mic and the indicator on the screen scale will move accordingly. You can use the little keyboard as reference instead of a pitch fork. You may notice that when singing a scale, the voice tends to go off pitch, partly because of the tempered tuning, a well known problem.

For the higher notes you can control better the intonation; the indicator will show fractions of a tone smaller than the half-tone.

To match any of the sounds played by the computer:

- -press the EVALUATE button;
- -sing the note until the indicator gets to the position;
- -release the EVALUATE button;

For the advanced levels the computer will play a melodic line made of 2 up to 7 notes; follow the above procedure for each of the notes.

If you press REPEAT (or CTRL key), then you have to start again from the first note.

2. Requirements: at least a 486DX or anything with a **Math Coprocessor**. Also the **microphone** should be either -condenser- those cheap mics with a stereo jack or -dynamic - with a mono jack, but in this case you need a good one, uni directional.

We tried several mics and the condenser performed the best, even cheap ones. For instance, we used a \$4.99 Labtec microphone on a \$39.99 Media Sound card and every note we tested was read accurately. With a dynamic microphone the lower notes were read inaccurately. In this case a baritone should sing one octave higher, using falsetto.

Also, depending on the computer speed, it may take up to 1 second to get the reading, so you should sing slowly longer notes.

The **voice quality** is also important; ring a pitch-fork in front of the microphone and the reading will be 100% accurate.

3. Using acoustic instruments: this is another great

feature of this program. If your microphone reads properly set it near your instrument (piano, acoustic guitar, horn etc.). The only inconvenience is that you cannot use the mouse to press the EVALUATE button, instead put it on the floor and press the Right button with your toe (regardless of the pointer position). (This idea came from Richard Webster, horn player).

MIDI

Instead of the instrument drawn on the screen, any MIDI instrument can be used, but only for the Melody and Rhythm sections.

Rhythm on Midi is useful if you have a Midi guitar or drum. Play the pattern composed by the computer and then wait a second.

With the melody it is different; any note you touch is considered to be the response. This will be no problem for those who possess perfect or good relative pitch. Otherwise you should practice at the lower difficulty levels. For less than average the computer will play randomly only one of the following notes: C,D,E,F,G,A,B for Not Bad.

for Try More; for Beginner;

C,D,E,F,G C, D, E

This way it should be easier to find the note without too many errors and it is also a useful practice scheme.

Melody

1. How it works: Select the desired instrument from

the menu, unless you use a <u>MIDI</u> instrument. Play with the left mouse on the instrument selected (piano or guitar) until you recognize the sound played by the computer and click the right mouse button on that note (or press Enter) to verify. Or sing that note into the

microphone, if there is one.

If more advanced, you can play directly with the right mouse button; any note you touch is considered to be the response.

2. Levels: for the advanced levels the computer will play a melodic line made of 2 up to 7 notes; follow the above procedure for each of the notes.

If you press REPEAT (or CTRL key), then you have to start again from the first note.

At the Excellent level, the melodic line played by the computer has a rhythmic feel also, but you do not need to play back it rhythmically, just the notes, one by one. For the less than average levels the computer will play randomly only one of the following notes: C,D,E,F,G,A,B for Not Bad.

C,D,E,F,G,A,B for Not Bad.
C,D,E,F,G for Try More;
C, D, E for Beginner;

This way it should be easier to find the note without too many errors and it is also a useful practice scheme.

3. Drill notes selection: you can select

which notes you would like for pitch drills. This works only for the levels above 'Average'.

Click the Left Mouse button (while holding the Shift key)

on the piano keys (guitar frets) which you want to use.

The computer will play random notes out of those selected only.

This adds a great deal of configurability to the 'Melody' section. You can quickly create any scales, arpeggios, increase or decrease the number of notes available for drill.

4. Timbre:

a)From the start the instrument on the screen will play with a piano sound or guitar; to add some variety you can change that using the Up-Down arrow keys

b)The computer will play random notes with same timbre as the instrument on the screen.

If you want to change this, so the timbre should be different each time, press the F1 key.

Rhythm

- **1.Play.** Hit on the Space-bar of your computer keyboard (or on a MIDI instrument) and play the rhythm pattern composed by the computer. After that press Enter or simply wait one second and the computer will compare your pattern with the original. On the bottom of the screen you can see the original rhythm shown as simple graphic figures, where the upper parts represent how much tolerance is permitted. Then the pattern which you played will be represented as some sticks aligned along the original figures. You will be able to check visually your performance.
- **2.Sound problem**. If not able to hear anything, or the sound does not ressemble a drum (and a soundcard is present) then try to change the sound by pressing Shift on your computer keyboard. This may correct the problem which occurs due to different MIDI sound configurations.
- **3.Change speed**. If the rhythm played by the computer seems to be incomprehensible you can play it back at a lower speed. Move the cursor to a lower tempo and press Repeat (or CTRL key) to hear how it sounds played slowly. It is a good method to study the patterns.
- **4.Test mode**. On the test mode you will be permitted to try the same pattern twice. Also you can use a little trick. Anytime you make a mistake in playing that pattern, quickly press the Delete key (or the CTRL key which does the same as the Repeat button) and then restart playing it.

Intervals

1.How it works. The computer plays a melodic or harmonic interval. You have to click the right mouse button on one of the selected boxes. This is the way to tell the computer which interval you guessed. (Or you can use the left mouse button and Enter.) If the difficulty level is 'Average' or lower you can hear how a specific interval sounds by clicking on it with the left mouse button.

Also for the levels 'Average' or lower, the intervals will be either ascending or descending, depending what you select on the 'Options'.

- **2.Configure.** You can check only the intervals which you want to practice with. The computer will play randomly an interval out of those selected only. For instance, if you find it difficult to recognize a fourth from a fifth, select only these two boxes and the computer will play randomly only a fourth or a fifth.
- **3.No theory**. Many people, even among musicians, may not know too much about what intervals are, however this type of training should be useful to them too. And they need it. Anybody should be able to recognize consonance from dissonance, without getting into any theoretical detail.

Harmony

1.How it works. The computer plays one chord.

You have to click the right mouse button on one of the selected boxes. This is the way to tell the computer which chord you guessed. (Or you can use the left mouse button and Enter.) If the difficulty level is Average or lower you can hear how a specific chord sounds by clicking on it with the left mouse button.

At the Average level this can be misleading because the chord may be higher or lower than the original. But at the levels lower than average you can in fact compare the chords and decide which is which.

- **2.Configure.** One nice feature in this section is that you can select freely how many different types of chords you need to practice, and the computer will play randomly only those which were selected. For instance if you have difficulty recognizing major from minor chords, you can uncheck all the others and the computer will play only major or minor chords, randomly.
- **3.No theory**. Many people, even among musicians, may not know too much about harmony, however this type of training should be useful to them too. And they need it. Anybody should be able to recognize consonance from dissonance, without getting into any theoretical detail.

New chords construction site:

Also, an even nicer feature is that you can design your own chords and save them. This is how it works:

- click the mouse on any chord you want replaced;
- design a new chord (up to 6 notes) on the instrument selected from menu (piano or guitar);
 - -press 'Play' to hear how it sounds:
 - rename the new chord and press 'Enter' or

'Save'

If you decide to keep the new chord for the next time, make sure that 'Save new chords' on 'Options' is selected before you exit.