

EAR-TRAINING TUTOR

Thank you for purchasing Ear-Training Tutor. We believe it to be a unique approach to the instruction of music listening skills and hope you will find it helpful in improving your ear-training ability at home and in the classroom. Ear-Training Tutor was designed by musicians to be easy to learn and use while simultaneously providing the user with correct musical concepts, terminology and efficient computer-assisted practice.

EAR-TRAINING TUTOR

MSB Music Software

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(203) 723-5275

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EAR-TRAINING TUTOR USER'S MANUAL

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EAR-TRAINING TUTOR  
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## HARD WARE REQUIRED

Commodore 64 or 128 (in 64 mode) personal computers

Commodore 1541 or 1571 or compatible disk drives

Composite color video monitor or TV with speaker/headphone output

MIDI interface (optional): Passport or Sonus-compatible

MIDI synthesizer (optional)

Printer (optional)

Joystick, 1350 or 1351 mouse (optional)

### notes:

A MIDI keyboard and Passport-compatible MIDI interface are optional additions for improved sound quality, although not required, as Ear-Training Tutor also simultaneously produces all sounds through the on-board SID music chip of the Commodore computer.

If your monitor does not have a speaker or if better sound reproduction is desired, it is recommended that you connect the audio output (the white RCA jack on the Commodore video monitor cable) of the computer to a high-quality home stereo amplifier/tuner. Then set your amplifier for mono output. You may then use the headphone jack or your stereo's own speakers for sound output. Other options include using a self-powered audio amplifier/speaker with a headphone jack such as those available from local electronic stores.

## PROGRAM FEATURES

### LESSON MODULE:

- 36 preset Interval lessons
  - ascending/descending intervals
  - melodic/harmonic intervals
  
- 15 preset Triad lessons
  - melodic/harmonic triads
  - all triad positions (inversions) available singly or in combination

recording of successfully completed lessons on disk  
screen display of any current or previous lesson result  
printer output of any current or previous lesson result

### INTERVAL MODULE:

- design your own lesson
  - all intervals available singly or in combination
  - ascending/descending intervals
  - melodic/harmonic intervals
  - (Major, minor, Perfect intervals available - unison through octave)
  - (Augmented 4ths & 5ths, diminished 5ths)
  
- screen display of any current or previous interval session result
- printer output of any current or previous interval session result

### TRIAD MODULE:

- design your own lesson
  - all triads available singly or in combination
  - (Major, minor, Augmented, diminished)
  - melodic/harmonic triads
  - all triad positions (inversions) available singly or in combination
  - (root position, first & second inversions)
  
- screen display of any current or previous triad session result
- printer output of any current or previous triad session result

### EXAM MODULE:

- test yourself on any selection from the Lesson, Interval or Triad modules
- save test results to disk (name, date, percentage, test data)
- screen display of any current or previous test result
- printer output of any current or previous test result
- test duration by time limit, maximum exercise number or user termination

RANDOM selection of all interval/triad sounds within the selected limits.  
Eliminates the possibility of memorizing drill or test exercises in advance.

EAR-TRAINING TUTOR was specifically designed to be compatible with ALL ear-training and music theory texts. The ability to create your lessons using the Interval and Triad Modules allows you to tailor the program to material currently being discussed and studied in your text as well as to identify and drill personal aural weaknesses. This is a marked advantage over programs requiring you to follow one specific lesson order and which often have insufficient emphasis on your own personal problem areas. In addition, teachers will have the flexibility to choose the order of any of the material they wish to cover. In the long run, Ear-Training Tutor will continue to be useful as you move on to other music texts and to quickly review any weaknesses that arise. The ability to review and save to disk all your previous test results will let you evaluate your progress.

## OPERATING INSTRUCTIONS

### MAKING A BACKUP copy of the Ear-Training Tutor program disk:

- 1) Format a blank diskette, following the instructions in the Commodore User's Guide provided with your computer.
- 2) Use the copy program 'Disk Backup' found on the Commodore Test/Demo Disk that came with your computer or any other commercial disk copy program and make an exact copy of the original Ear-Training Tutor program disk. BE SURE TO COPY ALL FILES from the original disk to your new backup disk.
- 3) Store the original Ear-Training Tutor disk in a safe storage location.

### LOADING Ear-Training Tutor:

- 1) Turn VOLUME UP on your computer monitor, stereo system or MIDI keyboard
- 2) Place a copy of Ear-Training Tutor in the disk drive. Close the disk drive door.
- 3) Type: LOAD"\*\*",8
- 4) Press: RETURN
- 5) The computer display screen will display the following:  
SEARCHING FOR \*  
LOADING  
READY
- 6) Type: RUN
- 7) Press: RETURN
- 8) After one minute the display screen will read:  
'Please enter your password:'
- 9) Type in the password exactly as provided on your invoice at time of purchase. For your protection, the letters will not appear on the video display screen as you type them.
- 10) Press: RETURN
- 11) The Main Menu and personal greeting message should now appear on the screen.
- 12) If the message 'Unauthorized Password' appears on your screen, re-enter your password as outlined in step 9. For protection against unauthorized use of your program, the program will be erased from computer memory after three unsuccessful attempts to enter the correct password. Your program disk will remain unchanged and in good working order.

Note: ALWAYS leave your E.T.T. program/backup disk in the disk drive during program operation at all times. Removal of the disk will result in faulty program operation and the destruction of test records. Only remove your disk at the completion of your session when instructed by the program to do so.

## SPECIAL KEYS

Ear-Training Tutor uses the following keys on the computer keyboard:

TO MAKE A SELECTION FROM A MENU WITH A SQUARE BORDER: (Main, Setup, Lesson, Interval & Triad Menus)

- 1) Press: CURSOR DOWN key (or joystick or mouse) to cycle through the choices.  
When the wanted choice is highlighted then:
- 2) Press: RETURN to turn on that option.

The CURSOR DOWN key is found immediately to the right of the right SHIFT key and below the RETURN key on the computer keyboard.

If you are using a joystick or mouse, be sure it's connected to PORT 2. If using the 1351 mouse use joystick mode (non-proportional mode).

TO MAKE A SELECTION FROM MENUS WHERE FIRST LETTERS OF CHOICES ARE HIGHLIGHTED:  
(Exam, Note Display & View Results Menus)

- 1) Press: KEY representing first letter of desired choice.

TO IDENTIFY AN INTERVAL PLAYED BY THE COMPUTER:

- 1) Press: NUMBER KEY representing the interval as follows:

Number key alone	Shifted Number key	Commodore / Number key
1 - Unison		
2 - Major 2nd	minor 2nd	
3 - Major 3rd	minor 3rd	
4 - Perfect 4th	diminished 4th	Augmented 4th
5 - Perfect 5th	diminished 5th	Augmented 5th
6 - Major 6th	minor 6th	
7 - Major 7th	minor 7th	
8 - Octave		

for Major or Perfect intervals press the appropriate number key once.

for minor or diminished intervals hold down SHIFT then press number key.

for Augmented 4ths or 5ths hold down COMMODORE key then press number key.

(COMMODORE key is found on the lower left corner of computer keyboard).

TO IDENTIFY A TRIAD PLAYED BY THE COMPUTER:

- 1) Press: FUNCTION KEY representing the triad as follows:

F1 key	- Major triad
F3 key	- minor triad
F5 key	- Augmented triad
F7 key	- diminished triad

The FUNCTION keys are the large keys vertically arranged on the extreme right side of keyboard. On the C-128 they can be found across the top right of keyboard.

2) After identifying the Triad you will be asked what POSITION it is in.  
Press: FUNCTION KEY on computer keyboard representing triad position:

F1 key - Root Position  
F3 key - First Inversion  
F5 key - Second Inversion

The FUNCTION keys are the large keys vertically arranged on the extreme right side of keyboard. Across the top on the C-128.

The numbers on the function keys represent which note of the triad is in the bass (the lowest): root (1), third (3) or fifth (5).

You will NOT be asked to identify the position of Augmented triads, as they all SOUND identical to other Augmented triad positions.  
(C aug. root position = Ab aug. 1st inversion = E aug. 2nd inversion)

#### GLOSSARY OF TERMS

Definitions of music terms as used in Ear-Training Tutor:

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PITCH: the quality of highness or lowness of a sounded note.

INTERVAL: the distance between two notes.

TRIAD: three simultaneous or successive notes.

MELODIC: non-simultaneous sounding of two (interval) or three (triad) notes in succession.

HARMONIC: simultaneous sounding of two (interval) or three (triad) notes.

ASCENDING: a rising interval - heard lower note first followed by upper note.

DESCENDING: a falling interval - heard upper note first followed by lower note.

ROOT POSITION: a triad having its root as the lowest note heard - the root note always gives the triad its name. ex: a C triad has a C note as its root.

FIRST INVERSION: a triad having its third as the lowest note heard.

SECOND INVERSION: a triad having its fifth as the lowest note heard.

STAFF: system of lines and spaces used for the notation of music.

note: These definitions are simplifications of actual musical terms and stated for an initial understanding of the program. For a thorough comprehension of musical terminology it is strongly suggested that use of this program be accompanied by a music theory text. This will enable the user to acquire both aural as well as theoretical ability. By allowing you to design your own lessons, Ear-Training Tutor lets you follow the lessons in your text with similar computer-assisted ear-training drill practice.

SAMPLE LESSON 1

Intervals (melodic)

1) Load Ear-Training Tutor as outlined on page 5 (Operating Instructions). Be sure VOLUME is UP on your computer monitor, stereo system or MIDI keyboard.

2) The MAIN MENU should now appear on the screen.

'LESSON MODULE'  
'INTERVAL MODULE'  
'TRIAD MODULE'  
'EXAM MODULE'

3) Using the CURSOR DOWN key, highlight the first choice on the screen:

'LESSON MODULE'

Press: RETURN

The LESSON MODULE consists of 36 interval lessons numbered 1-36 and 15 Triad lessons arranged in escalating difficulty. The 36 interval lessons are divided into three menus of 12 lessons each.

4) The SETUP MENU should now appear on the screen.

'Melodic Intervals'  
'Harmonic Intervals'  
'Melodic Triads'  
'Harmonic Triads'  
'Reset Lesson'  
'Main Menu'

5) Using the CURSOR DOWN key, highlight the first choice on the screen:

'Melodic Intervals'

Press: RETURN

6) 'Interval LessonsMenu 1' should now appear on the screen.

Using the CURSOR DOWN key, highlight interval lesson #1:  
'Unison'

Press: RETURN

(If you selected Melodic Unisons or are reading this for the first time, skip to step 8.)

7) 'Ascending or Descending Intervals ?' should now appear on the screen.

Press: A (for Ascending)

Press: RETURN

8) You should now hear a Unison interval played by the computer.

The identify interval screen now appears (see page 6 - Special Keys).  
The 'elapsed time' minutes display helps you keep track of the time spent.

9) If you would like to hear the interval again:

Press: R (for Repeat)

10) Since we know that Unison is the only interval choice selected to be heard:

Press: 1 (for Unison)

11) The Note Display screen now appears and displays the Unison interval on the music staff as well as on a piano-style keyboard. The interval name, note names and current exercise number also appear.

note: Since a Unison interval consists of two identical notes, only one key on the piano keyboard is necessary for display. In accordance with music notation practice, unison interval notes are displayed horizontally. All other intervals and triads are arranged vertically on the music staff.

NOTE DISPLAY SCREEN

Interval: CORRECT	Unison	#1
<u>Interval</u>	-----	Press:
<u>Pitches</u>	----- MUSIC -----	
	----- STAFF -----	Continue
upper:	----- DISPLAY -----	Main Menu
lower:	-----	End
<hr/>		
----- PIANO KEYBOARD DISPLAY -----		
<hr/>		

- 12) To the right of the music staff on the screen the following menu is seen:  
 'Continue'  
 'Main Menu'  
 'End'
- 13a) Press: C (to continue) - goes back to step 8 and sounds another interval.  
 After identifying a few unisons, listening carefully to the similarity of sound they have in common, exit to see your results by selecting 'Main Menu' from the Note Display screen (see step 13b).
- 13b) Selecting 'Main Menu', displays your results then returns you to the MAIN MENU to select another combination of intervals or triads to practice.  
 Press: M (for Main Menu)
- 13c) Selecting 'End', displays your results then terminates your ear-training session and erases the program from computer memory. Only choose this option when you are finished with ALL ear-training activity. The program will prompt you with 'Are you sure ?' as a further safeguard against accidental termination.

RESULTS DISPLAY SCREEN

- 14) The RESULTS DISPLAY SCREEN should now appear:  
 the exact numbers may vary depending on how many exercises were done.

Interval lesson # 1
Percent correct: 100
5 ascending melodic Intervals heard
0 intervals missed
0 - 5 Unison
'Press M for Main Menu or'
'press P for printer output'

- 15) If a printer is hooked up to your computer, you may at this point print to paper the results of your first ear-training session. Your name will automatically be printed at the top of the page.  
 Press: P (for printer)
- 16) Press: M (for Main Menu)

The MAIN MENU should now appear on the screen. Go back to step 2 - you may now choose another interval lesson to try. When you get to step 6, choose Interval lesson #2 - Octave. (You may of course choose any other lesson to try, but we recommend that for the time being you follow the preset order of the lessons).

## SAMPLE LESSON 2

### Triads (melodic)

If the program is already active then skip step 1 (loading instructions).

- 1) Load Ear-Training Tutor as outlined on page 5 (Operating Instructions). Be sure VOLUME is UP on your computer monitor, stereo system or MIDI keyboard.
- 2) The MAIN MENU should now appear on the screen as in sample lesson 1.
- 3) Using the CURSOR DOWN key, highlight the first choice on the screen:  
'LESSON MODULE'  
Press: RETURN

The LESSON MODULE consists of 36 interval lessons numbered 1-36 and 15 triad lessons numbered 37-51.

- 4) The SETUP MENU should now appear on the screen.
- 5) Using the CURSOR DOWN key, highlight the third choice on the screen:  
'Melodic Triads'  
Press: RETURN
- 6) The 'Set Triad Positions' menu should now appear on the screen.  
Using the CURSOR DOWN key, highlight the first position choice:  
'Root Position'  
Press: RETURN
- 7) The 'Triad Lessons Menu 4' should now appear on the screen.  
Using the CURSOR DOWN key, highlight triad lesson # 37:  
'Major'  
Press: RETURN
- 8) You should now hear a Major triad played by the computer.  
The identify triad screen now appears (see page 6 - Special Keys).  
The 'elapsed time' display helps you keep track of minutes gone by.
- 9) If you would like to hear the triad again:  
Press: R (for Repeat)
- 10) Since we know that Major is the only triad choice selected to be heard:  
Press: F1 function key (for Major)
- 11) The identify triad position screen now appears (see page 6 - Special Keys).
- 12) Since we know that Root Position is the only position choice active:  
Press: F1 function key (for Root Position)
- 13) The Note Display screen now appears and displays the Major triad on the music staff as well as on a piano style keyboard. The triad name, position, note names and current exercise number also appear.  
You should now see a three note Major triad in Root Position on the musical staff and piano keyboard displayed on the screen.

NOTE DISPLAY SCREEN

Triad:	CORRECT	Major	#1
Position:	CORRECT	Root Position	
Triad	-----	Press:	
<u>Pitches</u>	----- MUSIC -----		
fifth:	----- STAFF -----	Continue	
third:	----- DISPLAY -----	Main Menu	
root:	-----	End	
 ----- PIANO KEYBOARD DISPLAY ----- -----			

- 14) To the right of the music staff on the screen the following menu is seen:  
 'Continue'  
 'Main Menu'  
 'End'
- 15a) Press: C (to continue) - goes back to step 8 and sounds another triad.  
 After identifying a few Major triads, listening carefully to the similarity of sound they have in common, exit to see your results by selecting 'Main Menu' from the Note Display screen (see step 13b).
- 15b) Selecting 'Main Menu', displays your results then returns you to the MAIN MENU to select another combination of triads or intervals to practice.  
 Press: M (for Main Menu)
- 15c) Selecting 'End', displays your results then terminates your ear-training session and erases the program from computer memory. Only choose this option when you are finished with ALL ear-training activity. The program will prompt you with 'Are you sure ?' as a further safeguard against accidental termination.

RESULTS DISPLAY SCREEN

- 16) The RESULTS DISPLAY SCREEN should now appear:  
 the exact numbers may vary depending on how many exercises were done.

Triad lesson # 37
Percent correct: 100
5 melodic triads heard
0 triads missed
0 triad positions missed
0 - 5 Major
 'Press M for Main Menu or'
'press P for printer output'

- 17) If a printer is hooked up to your computer, you may at this point print to paper the results of this triad ear-training session. Your name will automatically be printed at the top of the page.  
 Press: P (for printer)
- 18) Press: M (for Main Menu)

The MAIN MENU should now appear on the screen. Go back to step 2 - you may now choose another triad lesson to try. When you get to step 7, choose triad lesson #38 - minor. (You may of course choose any other lesson to try, but we recommend that for the time being you follow the preset order of the lessons).

### SAMPLE LESSON 3

#### Intervals (harmonic)

Follow instructions for Sample Lesson 1 on page 8, EXCEPT:

- 5) Using the CURSOR DOWN key, highlight the second choice on the screen:  
'Harmonic Intervals'

Press: RETURN

Continue with steps 6 through 13 as before.

Note that you now hear an interval sound that is simultaneous (harmonic), as opposed to alternate (melodic).

If you chose the 'Unison' (Interval lesson #1) as your practice interval, you should have heard one sound only, that of two separate but identical notes playing exactly simultaneously. Try a few more.

Next, go back to the MAIN MENU by pressing:

- 13b) press M from the note display screen, then press M from the lesson results screen.  
3) select LESSON MODULE  
5) select 'Harmonic Intervals'  
6) select 'Octave' (Interval lesson #2):  
Continue with steps 7 through 13 as before.

Note the difference between the harmonic octave you now hear as opposed to the melodic octave you previously heard at the end of Sample Lesson 1. Two separate distinct notes sounding simultaneously should now be heard.

You may select to hear any melodic or harmonic interval or triad combination from all of the modules.

### SAMPLE LESSON 4

#### Triads (harmonic)

Follow instructions for Sample Lesson 2 on page 10, EXCEPT:

- 5) Using the CURSOR DOWN key, highlight the fourth choice on the screen:  
'Harmonic Triads'

Press: RETURN

Continue with steps 6 through 13 as before.

Note that you now hear a triad sound that is simultaneous (harmonic), as opposed to alternate (melodic). All three notes of the triad are heard at once together.

If you chose the 'Major' (Triad lesson #37) as your practice triad, you should have heard all three notes of the Major triad sounding exactly at the same time. Try a few more, listening carefully.

Note the difference between the harmonic triad you now hear as opposed to the melodic triad you heard previously in Sample Lesson 2.

## SAMPLE LESSON 5

### Intervals (ascending melodic)

- 1) Follow instructions for Sample Lesson 1 on page 8:

Note that in step 7, we selected 'Ascending Intervals' - that is, all intervals will be heard lower note first, followed by the upper note.

Since a 'Unison' (meaning "one sound") consists of two identical notes, it is impossible to discern between ascending and descending unisons. So we need to try any other interval in order to hear the order of the notes being played.

- 6) Let's select the next interval lesson: 'Octave' (Interval lesson #2).

Listening to the 'Octave' being played, note that the lower note is heard first followed by another note exactly one octave higher. Go back and try a few more.

## SAMPLE LESSON 6

### Intervals (descending melodic)

- 1) Follow instructions for Sample Lesson 1 on page 8, EXCEPT:
- 6) Select 'Octave' (Interval lesson #2) from Interval Lesson Menu 1
- 7) Select 'Descending Intervals' - Press D (for descending)

When you hear the 'Octave' (Interval lesson #2) as a descending interval, note that the upper note is heard first followed by another note exactly one octave below the first.

The interval sound is the same as heard above in Sample Lesson 5, only the order of the notes played was reversed.

You may select from the interval or lesson modules any melodic interval combination, either ascending or descending.

## SAMPLE LESSON 7

### Completing your first lesson

Up to now, we have covered sample interval (melodic, harmonic, ascending & descending) and triad (melodic & harmonic) lessons. We will now successfully complete our first lesson.

If while doing the previous sample lessons, you attempted 10 or more exercises of any one of those lessons and achieved a percentage correct of 85% or greater, you may have noticed that a check mark was placed next to the lesson number displayed in the lesson menu. The disk drive light came on at the completion of your lesson session and that completed lesson number saved to your E.T.T. disk. If you have not done 10 exercises in one lesson, let's do so now. Go back and repeat Sample Lesson 1 - ascending melodic intervals - on page 8.

Sample Lesson 7 (continued)

This time, we will do at least ten 'unisons' before exiting to see the results and the main menu:

Since 'Unison' is the only active choice that will be played by the computer, you literally can not miss - only unisons will be heard.

Each time you get to step 10, identify the interval heard by:

Press: 1 (for unison)

Each time you get to step 13, select option a.

Press C (for continue).

You can see how many exercises you have done by looking at the top right corner of the NOTE DISPLAY MENU. This shows you the current exercise number. When this number is ten or greater, then in step 13 select option b.

Press M (for Main Menu).

The results screen should now appear:

Interval lesson #1
Percent correct: 100
10 ascending melodic Intervals heard
0 intervals missed
0 - 10 Unison
 writing lesson data...
 'Press M for Main Menu or'
'press P for printer output'

The message: 'writing lesson data', tells you the successfully completed lesson number is being saved to disk for future reference - Interval lesson #1 - in this case.

A check mark will also now appear next to that lesson number in the menu.

These check marks serve two purposes, to challenge you to complete lessons with a high degree of accuracy and also to remind you of where you left off whenever you access the LESSON MODULE. It's a quick way to measure your progress.

As the lesson difficulty increases with more choices to identify, so does the challenge to successfully complete a lesson. While it is recommended, you do not have to complete lessons in the order presented. Lessons previously completed (having a check mark), may later be re-visited for review. Remember that you must do at least 10 exercises per lesson in order to qualify for a completed lesson check mark.

You can also erase a single or all previously completed lesson check marks by selecting the 'Reset Lesson' option from the SETUP MENU. Once erased, there is no way to recover those check marks which were eliminated.

Review: To successfully complete a lesson (Triad or Interval lessons # 1-51).  
Do at least ten (10) exercises during one lesson.  
Achieve a correct percentage equal to or greater than 85%.

## SAMPLE LESSON 8

### INTERVAL MODULE

In the first 7 Sample Lessons, we have dealt with only the LESSON MODULE. It only allowed you to drill interval or triad combinations already preset as lessons 1 through 51. The more advanced users, however, can design customized interval practice drill sessions with the INTERVAL MODULE.

If the program is already activated skip to step 2.

- 1) Load Ear-Training Tutor as outlined on page 5 (Operating Instructions). Be sure VOLUME is UP on your computer monitor, stereo system or MIDI keyboard.

- 2) The MAIN MENU should now appear on the screen.

'LESSON MODULE'  
'INTERVAL MODULE'  
'TRIAD MODULE'  
'EXAM MODULE'

- 3) Using the CURSOR DOWN key, highlight the second choice on the screen:  
'INTERVAL MODULE'

Press: RETURN

- 3b) Choose Melodic or Harmonic Intervals from the Setup Menu.

The INTERVAL MODULE lets you select any interval combination to practice. You may activate from any single interval through all 13 intervals.

- 3c) If you chose melodic intervals, then now select 'Ascending or Descending'. Press 'A' or 'D'
- 4) 'Interval Menu' should now appear on the screen, listing all the intervals.

The first choice - 'All Intervals' - is the quickest way to practice at the most difficult interval level. The computer (or MIDI keyboard) will randomly play for your identification any one of the 13 available intervals.

The last choice - 'Main Menu' - will let you escape from the Interval Menu and de-activate all previously made choices in case of error or change of heart. It will return you to the MAIN MENU where you may re-start any module.

Selecting any of the other choices will activate the interval currently highlighted. You may select one or more intervals to activate by:

- 5) Using the CURSOR DOWN key, highlight the wanted interval choice, then:  
Press: RETURN

A check mark will appear by that choice to indicate that it is now activated.

- 6) You may now go back and select any other interval by repeating step 5 until all the wanted selections are activated. When done, go on to step 7.

note: the program will randomly choose and play only intervals within the limits you selected.

- 7) Using the CURSOR DOWN key, highlight the 'EXIT' choice at the top of the menu:  
Press: RETURN

## Interval Module (continued)

- 9) You will now hear one of the intervals you selected. Listen carefully and identify this interval.
- 10) The identify interval screen appears (see page 6 - Special keys).
- 11) If you would like to hear the interval again:  
Press: R (for Repeat)
- 12) Identify the interval heard by pressing the appropriate number key (see page 6 - Special keys).  
Press: (your guess)

If your guess was correct then skip to step 13.

If your guess was incorrect, a buzz and screen effect will signal an incorrect guess. The original interval sound will then be repeated for you to try to identify. After three incorrect attempts the program will tell you what it was and display it on the screen. This allows you to not "get stuck" on any one sound you find difficult to identify.

- 13) The Note Display screen now appears and displays the interval on the music staff and a piano style keyboard. The interval name, note names and current exercise number also appear.

Follow steps 12 through 16 in Sample Lesson 1. (try a few more).

note: When the session is finished, the Results screen lists all the intervals attempted during the session and includes the specific misses. This allows you to evaluate which particular sounds need more attention. Review by going back to the INTERVAL MODULE and turning on only those particular problem intervals that need further practice.

## SAMPLE LESSON 9

### TRIAD MODULE

In the first 7 Sample Lessons, we have dealt with only the LESSON MODULE. It only allowed you to drill the interval or triad combinations already preset as lessons 1 through 51. The more advanced users, however, can design customized triad practice drill sessions with the TRIAD MODULE.

If the program is already activated skip to step 2.

- 1) Load Ear-Training Tutor as outlined on page 5 (Operating Instructions). Be sure VOLUME is UP on your computer monitor, stereo system or MIDI keyboard.

- 2) The MAIN MENU should now appear on the screen.

'LESSON MODULE'  
'INTERVAL MODULE'  
'TRIAD MODULE'  
'EXAM MODULE'

- 3) Using the CURSOR DOWN key, highlight the third choice on the screen:  
'TRIAD MODULE'

Press: RETURN

- 3b) Choose Melodic or Harmonic Triads from the Setup Menu.

The TRIAD MODULE lets you select any triad or triad position combination to practice. You may activate from a single through all triads or from one through all three triad positions.

- 4) 'Triad Menu' should now appear on the screen, listing all available triads and positions in contrasting colors.

The first choice - 'All Triads' - is the quickest way to practice at the most difficult triad level. The computer (or MIDI keyboard) will randomly play for your identification any one of the 4 available triads in any order it chooses. Unless you select other positions, the triads will be in 'Root Position'.

The last choice - 'Main Menu' - will let you escape from the Triad Menu and de-activate all previously made choices, in case of error or change of heart. It will return you to the MAIN MENU where you may re-start any module.

Any of the other choices will activate the triad or triad position currently highlighted. You may select one or more triads in one or more positions by:

- 5) Using the CURSOR DOWN key, highlight the wanted triad or position choice:  
Press: RETURN

A check mark will appear next to the selection to indicate that it is now activated.

- 6) You may now go back and select any other triad or position by repeating step 5 until all the wanted selections are activated. When done, go on to step 7.

note: the program will randomly choose and play only triads within the limits selected.

- 7) Using the CURSOR DOWN key, highlight the 'EXIT' choice at the top of the menu:  
Press: RETURN.

You must always turn on at least one triad type in order to hear any of the triad positions.

If no triad positions are chosen, the program will play all 'Root Position' triads.

- 8) You will now hear one of the triads you selected. Listen carefully to identify the triad AND its position.

- 9) The identify triad screen now appears (see page 6 - Special keys).

- 10) If you would like to hear the triad again:

Press: R (for Repeat)

- 11) Identify the triad heard by pressing the appropriate function key (see Special keys on page 6).

Press: (your guess)

If your guess was correct then skip to step 12.

If your guess was incorrect, a buzz and screen effect will signal an incorrect guess. The original triad sound will then be repeated for you to try to identify. After three incorrect attempts the program will tell you what it was and display it on the screen. This allows you to not "get stuck" on any one sound you find difficult to identify.

- 12) Identify the position of the triad you just heard by pressing the appropriate function key (see page 6 - Special keys).

note: if the triad was Augmented then you will not be asked to identify its position (see note at the bottom of page 6).

- 13) The Note Display screen now appears and displays the triad in its correct position on the music staff and a piano style keyboard. The triad name, position, note names and current exercise number also appear.

Follow steps 14 through 18 in Sample Lesson 2. (try a few more).

note: When the session is finished, the Results screen lists all the triads attempted during the session and includes the specific misses. This lets you evaluate which particular sounds need more attention. Review by going back to the TRIAD MODULE and turning on only the particular problem triads or positions that need further practice.

## SAMPLE LESSON 10

### EXAM MODULE

The EXAM MODULE lets you:

Save to disk a complete record of any interval or triad session from any of the other three modules - (Lesson, Interval or Triad Modules).

View any previously saved test record.

Protect your confidential test records from prying eyes.

Turning on EXAM MODULE:

If the program is already active then skip step 1 (loading instructions).

- 1) Load Ear-Training Tutor as outlined on page 5 (Operating Instructions). Be sure VOLUME is UP on your computer monitor, stereo system or MIDI keyboard.
- 2) The MAIN MENU should now appear on the screen.
- 3) Using the CURSOR DOWN key, highlight the fourth choice on the screen:  
'EXAM MODULE'  
Press: RETURN
- 4) The EXAM MODULE menu should now be on the screen:  
'Test session'  
'View test results'  
'Main Menu'  
'End session'

The first option - 'Test session' - activates test mode.

The second option - 'View test results' - lets you to view previously saved test records. The most recent results will be displayed first followed by the next recent, etc.. Since there are no tests saved to disk yet, we shall skip this option for now.

The third option - 'Main Menu' - de-activates test mode and returns you to the Main Menu where you may re-start any of the four modules.

The last option - 'End session' - is used only when you want to end ALL ear-training activity. It erases the program from memory as discussed in previous sample lessons.

- 5) Select the first option 'Testing session':  
Press: T (for test)
- 6) The screen should now show:  
'Your name'  
'Date:'  
'Maximum number of examples on exam (optional):'  
'Maximum time limit in minutes (optional):'

If both a maximum number AND a time limit is specified then the program will end test session when whichever occurs first.

If neither of the above is specified then you may end the test session at anytime by selecting 'M' (Main Menu) or 'E' (End) from the Note Display screen.

- 7) Enter today's date. (in any format)  
Press: RETURN  
Press: RETURN (do not specify max. number of exercises)  
Press: RETURN (do not specify maximum time limit)
- 8) If any of the information was NOT entered correctly:  
Press: C to make any changes. Go to step 7 and enter information again.
- 8a) If all is OK then:  
Press: the SPACE BAR, to continue.
- 8b) If you want to de-activate exam mode, press M to return to the Main Menu.
- 9) You should be back at the Main Menu and the prompt 'Exam mode activated' confirms that test mode is currently on (unless you de-activated it in step 8b).
- 10) At this point, go back and repeat any of the LESSON, INTERVAL or TRIAD sample lessons in the previous pages. (Sample Lesson 1 or 2 are recommended as starting points).
- 11) The selection, identification and display of intervals or triads in exam mode is identical to the previous practice sample lessons. The only exceptions are:

The repeat sound feature previously available from the interval and triad identification screens is now de-activated. In exam mode, every time the computer plays an interval or triad, it counts as an attempt (no freebies). Therefore, if you had been using the repeat function quite often in practice mode, your initial scores in exam mode may now be lower.

The elapsed time clock is reset to 00:00 every time you enter exam mode. It will keep track of the time spent on your test.

At the conclusion of your test session, your complete test results will be permanently saved to disk, along with your name, test date and test number. The results screen will display 'saving test data' for verification.  
note: it is recommended that all test results be saved to the same work disk. Using multiple disks may result in loss of test records or faulty program operation. Each work disk will allow between 130 and 150 complete test records. If you should ever need to exceed this limit, simply make another work disk from your original Ear-Training Tutor program disk as described on page 5 - Making a Backup Copy. These precautions are necessary in order to assure confidential and tamper-free test records.

It is recommended that exam mode be activated only as a final evaluation of material previously extensively practiced. This will keep your work disk from becoming crowded with duplicate results and will let you better evaluate your progress. Practice current material until you feel confident and only then activate then EXAM MODULE to test yourself on that material.

note to classroom teachers: If your students are using Ear-Training Tutor in a classroom lab situation, you will need a special program to be able to read the test records on your students' personal disks. This program is available from MSB Music Software. Please contact us for further information.

MIDI PLAYBACK NOTES

Ear-Training Tutor will automatically playback all sounds on any MIDI synthesizer that connects to the computer through a Passport or Sonus compatible MIDI interface cartridge. The resulting sound quality and flexibility of timbre choices is far superior to those produced by any personal computer's sound chip and is especially recommended for serious music applications. If you (or your school) already have a MIDI synthesizer, then all you need to take advantage of this superior sound is a compatible MIDI interface to connect the computer to the synthesizer. The procedure is as follows:

- 1) Make sure all units are OFF.
- 2) Connect the MIDI-interface to the game cartridge slot of the computer (follow your interface's connection instructions).
- 3) Connect the MIDI-out jack on the interface to the MIDI-in jack on the synthesizer using a 5-pin DIN MIDI cable.
- 4) Connect synthesizer to amplifier. Turn synthesizer and amplifier ON and volume UP.
- 5) Turn ON your printer, computer, disk drive, and monitor.
- 6) Set synthesizer to MIDI RECEIVE channel #1 or OMNI mode.
- 7) Select a timbre (sound program) on synthesizer that will be appropriate for ear-training purposes - a piano-type sound is a good choice. Note: be sure the sound you select plays in the correct octave. For example, bass sound programs on synthesizers are often pre-patched to sound one octave lower and some string programs sound one octave higher than played. You can easily check octaves by comparing the sound played by the computer with the one played by the synthesizer as they sound simultaneously.
- 8) Turn DOWN computer volume (on monitor) as there may be slight intonation differences between its pitch level and the synthesizer's (of course, you can always tune the synthesizer to match the computer if you wish). The computer pitch level is set to concert A = 440.

If you are having problems, make sure all cables are connected properly, that the synthesizer is set to OMNI mode or RECEIVE channel 1 and that the volume is UP on your amplifier and synthesizer.

You may use as many timbres to test yourself as your synthesizer is capable of producing by directly selecting them on your synthesizer's front panel controls.

It is possible to use any MIDI sound producing device such as keyboard-less synthesizer modules and tone generators. In order to hear harmonic sounds, the unit must have polyphonic capability as well.

note: It is strongly recommended that you NEVER insert or remove your MIDI cables or interface from the cartridge port while your computer power is on. This could lead to damage to your computer, interface or both. The same goes for all connections to the joystick ports as well. Make all connections with the power OFF. Beware of static electricity discharge to the joystick ports from you or the connectors which could lead to internal chip failure.

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