

MUSIC LESSONS I

Fundamentals



Reference Manual

Version 3 for Macintosh
System 7.5 or later

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Acknowledgments

MiBAC™ MUSIC LESSONS I software written by Todd Wallar and John Ellinger.

Manual written by John Ellinger.

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CHAPTER 1 - DRILLS

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This section discusses each of the twelve MUSIC LESSONS I drills. We'll begin by looking at elements common to all twelve drills. Information presented in this opening section will not be repeated later. When we discuss the individual drills we'll focus on elements unique to that drill.

USER SETTINGS

The way you interact with MUSIC LESSONS I is affected by settings in the Preferences dialog, and by items in the Options, Sound, Clefs, Instrument, and Level menus which will be discussed briefly here. A more thorough discussion will be found in the Menus and Preferences sections of this manual.

Many settings in MUSIC LESSONS I can be made permanent so they'll be remembered the next time you use the program.

A setting is on when the item is checked; it's off when there is no check. Items that end with an ellipsis (...) open a dialog box with additional choices. Items that are grayed out are disabled and cannot be chosen.

OPTIONS MENU

Items in the Options menu affect how you input answers and interact with the program.

Auto Next Note

When Auto Next Note is on and you play a note, the text insertion point advances to the next answer box. When Auto Next Note is off and you play a note, the text insertion point remains in the same answer box. To advance to the next answer box type the tab key. The menu item affects only the current drill. To make this setting permanent use the Drill page of the Preferences dialog. See page 31.

Auto Next Question

If Auto Next Question is on when you check your answers and your answer is correct, you'll get a new question. The menu item affects only the current drill. To make this setting permanent use the Drill page of the Preferences dialog. See page 31.

Allow Typed Answers

If Allow Typed Answers is on, you can type your answers. When Allowed Typed Answers is on, MUSIC LESSONS I doesn't care if you play the note in the correct octave, only that you get the name right. This menu item affects all twelve drills. To make this setting permanent use the General page of the Preferences dialog. See page 30.

Fast Answer Checking

When Fast Answer Checking is on, MUSIC LESSONS I automatically checks

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your answers as soon as all answer boxes are filled. If your answers are correct you'll instantly get a new question. If any answers are wrong, the first wrong answer will be selected. When you've corrected that answer, the next wrong answer will be selected. As soon as you've corrected all the wrong answers, your answer will be checked again. Fast Answer Checking is a rapid way to improve your skills in all drills. This menu item affects all twelve drills. To make this setting permanent use the General page of the Preferences dialog. See page 30.

Set Global Keys

Set Global Keys lets you choose the keys or starting notes used when assigning questions. The menu item affects the Key Signatures, Major Minor Scales, Modes, Jazz Scales, Scale Degrees, and Intervals drills.

SOUND MENU

Items in the Sound menu let you choose whether to use Mac, QuickTime, or MIDI. You can also use sound effects, change the tempo, and assign MIDI patches. See Chapter 4, Sound, page 39.

CLEFS MENU

The items in the Clefs menu let you choose between treble, bass, alto, tenor, or a combination of these clefs. The clef you select affects all drills.

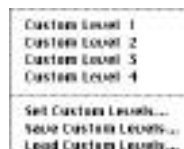
INSTRUMENT MENU

The items in the Instrument menu let you choose between a Piano, Guitar, or Alphabet Blocks instrument. The instrument you choose affects all instrument drills.

LEVEL MENU

The Level menu for each drill is divided into two sections, main and custom. The

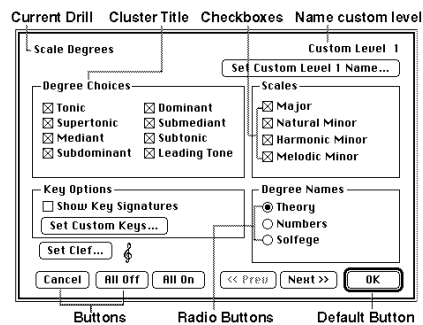
menu items in the main section of each drill will be discussed later in this section. The items in the custom section of the Level menu are the same for each drill.



You can create, save, and load up to four custom levels in each drill.

Set Custom Levels

When you choose the Set Custom Levels command, a dialog box opens where you can create the content for four custom levels. Although the Set Custom Levels dialog boxes are different for different drills, they all share some common features. For example, let's look at the Set Custom Levels dialog box for the Scale Degrees drill.



Several types of controls are used in the dialog: buttons, radio buttons, and check boxes. Groups of controls enclosed in rectangular frames are called clusters.

Buttons

There are slight variations in the appearance of the buttons in this dialog. The default button (OK) is outlined by a thick black border. You can type return or enter as a shortcut for the default button. A button whose name ends with an ellipsis (Set Clef...) opens another dialog box with additional settings. Buttons that are grayed out (<<Prev) are disabled and cannot be chosen.

Radio Buttons

Radio buttons are used for multiple choice items. In any group of radio buttons, only one radio button can be on at a time.



Check Boxes

Check boxes differ from radio buttons in that several check boxes can be on at one time. Custom dialogs often contain many check boxes. It's tedious to turn them on and off one at a time, so we've made it easier. The buttons All On and All Off will turn every checkbox in the dialog on or off. Clicking the cluster title will turn every check box in that cluster on and off.



Set Custom 1 Name

The title of this button indicates which of the four custom levels you're working with. Clicking this button opens the Set Custom Name dialog where you name this custom level. That name will appear in the Level menu.

<< Prev and Next >>

Use the Prev and Next buttons to navigate through the four custom levels. The level currently in effect is shown in the Set Custom 1 Name button title.

Save Custom Levels

The Save Custom Levels menu command is used to save the four custom levels of the current drill. You can create as many custom level files, for as many drills, as you want. Each file contains one set of custom levels for one drill.

Load Custom Levels

The Load Custom Levels command is used to open a custom level file. The standard open file dialog will appear. After you've selected the custom level file you want to open, another dialog will ask for confirmation prior to replacing the custom levels.



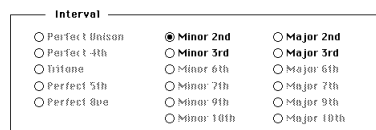
If you click Load, the custom levels found in the file replace the four custom levels of that drill.

Dim Unused Selections

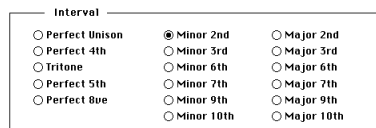
Another setting that affects custom levels is the Dim Unused Selections check box found on the Drill page of the Preferences dialog. It affects the display of answer buttons in the Custom Levels you create in the six multiple choice drills: Key Signatures, Scale Degrees, Intervals, Note Rest Durations, Scales Ear Training, and Intervals Ear Training. When the Dim Unused Selections check box is off, all answer buttons are enabled, even though only a few may have been used for the questions. When the Dim Unused Selections check box is off, only those answer buttons that are actually used are enabled; the others are disabled.

Here's an Intervals Ear Training custom level that uses only major and minor seconds and thirds.

Dim Unused Selections On



Dim Unused Selections Off



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The topics we've just covered are common to all twelve drills. We'll now discuss the drills individually, focusing on elements unique to each drill.



NOTE READING

The purpose of this drill is to help you learn to read music and improve your sight reading. Sight reading is one of the most important musical skills you can develop, because the better you are at sight reading, the more music you can play. The Note Reading drill is an excellent way to improve your sight reading skills, especially when used with Fast Answer Checking.

Note Reading Skill Levels



There are five main levels. The level in effect will have a check mark by its name.

Spaces — Notes appear on the four spaces of the staff.

Lines — Notes appear on the five lines of the staff.

Staff — Notes appear within the staff.

Ledgers — Notes appear within the staff and on ledger lines above and below the staff.

Ledgers Only — Notes appear only above and below the staff.

The following items modify the current skill level. A check mark in the menu indicates that it's in effect.

No Accidentals — Notes appear without accidentals.

Single Accidentals — Notes appear with sharps, flats, or naturals.

Double Accidentals — Notes appear with sharps, flats, naturals, double sharps, or double flats.

The following items modify the Ledgers and Ledgers Only drills and are enabled only when you're using those two levels. A check mark in the menu indicates that it's in effect.

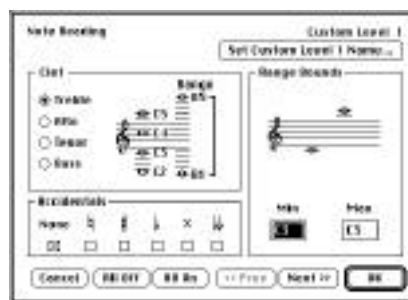
Beginning Ledgers — Notes appear up to two ledger lines above or below the staff.

Advanced Ledgers — Notes appear up to five ledger lines above or below the staff.

Notes will not exceed the range of the displayed instrument. For example, the highest note you can play on the four octave piano in treble clef is two ledger lines above the staff. However, if you switch to the six octave piano, notes five ledger lines above the staff will be within the range of the instrument and therefore can be used.

Note Reading Custom Levels

The Set Custom Levels command from the Level menu opens the Custom Levels dialog where you can create four custom levels for the Note Reading drill.



Clef — Choose the clef.

Accidentals — Choose the accidentals.

Range Bounds — Choose the minimum and maximum note range.

5 CIRCLE OF FIFTHS

The purpose of this drill is to help you learn how the Circle of Fifths is used to identify major and minor keys based on the number of increasing sharps and flats found in the key signature, the order that sharps and flats appear in key signatures, and the ability to play through the ascending or descending circle of fifths beginning with any note. Circle of fifths motion is used extensively in jazz, pop, and classical music chord progressions.

Circle of Fifths Skill Levels



There are seven main levels. The level in effect will have a check mark by its name.

Major Sharp Keys — the major sharp keys in order of increasing sharps in the key signature, from C major to C[♯] major C-G-D-A-E-B-F[♯]-C[♯]

Major Flat Keys — the major flat keys in order of increasing flats in the key signature, from C major to C[♭] major C-F-B[♭]-E[♭]-A[♭]-D[♭]-G[♭]-C[♭]

Minor Sharp Keys — the minor sharp keys in order of increasing sharps in the key signature, from A minor to A[♯] minor A-E-B-F[♯]-C[♯]-G[♯]-D[♯]-A[♯]

Minor Flat Keys — the minor flat keys in order of increasing flats in the key signature, from A minor to A[♭] minor A-D-G-C-F-B[♭]-E[♭]-A[♭]

Order of Sharps — the order that sharps appear in the key signature F[♯]-C[♯]-G[♯]-D[♯]-A[♯]-E[♯]-B[♯]

Order of Flats — the order that flats appear in the key signature B[♭]-E[♭]-A[♭]-D[♭]-G[♭]-C[♭]-F[♭]

Random Keys — name notes moving through the ascending or descending circle of fifths beginning with randomly selected starting notes

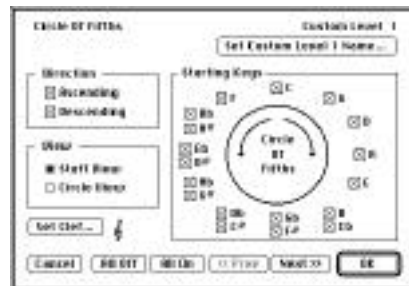
The following items affect the way the drill window is drawn. A check mark in the menu indicates that it's in effect.

Show Staff — display notes on the music staff

Show Circle — display notes around the circle

Circle of Fifths Custom Levels

The Set Custom Levels command from the Level menu opens the Custom Levels dialog where you can create up to four custom levels for the Circle of Fifths drill.



Direction — Choose either ascending or descending direction. For example, C-G-D-A-etc. moves by ascending fifths and C-F-B[♭]-E[♭]-etc. moves by descending fifths.

View — Choose the music staff view or circle view.

Set Clef — Choose the clef. The clef in effect for this custom level is displayed to the right of the button.

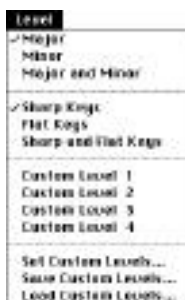
Starting Keys — Choose the keys you want to use for the questions.



KEY SIGNATURES

This drill will help you learn to identify major or minor keys based on the number of sharps or flats appearing in the key signature. Key signatures appear just after the clef symbol on each line of music. When you know the key signature and the notes of the corresponding major or minor scale, you know the notes the composer used as the raw materials for the melodies and harmonies in the piece.

Key Signatures Skill Levels



There are three main levels. The level in effect will have a check mark by its name. You can specify the keys you want to use with the Set Global Keys command in the Options menu. See page 62.

Major — Major keys will be used.

Minor — Minor keys will be used.

Major and Minor — Major and minor keys will be used.

If you choose either Major or Minor, only one set of answer buttons will be drawn.

If you choose both Major and Minor, both sets of answer buttons will be drawn.

The following items modify the current skill level. A check mark in the menu indicates that it's in effect.

Sharp Keys — Key signatures use sharps.

Flat Keys — Key signatures use flats.

Sharp and Flat Keys — Key signatures use both sharps and flats.

Key Signatures Custom Levels

The Set Custom Levels command from the Level menu opens the Custom Levels dialog where you can create up to four custom levels for the Key Signature drill.



Types — Choose major keys, minor keys, or both.

Major Keys — Choose the major keys you want to use.

Minor Keys — Choose the minor keys you want to use.

Set Clef — Choose the clef. The clef in effect for this custom level is displayed to the right of the button.

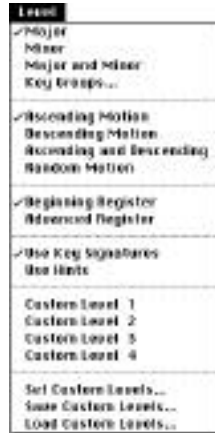


FIVE FINGER

POSITIONS

This drill will help you learn to recognize and play the five finger positions of all major and minor keys. Five finger positions are used in the early years of piano lessons. Because five finger positions use the first five notes of the major and minor scale, they are a good introduction to scales. The Five Finger Position drill is most useful with the piano instrument and is less useful with the guitar and alphabet block instruments.

Five Finger Positions Skill Levels



There are four main levels. The level in effect will have a check mark by its name.

- Major* — All fifteen major keys will be used.
- Minor* — All fifteen minor keys will be used.
- Major and Minor* — All major and minor keys will be used.
- Key Groups* — Select major and minor keys from four groups.
 - Group 1 — Fingers 1 3 5 on white keys
 - Group 2 — Fingers 1 and 5 on white keys, 3 on a black key
 - Group 3 — Fingers 1 and 5 on black keys, 3 on a white key
 - Group 4 — The rest

The following items modify the current skill level. A check mark in the menu indicates that it's in effect.

- Ascending Motion* — The five notes will be displayed in ascending order.
- Descending Motion* — The five notes will be displayed in descending order.
- Ascending and Descending* — The five notes will be displayed in either ascending or descending order.
- Random Motion* — The five notes will be displayed in random order.

The following items modify the current skill level. A check mark in the menu

indicates that it's in effect.

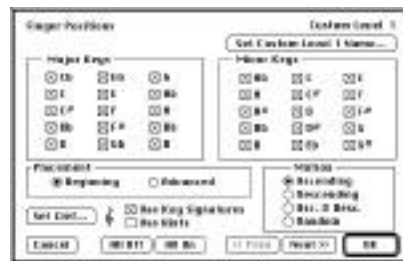
- Beginning Register* — The five notes will be placed in commonly used music staff positions.
- Advanced Register* — The five notes will be placed in commonly used staff positions as well as an octave higher or lower.
- Use Key Signatures* — If this is checked, a key signature appears in the staff and the notes appear without accidentals. If it's unchecked, no key signature is displayed and the notes appear with accidentals.
- Use Hints* — If this is checked, a light bulb button is displayed to the left of the screen piano. When you click the light bulb, the piano keys for that five finger position will be highlighted. This item is not available with the guitar or alphabet block instruments.

When the light bulb button is visible you can type "Command-I" as a shortcut for clicking the light bulb.



Five Finger Positions Custom Levels

The Set Custom Levels command from the Level menu opens the Custom Levels dialog where you can create up to four custom levels for the Five Finger Position drill.



- Major Keys* — Choose any combination of major keys.
- Minor Keys* — Choose any combination of minor keys.

Placement — Choose the placement of the notes on the staff.

Motion — Select Ascending, Descending, Ascending and Descending, or Random motion.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.

Use Key Signatures — If this is checked, a key signature appears in the staff and the notes appear without accidentals. If it's unchecked, no key signature is displayed and the notes appear with accidentals.

Use Hints — This displays the light bulb button to the left of the screen piano. You can click the light bulb to highlight the piano keys used for the five finger position.

THE THREE SCALES DRILLS

The Major/Minor Scales, Modes, and Jazz Scales drills have these elements in common: the Strict Answers and Lenient Answers menu items; the Black Keys Are Sharps and Black Keys Are Flats radio buttons; the Accidental Toolbar; and the keyboard popup menu. Each of these items affect the spelling of the names of notes.

STRICT / LENIENT ANSWERS

These two items are found in the Level menu. Because every note can have three enharmonic names (C = B \sharp = D \flat) it's sometimes difficult for MUSIC LESSONS I to know what to call the notes you play. In music theory the correct spelling of each note is important. Strict Answers enforces music theory rules for the names of notes in the scale. Lenient Answers relaxes the rules so you can just play the notes on the keyboard.

Strict Answers

If Strict Answers in the level menu is checked, the following items affect the names of the notes you play: the keyboard popup menu, the Accidental Toolbar, the Black Keys Are Sharps, and the Black Keys Are Flats radio buttons.

Keyboard Popup Menu

Click a piano key, guitar fret, or alphabet block and keep the mouse button held down. A popup menu will appear allowing you to select the name of the note.



Accidental Toolbar

When you need to apply a specific accidental to a note, select it here before playing the note. There are command key shortcuts for each of the accidentals. Press the "Apple-clover leaf-propeller" key and type the letter shown.



Black Keys Are Sharps Button and Black Keys Are Flats Button

When the Natural is selected in the Accidental Toolbar, these two buttons are automatically set to the most common accidental used in the scale. Notes you play will be correct about 95% of the time, but you still will have to use the keyboard popup menu or Accidental Toolbar for special cases like calling a white key E \sharp instead of F.

The following charts show how the accidental selected in the Accidental toolbar affects the names of the notes in Strict Answers mode.

White Key Names

White key names are not affected by the Black Keys Are Sharps or Black Keys Are Flats radio buttons. They are affected by

the accidental selected in the Accidental Toolbar as shown in the following chart. Notes that do not make sense with the selected accidental are shown as a double question mark.

Accidental	White Key Played						
	A	B	C	D	E	F	G
\natural	A	B	C	D	E	F	G
\sharp	??	??	B \sharp	??	??	F \sharp	??
\flat	??	C \flat	??	??	F \flat	??	??
\natural	B \flat	??	D \flat	E \flat	??	G \flat	A \flat
\times	G \sharp	A \sharp	??	C \sharp	D \sharp	??	F \sharp

Black Key Names

If the natural is selected in the Accidental Toolbar, the black key names reflect the setting of the Black Keys Are Sharps or Black Keys Are Flats radio buttons. If an accidental other than the natural is selected in the Accidental Toolbar, the names of black keys are shown in the following chart. Notes that do not make sense with the selected accidental are shown as a double question mark.

Accidental	Black Key Played					
Black Keys Are Sharps	C \sharp	D \sharp		F \sharp	G \sharp	A \sharp
Black Keys Are Flats	D \flat	E \flat		G \flat	A \flat	B \flat
\natural	C \sharp	D \sharp		F \sharp	G \sharp	A \sharp
\flat	D \flat	E \flat		G \flat	A \flat	B \flat
\sharp	C \sharp	D \sharp		F \sharp	G \sharp	A \sharp
\flat	D \flat	E \flat		G \flat	A \flat	B \flat
\natural	??	F \sharp		??	??	C \sharp
\times	B \sharp	??		E \sharp	??	??

Lenient Answers

In the Lenient Answers mode, if you play a correct note it will be named correctly. If you play a wrong note the following rules apply.

White Key Names

White keys are named by their natural name.

Black Key Names

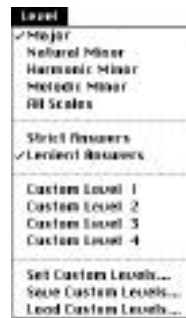
Black keys are named from the most common accidental used in that scale.



MAJOR / MINOR SCALES

This drill will help you learn what notes are used in the major, natural minor, harmonic minor, and melodic minor scales. The notes of these scales are the raw materials used to construct melodies and chords.

Major/Minor Scales Skill Levels



There are five main levels. The level in effect will have a check mark by its name. By default all major and minor keys will be used. You can specify the keys you want to use with the Set Global Keys command in the Options menu. See page 24.

Major — All scales will be major.

Natural Minor — All scales will be natural minor.

Harmonic Minor — All scales will be harmonic minor.

Melodic Minor — All scales will be melodic minor.

All Scales — Scales will be any of the above four types.

The following items affect the way MUSIC LESSONS I interprets your answers. A check mark in the menu indicates that it's in effect.

Strict Answers — You have to spell each note correctly. You may have to use the keyboard popup menu or Accidental toolbar for special case accidentals.

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Lenient Answers — If you play the correct notes, they will be named correctly.

Major / Minor Scales Custom Levels



Scales — Choose the type of scales you wish to use.

Options — Choose strict or lenient answers.

Major Keys — Choose any combination of keys.

Minor Keys — Choose any combination of keys.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.

There are eight main levels. The level in effect will have a check mark by its name. By default any black or white key can be used for the starting note. You can specify the starting pitches you want to use with the Set Global Keys command in the Options menu. See page 24.

Ionian — All modes will be Ionian.

Dorian — All modes will be Dorian.

Phrygian — All modes will be Phrygian.

Lydian — All modes will be Lydian.

Mixolydian — All modes will be Mixolydian.

Aeolian — All modes will be Aeolian.

Locrian — All modes will be Locrian.

All Modes — All modes will be used.

The following items affect the way MUSIC LESSONS I interprets your answers. A check mark in the menu indicates that it's in effect.

Strict Answers — You have to spell each note correctly. You may have to use the keyboard popup menu or Accidental Toolbar for special case accidentals.

Lenient Answers — If you play the correct notes, they will be named correctly.



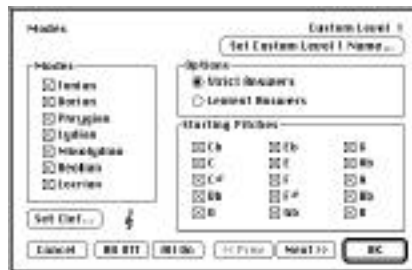
MODES

This drill will help you learn the modal scales. Modes were used by Renaissance composers. Modes are used today in jazz, pop and 20th century concert pieces. The major and natural minor scales are derived from the Ionian and Aeolian modes.

Modes Skill Levels



Modes Custom Levels



Modes — Choose the modes you wish to use.

Options — Choose Strict Answers or Lenient Answers.

Starting Pitches — Choose any combination of starting notes to use for the modes.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.



JAZZ SCALES

This drill will help you learn what notes are used in several jazz scales. The notes of these scales are the raw materials for improvised melodies in jazz.

Jazz Scales Skill Levels



There are seven main levels. The level in effect will have a check mark by its name. By default any black or white key can be used for the starting note. You can specify the starting pitches you want to use with the Set Global Keys command in the Options menu. See page 62.

Dorian Flat 2 — All scales will be Dorian Flat 2.

Lydian Sharp 5 — All scales will be Lydian Sharp 5.

Mixolydian Sharp 4 — All scales will be Mixolydian Sharp 4.

Mixolydian Flat 6 — All scales will be Mixolydian Flat 6.

Minor Flat 5 — All scales will be Minor Flat 5.

Locrian Flat 4 — All scales will be Locrian Flat 4.

All Jazz Scales — All the above jazz scales will be used.

The following items affect the way MUSIC LESSONS I interprets your answers. A check mark in the menu indicates that it's in effect.

Strict Answers — You have to spell each note correctly. You may have to use

the keyboard popup menu or Accidental Toolbar for special case accidentals.

Lenient Answers — If you play the correct notes, they will be named correctly.

Jazz Scales Custom Levels



Jazz Scales — Choose the jazz scales you wish to use.

Options — Choose Strict Answers or Lenient Answers.

Starting Pitches — Choose any combination of starting notes to use for the jazz scales.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.



SCALE DEGREES

This drill will help you learn a note's position within a major or minor scale or key. Each scale degree (position) has a name. The different scale degrees have melodic and harmonic functions. Knowing the scale degrees will be very useful when studying melodies and chords.

Scale Degrees Skill Levels



There are six main levels. The level in effect will have a check mark by its name. By default all major and minor keys will be used. You can specify the keys you want to use with the Set Global Keys command in the Options menu. See page 24.

Major Scales — Notes from the major scale will be used.

Natural Minor Scales — Notes from the natural minor scale will be used.

Harmonic Minor Scales — Notes from the harmonic minor scale will be used.

Melodic Minor Scales — Notes from the melodic minor scale will be used.

All Minor Scales — Notes from all minor scales will be used.

All Scales — Notes from all major and minor scales will be used.

The following items modify the current skill level. A check mark in the menu indicates that it's in effect.

Theory Names — traditional theory names: tonic, supertonic, mediant, subdominant, dominant, submediant, subtonic, leading tone

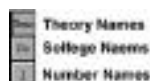
Solfege Names — moveable do names: do, re, mi, fa, sol, la, sa, si

Number Names — numerical position within the scale: 1, 2, 3, 4, 5, 6, ^b7, 7

Use Key Signatures — If this is checked, a key signature appears in the staff and the no accidentals appear in front of notes. If it's unchecked, no key signature is displayed and accidentals will appear in front of notes.

Scale Degree Toolbar

The Scale Degree Toolbar appears to the left of the screen keyboard and lets you select theory names, solfege names, or number names.



Scale Degrees Custom Levels



Degree Choices — Choose the scale degrees you wish to use.

Scales — Choose any combination of scale types.

Key Options — Choose whether or not to display key signatures. Click the Set Custom Keys button to choose the keys.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.

Degree Names — Choose the syntax.



INTERVALS

This drill will help you learn to identify intervals visually. An interval is the distance in pitch, measured in half steps, between two notes. Quick visual recognition of intervals is very important in sight reading and transposing.

Intervals Skill Levels



There are three main levels. The level in effect will have a check mark by its name.

Beginning — Interval sizes range from unison to octave. Key signatures are used. The first note of the interval is the first note (tonic) of the major or minor scale represented by the key signature. Diminished and augmented intervals are not used.

Intermediate — Interval sizes range from unison to octave. Key signatures are used. Both notes of the interval belong to the major or minor scale represented by the key signature and can be any two scale notes. Doubly diminished and doubly augmented intervals are not used.

Advanced — Interval sizes range from unison to tenth. Key signatures are not used. The two notes of the interval can be any notes altered by any accidental. All intervals are used.

The following items modify the current skill level. A check mark in the menu indicates that it's in effect.

Ascending — Use ascending intervals.

Descending — Use descending intervals.

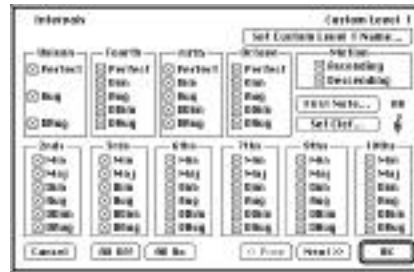
Ascending and Descending — Use both ascending and descending intervals.

Set First Note — this opens the following dialog where you can set the first note of the interval to a specific pitch.



You can specify the keys you want to use in the Beginning and Intermediate levels with the Set Global keys command in the Options menu. See page 24.

Intervals Custom Levels



Unison — Choose qualities for unisons.

Fourth — Choose qualities for fourths.

Fifth — Choose qualities for fifths.

Octave — Choose qualities for octaves.

Motion — Choose ascending intervals, descending intervals, or both.

First Note — Choose the pitch for the first note of the interval. The pitch currently in effect is displayed to the right of the button.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.

2nds — Choose qualities for seconds.

3rds — Choose qualities for thirds.

6ths — Choose qualities for sixths.

7ths — Choose qualities for sevenths.

9ths — Choose qualities for ninths.

10ths — Choose qualities for tenths.

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Additional Settings for Intervals

Additional settings for the Intervals drill are found on the Intervals/Scales ET (Ear Training) page of the Preferences dialog. You can specify whether intervals are to be played melodically, harmonically, or both.



You can set the number of times the interval will be played when you get a new question. If you're using MIDI or QuickTime sounds you can assign different sounds to Interval Note 1 and Interval Note 2. If you're using different sounds for Interval Note 1 and Interval Note 2 you should assign them to different MIDI channels. See page 35.

4 NOTE / REST DURATIONS

This drill will help you learn how many beats a note or rest receives in various time signatures. This is essential for understanding how rhythm and counting work.

Note/Rest Durations Skill Levels



There are three main levels. The level in effect will have a check mark by its name.

- Notes* — Note symbols will be used.
- Rests* — Rest symbols will be used.
- Both Notes and Rests* — Both note and rest symbols will be used.

The following item lets you choose whether to use dotted notes. A check mark in the menu indicates that it's in effect.

Use Dots — If this is checked, dotted notes will be used some of the time. If it's unchecked, no dotted notes will be used.

The following items refer to the beat value, the lower number in the time signature. A check mark in the menu indicates that it's in effect.

- Half Note Beat* — The lower number of the time signature is 2.
- Quarter Note Beat* — The lower number of the time signature is 4.
- Eighth Note Beat* — The lower number of the time signature is 8.
- Sixteenth Note Beat* — The lower number of the time signature is 16.
- All Beat Units* — All time signatures will be used.

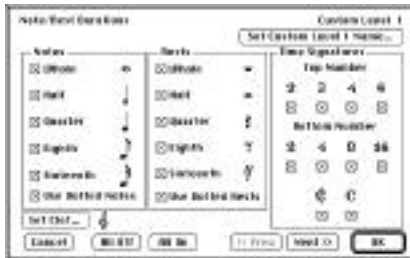
The following items specify the levels of beat divisions used. A check mark in the menu indicates that it's in effect.

- First Beat Division* — The smallest note value used will be equal to the beat value.
- Second Beat Subdivision* — The smallest note value used will be the next smallest value of the beat value.
- All Beat Subdivisions* — The smallest note value used will be a sixteenth note.

The following chart shows the relationship between time signatures and beat divisions. The upper number of the time signature can be a 2, 3, 4, or 6 and is shown as an X.

	Half Note Beat	Quarter Note Beat	Eighth Note Beat	Sixteenth Note Beat
X = 2,3,4,6				
First Beat Division				
Second Beat Division				
All Beat Divisions				

Note/Rest Durations Custom Levels

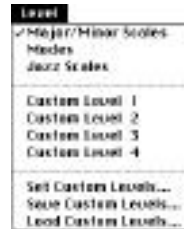


- Notes* — Choose any combination of note values. If you want to use dotted notes, check Use Dotted Notes.
- Rests* — Choose any combination of rest values. If you want to use dotted rests, check Use Dotted Rests.
- Time Signatures* — Choose the upper and lower numbers of the time signature.
- Set Clef* — Choose the clef. The clef currently in effect is displayed to the right of the button.

SCALES EAR TRAINING

This drill will help you learn to identify scales by listening. Learning to recognize what you hear is an important musical skill.

Scales Ear Training Skill Levels



There are three main levels. The level in effect will have a check mark by its name.

- Major / Minor Scales* — The major and three forms of the minor scales will be used.
- Modes* — The seven modal scales will be used.
- Jazz Scales* — The six jazz scales will be used.

Scales Ear Training Custom Levels



- Major / Minor* — Choose any major and minor scales.
- Modes* — Choose any modes.
- Jazz Scales* — Choose any jazz scales.
- Set Starting Pitches* — Choose the starting pitches.
- Set Clef* — Choose the clef. The clef currently in effect is displayed to the right of the button.

INTERVALS EAR TRAINING

This drill will help you learn to identify intervals by listening. Learning to recognize what you hear is an important musical skill.

Intervals Ear Training Skill Levels



There are three main levels. The level in effect will have a check mark by its name.

Beginning — Interval sizes range from unison to fifth.

Intermediate — Interval sizes range from unison to octave.

Advanced — Interval sizes range from unison to tenth.

The following items modify the current skill level. A check mark in the menu indicates that it's in effect.

Ascending — Use ascending intervals.

Descending — Use descending intervals.

Ascending and Descending — Use both ascending and descending intervals.

Set First Pitch — Restrict the first note of the interval to a specific pitch.

Intervals Ear Training Custom Levels



Interval Types — Select the interval sizes and qualities.

First Pitch — Choose the pitch of the first note of the interval. The pitch currently in effect is displayed to the right of the button.

Set Clef — Choose the clef. The clef currently in effect is displayed to the right of the button.

Interval Motion — Choose ascending intervals, descending intervals, or both.

Additional Settings for Intervals

Additional settings for the Intervals drill are found on the Intervals / Scales ET (Ear Training) page of the Preferences dialog. You can specify whether intervals are to be played melodically, harmonically, or both.



You can set the number of times the interval will be played when you get a new question. If you're using MIDI or QuickTime sounds you can assign different sounds to Interval Note 1 and Interval Note 2. If you're using different sounds for Interval Note 1 and Interval Note 2 you should assign them to different MIDI channels. See page 35.

CHAPTER 2 - MENUS

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This section discusses the commands found in MUSIC LESSONS I's menus.

APPLE MENU

The first item in the Apple menu is About MUSIC LESSONS I. This item displays a dialog box containing the version number, the registered user name, and information about contacting MiBAC Music Software.

FILE MENU

The File menu contains commands that allow you to create, open, save, and print Progress Reports. It also contains the Preferences command that lets you customize MUSIC LESSONS I.



New Progress Report...

When you choose New Progress Report the Name dialog box appears asking for your name.



The name you type is attached to the Progress Report window and cannot be changed. Click OK and the Progress Report window will open. In a classroom or studio setting each student can have her/his own progress report file. The number of student files is limited only by disk space. This menu item is disabled if a Progress Report window is already open. See the User Guide, pages 32-35.

Open Progress Report...

When you choose Open Progress Report the Open File dialog box appears where you select the Progress Report you want to open. This menu item is disabled if a Progress Report window is already open. See the User Guide, pages 32-35.

Close

Closes the Progress Report or Help window. If there are unsaved changes, you will be asked if you want to save them. This menu item is disabled if no Progress Report window is open.

Save Progress Report

You normally use this command to save scores to an existing file. When you save a Progress Report the Session Scores will be reset to zero. This menu item is disabled if no Progress Report window is open, or if there are no unsaved scores.

Save Progress Report As...

You normally use this command to save a file for the first time, or to save an existing file with a new name. This item displays the standard Save dialog box, where you can name and save a Progress Report. This item is disabled if no Progress Report window is open.

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Page Setup...

Displays the standard Page Setup dialog box. The exact appearance of the dialog box depends on the printer selected in the Chooser. The Chooser is found in the Apple menu.

Print...

You can print Progress Report and Help windows. The scores displayed in the lower portion of the Progress Report window will be printed. The file that's being displayed in the Help window will be printed.

Preferences...

Displays the Preferences dialog box where you can customize program settings used by MUSIC LESSONS I. There are fifteen pages in the Preferences dialog that can be accessed by the Preferences popup menu or by the Prev and Next buttons. If you click the OK button, the dialog will close and the settings on all changed pages will be used until you quit. If you click the Permanent button, the dialog will remain open and the settings on the current page will be saved to a file called "MUSIC LESSONS Preferences" in the Preferences folder inside the System Folder and will be used the next time you start the program. Preferences are discussed in detail in Chapter 3, Preferences, page 29.



Quit

Quits MUSIC LESSONS I. If there are unsaved scores a dialog box will appear giving you four choices. You can save scores to an existing file; to a new file;

quit without saving; or cancel and return to the program.



EDIT MENU

The Edit menu contains the usual cut, copy, and paste commands.

DRILL MENU

The Drill menu contains commands that allow you to choose one of twelve different drills. The Drill menu is discussed in detail in Part 5, Drills, page 39. The drill you want to use at program start up can be set on the General page of the Preferences dialog. See page 69.



LEVEL MENU

The Level menu refers to level of difficulty. It is divided into two sections, main and custom. The number of items in the main section changes for each of the twelve drills. The levels of difficulty in the Main section range from easy to difficult. The custom section stays the same and lets you create, save, and load four custom levels in each drill. The Level menu for each drill is discussed in Chapter 1, Drills, page 5.

CLEFS

The Clefs menu lets you choose between the treble, bass, alto, tenor, or any combination of these clefs. The clef you want to use at program start up can be set on the General page of the Preferences dialog. See page 30.

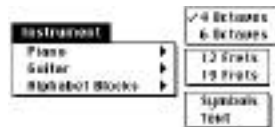


To work in a single clef, choose that clef from the menu. To alternate between clefs, choose the Random command and select any combination of clefs.



INSTRUMENT MENU

The Instrument menu lets you choose between the four or six octave piano, the twelve or nineteen fret guitar, or alphabet blocks that display accidentals as symbols or text. The instrument you want to use at program start up can be set on the General page of the Preferences dialog. See page 30.



Instruments are discussed in the User Guide, page 18. You can customize the sound and appearance of the instruments by using the Color, Piano, Guitar, and Alphabet Block pages of the Preferences dialog. See pages 31, 33-35

OPTIONS MENU

The Options menu contains commands that affect the way you interact with the program. Many of these options can be set in the Preferences dialog so they'll be in effect at program start up.



Auto Next Note

The Auto Next Note command affects only the current drill. When Auto Next Note is on (has check mark), each time you play a note the text insertion point advances to the next answer box. When you play several notes in a row, each note is entered into successive answer boxes. When Auto Next Note is off (no check mark), every note you play stays in the same answer box, replacing the note previously there. You type the tab key or right arrow key to move to the next answer box. It is disabled in drills that have only one answer box. You can set Auto Next Note independently for each drill using the Drill page in the Preferences dialog. See page 31.

Auto Next Question

The Auto Next Question command affects only the current drill. When Auto Next Question is on (has check mark), each time you check your answers and they're correct, you'll get a new question. When Auto Next Question is off (no check mark), you won't get a new question, even if your answers are correct. You can set Auto Next Question independently for each drill using the Drill page in the Preferences dialog. See page 31.

Allow Typed Answers

The Allow Typed Answers command affects all drills. If you want to type your answers, be sure Allow Typed Answers is on (has check mark). When it's on, the

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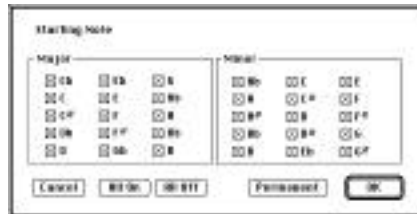
program checks that the note name is correct, but does not care if you played it in the correct octave. When it's off, both the note name and octave position of the note have to be correct. Allow Typed Answers can be enabled at program start up on the General page of the Preferences dialog. See page 30.

Fast Answer Checking

When Fast Answer Checking is on (has check mark), MUSIC LESSONS I automatically checks your question as soon as all answer boxes are filled. If your answers are correct you'll instantly get a new question. If any answers are wrong, the first wrong answer will be selected. When you've corrected that answer, the next wrong answer will be selected. As soon as you've corrected all the wrong answers, your answer will be checked again. Fast Answer Checking is a rapid way to improve your skills in all drills. Fast Answer Checking can be enabled at program start up on the General page of the Preferences dialog. See page 30.

Set Global Keys...

Set Global Keys lets you specify the key signatures or starting notes that will be used in the Key Signatures, Major/Minor Scales, Modes, Jazz Scales, Scale Degrees, and Intervals drills. It has no affect on custom levels. If you click OK, the keys/notes will be used until you quit from the program and will not be remembered across program restarts. If you click Permanent, the keys/notes will be remembered across program restarts.



Reset Scores...

Sometimes you get off to a bad start and just want to start over again. The Reset

Scores dialog lets you reset scores for the current level of the current drill (Reset Level), all levels of the current drill (Reset Drill), or all levels of all drills (Reset All). This only affects scores that have not been saved and will not change any scores already saved in your progress report.



SOUND MENU

The Sound menu contains commands that let you choose the sound system you want to use, choose whether you want to play sound effects for right and wrong answers, change the tempo, and specify the MIDI instrument sounds. Many of these options can be set in the Preferences dialog so they'll be in effect at program start up. Sound is discussed in more detail in Chapter 4, Sound, page 30.



Use Mac

When Use Mac is on (has check mark) sounds play through your Mac speaker. You can replace the sounds we use for the piano and guitar with your own. See page 94. Mac sounds can be enabled at program start up on the General page of the Preferences dialog. See page 30.

Use MIDI

When Use MIDI is on (has check mark) MUSIC LESSONS I can send and receive MIDI messages. MUSIC LESSONS I supports three MIDI systems: MiBAC's built in MIDI routines, Apple Computer's

MIDI Manager, and Opcode System's OMS (Open Music System). You can select the MIDI system you want to use from the MIDI Setup page of the Preferences dialog. See page 72. MIDI sounds can be enabled at program start up on the General page of the Preferences dialog. See page 30.

Use QuickTime

When Use QuickTime is on (has check mark) MUSIC LESSONS I will play notes using QuickTime Musical Instruments sounds. QuickTime sounds can be enabled at program start up on the General page of the Preferences dialog. See page 30. Different QuickTime sounds can be chosen for each instrument in the instrument pages of the Preferences dialog. See pages 33-35. This menu item and all QuickTime related options in the Preferences dialog will be disabled if QuickTime is not installed.

Use Sound

When Use Sound is on (has check mark) you'll hear sounds when you play the screen instrument, and when you click the Check, Play, or Show Me buttons. In some situations you might want to turn the sound off. For example, you're working in a public place and don't want to disturb others. Or, you're looking for faster feedback and want your answers checked instantly, without having to wait for each note to play. Use Sound can be enabled at program start up on the General page of the Preferences dialog. See pages 21, 30.

Use Sound Effects

When Use Sound Effects is on (has check mark) sound effects will be played after checking your answer. You can assign different sound effects to the correct answer and the wrong answer by using the Sound Effects page of the Preferences dialog. See page 37. You can create and use your own sound effects by recording and saving a 'snd ' resource and adding it to the Sound Effects folder. See page 51.

Sound effects can be enabled at program start up on the General page of the Preferences dialog. See page 30.

Set Tempo...

Set Tempo lets you change how fast the answers play. You might want to make answers play slowly so you have time to watch the correct notes highlight on the screen. You might want to make answers play fast so you can get a new question more quickly. If you click OK, the new tempo will be used until you quit from the program. If you click Permanent, the new tempo will be remembered across program restarts.



Set MIDI Patches...

Set MIDI Patches lets you assign different MIDI sounds (patches) to the piano, guitar, and alphabet block instruments; and to Interval Note 1, Interval Note 2, and Scales Ear Training sounds.



Use the Device popup menu to choose your synthesizer. Use the Apply To popup menu to specify which instrument or drill sound you're setting. Then click any cell to set the patch (sound) for that instrument. If Play On Click is checked, you'll hear the sound whenever you click a patch name. If you click OK, your choices will be used for the remainder of this session. If you click Permanent your choices will be remembered across program restarts.

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If your synthesizer isn't listed in the Device menu, you can create a patch list file in a text editor and copy it to the Synthesizer Name Files folder. See page 50.

WINDOW MENU

The Window menu lets you switch easily between Drill windows, Progress Report windows, and Help windows.



HELP MENU

The Help menu is displayed as a question mark icon at the right side of the menu bar. It contains commands to turn balloon help on and off, and to open the MUSIC LESSONS I Help window.



Show Balloons / Hide Balloons

Choose Show Balloons to turn balloon help on.

When Balloon Help is on, balloons appear when the mouse is moved over areas of the screen. The following picture shows the help balloon that appears when the mouse is moved over the Help icon in the Drill toolbar.

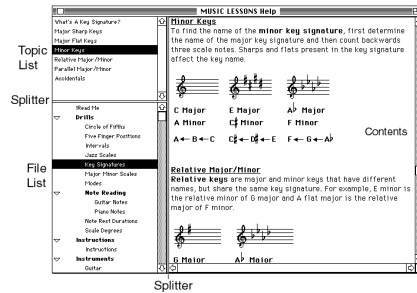


Balloon help is available for all menu items, dialogs, and drill windows used in MUSIC LESSONS I. Choose Hide Balloons to turn balloon help off.

MUSIC LESSONS I Help

A complete music theory reference is available by choosing Help from the Window menu, clicking the Help button in the toolbar, or choosing the MUSIC LESSONS I Help command from the Help Menu.

We've supplied help files explaining the music theory for all the drills in MUSIC LESSONS I as well as instructions for using the program. The following picture shows the MUSIC LESSONS I Help window.



The Help window is divided into three parts. The File List in the lower left displays the help files in the MUSIC LESSONS I Help folder. When you click a file name in the File List, the topics in that file appear in the Topic List in the upper left, and the contents of the file will appear in the Contents area on the right. When you click a topic in the Topic List, that topic will scroll into view in the Contents area.

When you see a speaker button in the help file, double click the speaker to play the sound.



The MUSIC LESSONS I Help system is extensible. You can create and add your own files to the MUSIC LESSONS I Help folder. Help files can be created with the ML Help Editor application and are just TEXT files containing colored, styled text, pictures, and sounds. Once you've created a help file, just copy it to the MUSIC LESSONS I Help folder, and it will show up in the File List in the Help window. See page 50 for information on creating your own help files.

Help files can be printed by choosing the Print command in the File menu.

CHAPTER 3 - PREFERENCES

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This section discusses the Preferences dialog where you can customize MUSIC LESSONS I. You can open the Preferences dialog by choosing the Preferences command in the File menu.

COMMON ELEMENTS

You can access the fifteen pages in the Preferences dialog using the Preferences popup menu or the Prev and Next buttons.



The following elements are common to each of the fifteen pages.

OK Button

Click the OK button to close the dialog and set the program preferences on all

changed pages. These settings remain in effect until you quit the program.

Permanent Button

If you click the Permanent button, the dialog will remain open and the settings on the current page will be saved to a file called "MUSIC LESSONS Preferences" in the Preferences folder inside the System Folder. These settings will be used the next time you start the program.

Defaults

Click the Defaults button to reset the current page to MUSIC LESSONS I's default settings.

<<Prev and Next>> Buttons

Click the Prev or Next buttons to move to the previous preference page or the next preference page. Changes you make to different pages will go into effect once you click the OK button. If you want settings on the current page to be remembered across program restarts, you must click the Permanent button before moving to a new page.

Cancel

Click Cancel to exit from the Preferences dialog without changing or saving any settings, even if you've clicked the Permanent button.

Clusters

A group of check boxes surrounded by a rectangular frame is called a cluster. Each cluster has a descriptive title. Click the cluster title to quickly turn all check boxes within the cluster on and off.



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Spin Buttons

Spin Buttons appear to the right of a text entry box. You can type a value directly into the text box or click the up or down arrow of the spin button to increase or decrease the value. The range of permitted values appears below the text entry box.



Speaker Button

If an item has a speaker button, you can click the speaker to play the sound.



GENERAL

The General page affects the program start up state, the sound system used, and answer checking. To make these settings permanent, remember to click the Permanent button.



Startup Drill

Choose the drill to be used at program start up.

Sound

Choose the sound system you want to use.

Use Sound

Use Sound should be checked if you want to hear the sounds.

Use Sound Effects

Use Sound Effects should be checked if you want to hear sound effects played for right and wrong answers.

Startup Instrument

Choose the instrument to be used at program start up.

Startup Clef

Choose the clef to be used at program start up.

Scales Answers

Choose whether you want the program to use Strict or Lenient Answers in the Major/Minor Scales, Modes, and Jazz Scales drills. Strict Answers requires you to spell notes correctly. Lenient Answers lets you play the notes on your keyboard and automatically call the notes by their correct names. See pages 47-48.

Allow Typed Answers

If you want to type your answers, turn on Allow Typed Answers. When this is on, MUSIC LESSONS I doesn't care if you play the note in the correct octave, only that you get the name right. This item affects all twelve drills.

Fast Answer Checking

When Fast Answer Checking is on, MUSIC LESSONS I automatically checks your answers when you've reached the last answer box. If your answers are correct you'll instantly get a new question. If any answers are wrong, the first wrong answer will be selected. When you've corrected that answer, the next wrong answer will be selected. As soon as you've corrected all wrong answers, your answer will be checked again. This item affects all twelve drills.

DRILL

The Drill page has settings that affect your interaction with the program. To make these settings permanent, click the Permanent button.



Auto Next Question

When Auto Next Question is on, you'll get a new question after you've checked your answer and it was correct. You can set Auto Next Question independently for each drill.

Auto Next Note

When Auto Next Note is on, the text insertion point advances to the next answer box each time you play a note. When it's off, each note you play remains in the same answer box. You use the tab key or right arrow key to move to the next answer box. You can set Auto Next Note independently for each drill that has more than one answer box.

Note Names

If Alphabet is selected, notes will be called A B C D E F G. If Solfege is selected, notes will be called Do Re Mi Fa Sol La Si. The solfege system is a fixed Do system; the note C is always Do.

Custom Levels

The Dim Unused Selections check box is found on the Drill page of the Preferences dialog. It affects the display of answer buttons in Custom Levels you create in any of the six multiple choice drills: Key Signatures, Scale Degrees, Intervals, Note Rest Durations, Scales Ear Training, and Intervals Ear Training. When the Dim Unused Selections check box is off, all

answer buttons are enabled, even though only a few may have been used for the questions. When the Dim Unused Selections check box is off, only those answer buttons that are actually used are enabled; the others are disabled.

Here's an example from an Intervals Ear Training custom level that uses major and minor seconds and thirds.

Dim Unused Selections On

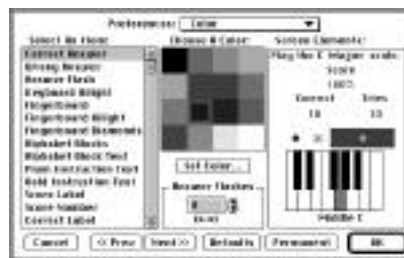


Dim Unused Selections Off



COLOR

The Color page lets you choose colors for items drawn in the drill windows. To make these settings permanent, click the Permanent button. A representative display of your settings is shown in the Screen Elements portion of the dialog.



Select An Item:

Select one of the items from this list. You will have to use the scroll bar to see all 19 items. And then...

Choose a Color:

Click one of the sixteen color squares to set the color for the selected item.

MUSIC LESSONS I Reference Manual

Screen Elements:

This displays a representation of the screen so you can see how your color choices look.

Set Color Button

If the color you want isn't in the 16 color squares, click the Set Color button to pick a different color. The new color will appear in the lower right square.

Answer Flashes

When you get an answer right, a rectangle above the answer boxes flashes to indicate that the answer was correct. You can set the number of times that the rectangle flashes. You can turn the flashing off by setting this number to zero.

FONT

The Font page lets you choose the font, size, style, and color for text elements drawn in the drill windows. To make these settings permanent, click the Permanent button. A representative display of your settings is shown in the lower portion of the dialog.



Font, Size, Style Popup Menus

Choose the font, size, and style to be used for the text element indicated by the selected radio button. Large font sizes may not look good on small screens.

Color Rectangle Popup Menus

Click the color rectangle to the right of each radio button to choose the text color for that item.

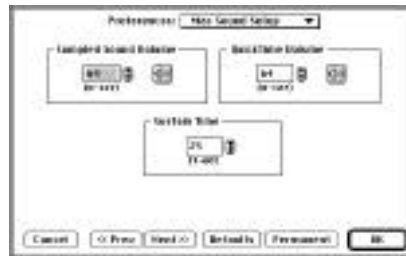
Set Color...

If the color you want isn't in the color

rectangle popup menu, click the Set Color button to pick a different color. The new color you choose will show up in the lower right corner of the color rectangle popup menu.

MAC SOUND SETUP

The Mac Sound Setup page lets you set the sound volume for sampled sounds and QuickTime sounds relative to the master volume setting found in the Sound control panel. See page 39. To make these settings permanent, click the Permanent button.



Sampled Sound Volume

Set the volume of the sampled sounds for the piano and guitar instruments.

QuickTime Volume

Set the volume for the QuickTime Musical Instrument sounds.

Sustain Time

The Sustain Time setting affects the length of time a sampled sound sustains after clicking a note on the keyboard. Sustain Time is measured in ticks, with 60 ticks equal to one second. For example, using a sustain time of 1, you can click different notes on the keyboard as fast as possible and the highlighting of the keys will keep up with the clicks. However, the sounds of the notes will be clipped short. If you set the sustain time to 60, the sound of the notes will last for one second but there will be a lag between the highlighting of the keys and the time you click. A sustain time of 25 works well. Sustain time has no effect on MIDI.

MIDI SETUP

The MIDI Setup page lets you select MIDI drivers, set the MIDI Input Transpose value, configure your MIDI interface, use QuickTime output with MIDI input, and use MIDI Echo. To make these settings permanent, click the Permanent button.



MIDI System

MUSIC LESSONS I supports three MIDI systems: MiBAC's built in MIDI, OMS, and MIDI Manager. OMS and MIDI Manager do not come with MUSIC LESSONS I but can be used if you already have them. See pages 42-45 for details on configuring your system. See page 53 for information on obtaining OMS and MIDI Manager.

Input Transpose

Input Transpose is useful with guitar and wind controllers, and with pitch input devices that let you sing or play into a microphone to answer questions. When MIDI pitch data is received from your controller, it is transposed by the Input Transpose value (number of half steps) before being processed by MUSIC LESSONS I. For example, if you're using a B₂ transposing instrument, you would set the MIDI input transpose value to 2. MIDI Input Transpose values can range from -12 to +12.

Port / Clock Rate

This area of the dialog changes depending on which MIDI system is selected. See pages 42-45.

QuickTime Output

Turn QuickTime Output on if you're using a MIDI keyboard controller that has no sounds of its own, and you want the controller to play QuickTime sounds.

Use MIDI Echo

Turn Use MIDI Echo on if you're using a MIDI keyboard controller and a MIDI sound module. See the User Guide, page 13. When Use MIDI Echo is on, notes played on the controller are sent to the sound module using the channel, patch, and velocity specified for the current MUSIC LESSONS I instrument.

PIANO

The Piano page lets you set the range and sound used for the piano instrument. To make these settings permanent, click the Permanent button.

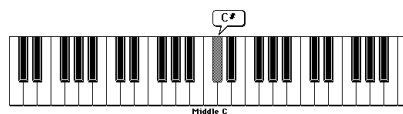


Keyboard Range

The piano instrument can display four or six octaves. See the User Guide, page 18.

Display Name Balloons

You can have balloons display the names of notes above the keyboard keys.



There are three settings.

On Check and Show Me

Display note name balloons when you click the Check or Show Me button.

MUSIC LESSONS I Reference Manual

Always

Display note name balloons whenever you play a note on the keyboard or click Check or Show Me.

Never

Don't use the note name balloons.

Mac Sampled Sound

You can use either a piano or guitar sound for this instrument. You can also record and use your own sounds. See page 52.

QuickTime Sound

Click the Set button to choose any of the QuickTime Musical Instruments. See page 41.

MIDI Sound

Set Patch

Click the Set Patch button to open the Set Patches dialog where you select the patch (MIDI instrument sound) for the piano instrument. See pages 44-45.

Channel

Set the MIDI channel for the piano.

Velocity

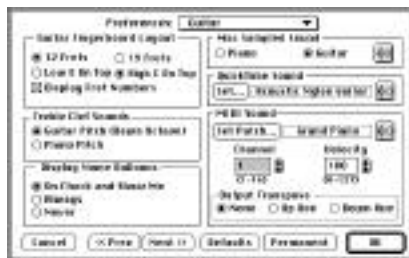
Set the velocity (loudness) of the transmitted MIDI sound.

Output Transpose

Choose whether you want the MIDI sound to be transposed up or down an octave.

GUITAR

The Guitar page lets you set the range, orientation, and sound used for the guitar instrument. To make these settings permanent, click the Permanent button.



Guitar Fingerboard Layout

The guitar instrument can display 12 or 19 frets. You can specify whether the low E string appears at the top or bottom of the instrument and whether to display fret numbers. See the User Guide, page 18.

Treble Clef Sounds

Guitar Pitch (Down Octave)

Guitar music is written in treble clef, although its actual sound is one octave lower. When this button is checked, MUSIC LESSONS I will display notes in treble clef but play notes one octave lower. Use this setting with MIDI guitar controllers.

Piano Pitch

Notes sound at their written pitch. The screen guitar will play notes one octave higher than a normal guitar.

Display Name Balloons

You can have balloons display the names of notes above the fingerboard.



There are three settings.

On Check and Show Me

Display note name balloons when you click the Check or Show Me button.

Always

Display note name balloons whenever you play a note on the fingerboard or click Check or Show Me.

Never

Don't use the note name balloons.

Mac Sampled Sound

You can use either a piano or guitar sound for this instrument. You can also record and use your own sounds. See page 52.

QuickTime Sound

Click the Set button to choose any of the QuickTime Musical Instruments. See page 41.

MIDI Sound

Set Patch

Click the Set Patch button to open the Set Patches dialog where you select the patch (MIDI instrument sound) for the guitar instrument. See pages 44-45.

Channel

Set the MIDI channel for the guitar.

Velocity

Set the velocity (loudness) of the transmitted MIDI sound.

Output Transpose

Choose whether you want the MIDI sound to be transposed up or down an octave.

Set Patch

Click the Set Patch button to open the Set Patches dialog where you select the patch (MIDI instrument sound) for the alphabet block instrument. See pages 44-45.

Channel

Set the MIDI channel for the Alphabet Blocks.

Velocity

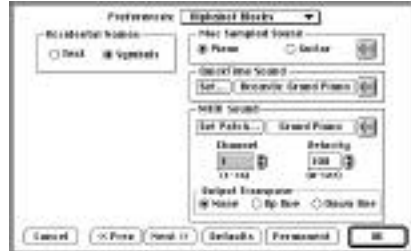
Set the velocity (loudness) of the transmitted MIDI sound.

Output Transpose

Choose whether you want the MIDI sound to be transposed up or down an octave.

ALPHABET BLOCKS

The Alphabet Blocks page lets you set the appearance and sound used for the Alphabet Blocks instrument. To make these settings permanent, click the Permanent button.



Accidental Names

The Alphabet Blocks instrument can display accidentals using text or symbols. See the User Guide, page 18.

Mac Sampled Sound

You can use either a piano or guitar sound for this instrument. You can also record and use your own sounds. See page 52.

QuickTime Sound

Click the Set button to choose any of the QuickTime Musical Instruments. See page 41.

MIDI Sound

INTERVALS / SCALES ET

The Intervals/Scales ET (Ear Training) page lets you set the sound used for the Interval Note 1, Interval Note 2, and Scales Ear Training sounds.



Drill Sound

The radio button selected here indicates the sound to be changed. You can choose different settings for Interval Note 1, Interval Note 2, and Scales Ear Training.

Intervals Play Options

You can specify whether intervals are to be played melodically, harmonically, or both.



Intervals Play Times

Visual sets the number of times the interval is played in the Intervals drill. Ear Training sets the number of times the interval is played in the Intervals Ear Training drill.

Mac Sampled Sound

You can use a piano or guitar sound for Interval Note 1, Interval Note 2, or Scales Ear Training sounds. You must use the same sounds for Interval Note 1 and Interval Note 2. You can also record and use your own sounds. See page 52.

QuickTime Sound

Click the Set button to choose any of the QuickTime Musical Instrument sounds for Interval Note 1, Interval Note 2, or Scales Ear Training. See page 41.

MIDI Sound

Set Patch

Click the Set Patch button to open the Set Patches dialog where you select the patch (MIDI instrument sound) for Interval Note 1, Interval Note 2, or Scales Ear Training sounds. If you're using different patches (sounds) for Interval Note 1 and Interval Note 2, you should assign them to different MIDI channels. See pages 44-45.

Channel

Set the MIDI channel for Interval Note 1, Interval Note 2, or Scales Ear Training. If you're using different sounds for Interval Note 1 and Interval Note 2, you should assign them to different MIDI channels.

Velocity

Set the velocity (loudness) of the transmitted MIDI sound. If you're using different sounds for Interval Note 1 and Interval Note 2, you can use different velocities to balance the sound level.

Output Transpose

Choose whether you want the MIDI sound to be transposed up or down an octave.

MIDI SHORTCUT KEYS

The MIDI Shortcut Keys page lets you assign keys on your MIDI synthesizer to function as shortcuts for the Check, Next, Play, and Show Me buttons and for navigating through the answer boxes. To make these settings permanent, click the Permanent button.



Assign MIDI Shortcut Keys

You can type the MIDI note number in the text box, play a key on your MIDI synthesizer, or click a key on the piano keyboard picture to automatically fill in the text box. Use the tab key to move between the text boxes. You can assign shortcuts for the four clefs. If you enter zero in a text box, the shortcut for that item will be ignored. The Tab L box assigns a key on your synthesizer that moves one answer box to the left. The Tab R box assigns a key on your synthesizer that moves one answer box to the right.

Use MIDI Shortcuts

You must check Use MIDI Shortcuts to activate the shortcuts.

PROGRESS

The Progress page lets you set the text colors used in the Progress Report. A representative display of your settings is shown in the lower portion of the dialog. To make these settings permanent, click the Permanent button.

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Pitch Input Device Settings

Show Play First Pitch Button

The Show Play First Pitch Button adds a button to the Instrument toolbar just below the Alphabet Blocks button. Click this button to play the first pitch of the question.



Play First Pitch On New Questions

If Play First Pitch On New Questions is checked, the first pitch of the question will be played whenever you get a new question.

MIDI Shortcut Keys

You may want to disable MIDI Shortcut keys while using a pitch input device so you don't accidentally sing or play a note that triggers a shortcut.

CHAPTER 4 - SOUND

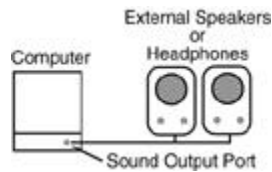
CONTENTS

Mac Sound Setup 39
 MIDI Setup 40
 Sampled Sounds 40
 QuickTime Sounds 41
 QuickTime Instruments 41
 MIDI Sounds 42
 MIDI Systems 42
 Other MIDI Settings 44

This section examines the options you have for using sound in MUSIC LESSONS I. You can play sound through the Mac speaker or through a MIDI synthesizer. Sounds generated by the Mac and played through the speaker are referred to as sampled sounds. Sounds played through a MIDI synthesizer are referred to as MIDI sounds.

MAC SOUND SETUP

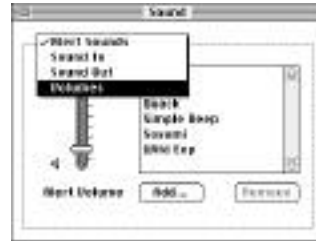
If you use sampled sounds, no special equipment is needed. Sounds can be played directly through the Mac speaker. However, you'll get better sound quality if you connect a cable from the Sound Output Port on the back of the Mac to amplified speakers or headphones. A stereo system will work just fine.



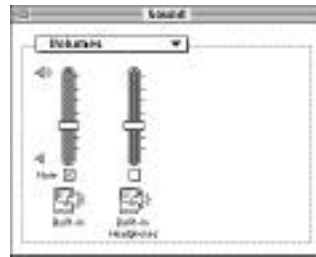
Warning: Do not connect the sound output port on the back of the Mac directly to an unamplified speaker.

Mac Sound Volume

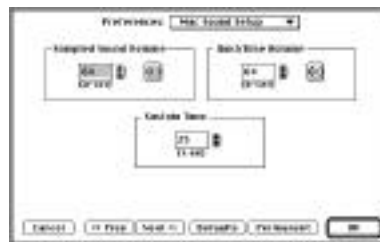
Open the Sound Control Panel and select Volumes from the popup menu.



Use the slider controls on the Volumes page of the Sound Control Panel to set the master volume. If you're playing sounds through the Mac speaker, you'll probably want to move the volume controls all the way to the top. If you're using headphones or amplified speakers, you'll probably want to set the volume controls low and then use your amplifier for the final adjustment.



The Mac Sound Setup page of the Preferences dialog sets the volume within MUSIC LESSONS I relative to the sound control panel volume. Select the volume you want for sampled sounds or QuickTime sounds. You can click the speaker button to hear the sound. When you've found the setting you like, click the Permanent button.

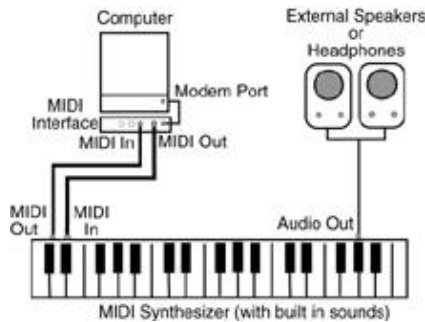


MIDI SETUP

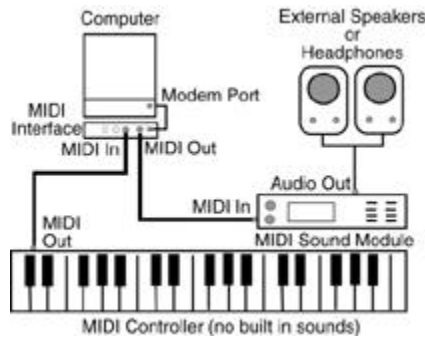
If you're using MIDI, you'll need a MIDI interface, a cable to connect the MIDI interface to the Mac, two MIDI cables to connect the MIDI interface to the synthesizer, and a MIDI synthesizer.

Caution: Make sure your computer and synthesizer are powered off when making these connections.

The simplest setup uses a MIDI synthesizer with built in sounds.



A slightly more complex setup uses a MIDI keyboard controller (no sounds of its own) and a MIDI sound module (has sounds, but doesn't have keys). You'll need to enable Use MIDI Echo. See page 72.



A standard printer cable connects the MIDI Interface to the modem port (recommended) or printer port on the back of the Mac. The MIDI interface functions as a high speed modem that transmits data between the computer and

synthesizer. Two MIDI cables connect the synthesizer to the MIDI interface. MIDI cable connections go to opposite label names. MIDI In on the interface is connected to MIDI Out on the synthesizer. MIDI Out on the interface is connected to MIDI In on the synthesizer. Audio Out from the synthesizer is connected to your sound system. Refer to your MIDI interface and synthesizer manuals for additional information.

MIDI Sound Volume

Use the controls on your synthesizer, amplifier, and/or powered speakers to adjust the sound volume.

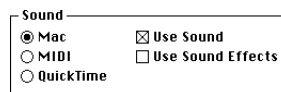
SAMPLED SOUNDS

MUSIC LESSONS I can play 'snd' resource sampled sounds or the new QuickTime Musical Instruments sounds through the computer speaker. MUSIC LESSONS I comes with built in 'snd' resources for the piano and guitar.



When the Use Mac command in the Sound menu is on (has check mark) MUSIC LESSONS I plays sounds through your Macintosh speaker.

If you want sampled sounds to be used at program start up, open the Preferences dialog from the File menu and go to the General page. Select Mac and Use Sound from the Sound cluster, and click the Permanent button.



Creating Your Own Sounds

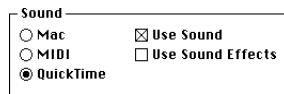
If you're technically inclined you can replace the sounds we use for piano and guitar with your own. See page 52.

QUICKTIME SOUNDS

QuickTime and QuickTime Musical Instruments let you play high quality instrument sounds through your computer speaker. MUSIC LESSONS I will use QuickTime sounds when Use QuickTime is checked in the Sound menu. Use Sound must also be checked to hear the sounds.



If you want QuickTime sounds to be used at program start up, open the Preferences dialog from the File menu and go to the General page. Select QuickTime and Use Sound from the Sound cluster, and click the Permanent button.



It's possible to use QuickTime sounds with a MIDI keyboard controller. See page 45.

QUICKTIME INSTRUMENTS

You can choose different QuickTime instrument sounds for the piano, guitar, alphabet block, Interval Note 1, Interval Note 2, and Scales Ear Training sounds using the Preferences dialog. We'll assign QuickTime sounds to the piano. The other instruments work similarly. Open the Preferences dialog and move to the Piano page.



In the QuickTime Sound cluster click the Set button and the QuickTime Instrument Picker will appear. Use the popup menus to select the instrument you want to use.



QuickTime Musical Instruments contain standard General MIDI instruments. The Category popup menu lists instrument families; the Instrument popup menu lists instruments available in that family. Instruments shown in italics are not available in Apple's QuickTime Musical Instruments. You can play the instrument by clicking the piano keys.



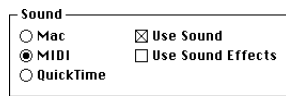
Follow a similar procedure to set QuickTime sounds for the guitar, alphabet blocks, Interval Note 1, Interval Note 2, and Scales Ear Training sounds using the Guitar, Alphabet Block, and Intervals/SET pages of the Preferences dialog.

MIDI SOUNDS

When Use MIDI is checked in the Sound menu, MUSIC LESSONS I can transmit and receive MIDI data. Use Sound must also be checked to hear the sounds.



If you want MIDI to be used at program start up, open the Preferences dialog from the File menu and go to the General page. Select MIDI and Use Sound from the Sound cluster, and click the Permanent button.



MIDI SYSTEMS

MUSIC LESSONS I supports three MIDI systems: MiBAC's built in routines, Opcode System's OMS (Open Music System), and Apple Computer's MIDI Manager.

Note: If you're using a newer Mac with a USB MIDI Interface, you'll need to use the OMS system.

If you want a specific MIDI System to be used at program start up, open the Preferences dialog and go to the MIDI Setup page as shown in the following picture. Select the MIDI system you want to use and then click the Permanent button. The MiBAC MIDI Drivers button is always available. The OMS and MIDI Manager buttons will be enabled if they are installed. See the User Guide, page 11. See page 33 in this manuals.

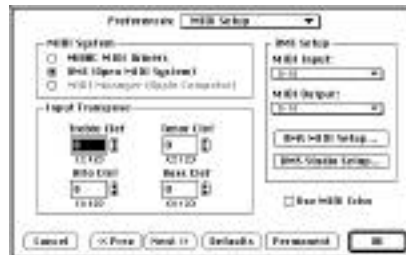
MiBAC MIDI Drivers

When the MiBAC MIDI Drivers button is selected, use the right hand side of the dialog to select the port and clock rate for your MIDI interface. Most MIDI interfaces use the 1 MHz clock rate. We recommend you use the Modem port if possible.



OMS (Open Music System)

OMS is written and maintained by Opcode Music Systems. If OMS is installed, and you select the OMS radio button, you'll see the following dialog.



The right hand side of the dialog has popup menus to choose your MIDI Input and MIDI Output devices. There are buttons for opening the OMS MIDI Setup dialog and the OMS Studio Setup application. The following pictures are from OMS 2.x.

MIDI Input / MIDI Output

Use these popup menus to specify the MIDI synthesizers you'll be using for input and output. If none are listed you'll need to create your OMS configuration file. In OMS 2.x and later, one of the options for MIDI Output is QuickTime.

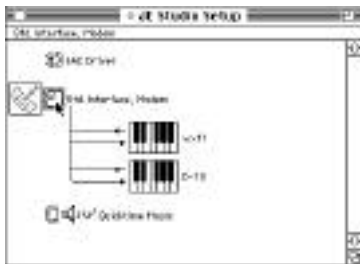
OMS MIDI Setup

The OMS MIDI Setup button opens the OMS MIDI Setup dialog where you can choose modem or printer port.



OMS Studio Setup

The OMS Studio Setup button on the MIDI Setup page of the Preferences dialog opens the OMS Studio setup application where you define your MIDI studio.



Click the Std. Interface, Modem icon, as shown in the picture above, to open the MIDI Interface dialog where you select the clock rate for your MIDI interface.



Click a synthesizer device icon, like D-10, in the OMS Studio Setup window to open the MIDI Device Info window where you define the characteristics of that device.



MIDI Manager (Apple Computer)

MIDI Manager was written by Apple Computer. The latest version is 2.0.2. However, it is no longer supported by Apple. MIDI features are being incorporated into future versions of QuickTime.

MIDI Manager requires the following files.

In the System Folder:



In the Extensions Folder in the System Folder:



This application can be anywhere:



The easiest way to install these files is to drag the icons for Apple MIDI Driver and MIDI Manager on top of your System Folder icon. The files will be placed in the correct folders. Restart your computer.

Open the Preferences dialog and go to the MIDI Setup page. When you select the MIDI Manager radio button, the right hand side of the dialog tells you to use the Patch Bay application to configure MIDI Manager.

be used for the remainder of this session. If you click Permanent, your choices will be remembered across program restarts.

If your synthesizer isn't listed in the Device menu, you can create a patch list file in a text editor and copy it to the Synthesizer Name Files folder. See page 50.

MIDI Channels

In the MIDI Sound cluster set the MIDI channels for the piano instrument.

MIDI Velocity

MIDI Velocity refers to how soft or loud the sound plays. In the MIDI Sound cluster set the MIDI velocity for the piano instrument.

Output Transpose

The transpose cluster allows you to adjust the octave register of the sound.

MIDI Input Transpose

The MIDI Input Transpose settings are found on the MIDI Setup page of the Preferences dialog. Input transpose is useful with guitar and wind controllers, and with pitch input devices that let you sing or play into a microphone to answer questions. When MIDI pitch data is received, it is transposed by the Input Transpose value number of half steps before being processed by MUSIC LESSONS I. For example, if you're using a B \flat transposing instrument, you would set the MIDI input transpose value to 2. MIDI Input Transpose values can range from -12 to +12. The Input transpose value can be set separately for each clef.

QuickTime Output

QuickTime Output is found on the MIDI Setup page of the Preferences dialog. You can set up your MIDI controller (no sounds of its own) to play QuickTime sounds through the Mac speaker by turning on QuickTime Output.

- QuickTime Output
- Use MIDI Echo

Use MIDI Echo

Use MIDI Echo is found on the MIDI Setup page of the Preferences dialog. When Use MIDI Echo is on, MUSIC LESSONS I will transmit MIDI data it receives to the sound module using the channel, patch, and velocity specified for the current MUSIC LESSONS I instrument. If you're using a MIDI controller (no sounds of its own) and want the sounds to play through a MIDI sound module turn on Use MIDI Echo.

- QuickTime Output
- Use MIDI Echo

APPENDIXES

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I. SHORTCUTS

There are many time saving shortcuts built into MUSIC LESSONS I. When you see “type Command-M” this means hold down the Command key (the Apple, clover leaf, propeller key) and type m. The letter is shown in upper case. You can type it in lower case.

Menu Items

When a menu item has a clover leaf symbol followed by a letter, it indicates that typing Command-letter is the same as choosing that menu item with the mouse.

Buttons

Check

Type return or enter.

Next

Type Command-E.

Play

Type Command-L.

Show Me

Type Command-H.

Answer Boxes

Tab Key, Right Arrow Key

Moves one answer box to the right.

Shift-Tab Key, Left Arrow Key

Moves one answer box to the left.

MIDI

The MIDI Shortcuts page of the Preference dialog lets you assign keys on your synthesizer to function as the Check, Next, Play, and Show Me button so you won't have to move your hands between the synthesizer to the mouse.

In the Key Signatures drill you can play a MIDI synthesizer key to answer questions.

Dialog Boxes

Default button

The default button is indicated by a thick black outline around the button. Typing return or enter is the same as clicking the outlined button.

Cancel button

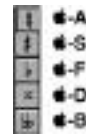
Typing Command-. (period) is the same as clicking the Cancel button.

Clusters

A group of check boxes surrounded by a rectangular frame is called a cluster. Each cluster has a title. You can click the cluster title as a shortcut to turn all the check boxes within the cluster on and off quickly.

Accidental toolbar

There are command key shortcuts for each accidental. Press the Command key and type the letter shown.



Five Finger Position drill

If Use Hints is enabled in the Level menu of the Five Finger Position drill, the light bulb icon will appear to the left of the screen piano. Typing Command-I is the same as clicking the light bulb. See page 11.

II. TECH SUPPORT

Before calling MiBAC for help, read through the Frequently Asked Questions (FAQ) list that follows. When you contact MiBAC for tech support we'll need your program serial number.

Email is our preferred method of technical support.

Email (tech@mibac.com)

Email is checked and answered regularly. Send your questions to tech@mibac.com.

Phone (507) 645-5851

Our tech support staff is small. You may need to leave a message. We'll call back. Leave both a day and evening number.

Fax (507) 645-2377

Fax your question and it will be answered by fax or email or phone.

Website (www.mibac.com)

III. FREQUENTLY ASKED QUESTIONS (FAQ)

How many student records can I keep?

The number of student files is limited only by disk space. You could have thousands on a hard drive.

When I play my MIDI keyboard, I see the notes highlight on the screen but I don't hear any sound.

Since the screen highlights, MIDI In is working. The problem is with MIDI Out.

- MIDI Synthesizer volume is not turned on.
- The MIDI cable is connected incorrectly or the MIDI cable is bad.
- If you're using a MIDI controller and sound module, you'll need to enable MIDI Echo.
- If you're using OMS or MIDI Manager, they're not configured properly. Try using the built in MiBAC routines.

See Chapter 4, Sound, page 39.

Is a site license for MUSIC LESSONS I available?

Our standard site license is good for up to 40 computers in a single building. The site license includes two copies of the manual, a special site license version of the MUSIC LESSONS I application, and license forms. The Preferences dialog and the Set Custom Level dialogs are password protected in the site license version.

We also have lab packs of five available. Please call or check our web site. For current prices, contact us by mail (info@mibac.com), phone (507) 645-5851 or fax (507) 645-2377.

Does the site license version of MUSIC LESSONS I work over a network?

MUSIC LESSONS I was not written to be a shared application where multiple

students can use a single copy of the program simultaneously from the server. Progress Report scores can be saved to the server. Our recommendation for site license use is that you install a full copy of MUSIC LESSONS I on the local hard drive of each workstation. If the lab workstations do not have local hard drives then you will need to create multiple copies of the program on the server and check each copy out to a specific workstation. Student records can be saved to a common directory on the server.

Can I use MUSIC LESSONS I with a guitar controller?

Yes. Go to the Guitar page of the Preferences dialog and turn on “Guitar Pitch (Down Octave).” See page 34. You may need to set the MIDI Input Transpose value, depending on the clef and on screen instrument, to +12. See page 33.

Can I use MUSIC LESSONS I with a wind controller?

Yes. If your wind controller is a transposing instrument you may need to set the MIDI Input Transpose value. See page 33.

Can I use MUSIC LESSONS I with an acoustic instrument or voice?

Yes. Pitch input devices convert sound to a MIDI note that MUSIC LESSONS I can use. See pages 95-96. MUSIC LESSONS I contains a page for pitch input devices in the Preferences dialog. See page 37-38.

Can I use the printer port with MIDI?

Yes. However, we recommend you use the modem port if possible. If you must use the printer port, you can choose it on the MIDI Setup page of the Preferences dialog.

MiBAC MIDI Routines

Choose MiBAC MIDI Drivers and Printer Port. See page 42.

OMS

Choose OMS. On the right side of the

dialog, click the OMS MIDI Setup button and choose the printer port. See page 43.

MIDI Manager

Choose MIDI Manager. Click OK. Open the PatchBay application and double click the Apple MIDI Driver button. Another window will open allowing you to choose the printer port. See page 44.

I can't get MIDI to work on my PowerBook.

The problems we've encountered here have been related to internal modems and the AppleTalk setting. If your internal modem is enabled, the modem port connector on the back of the PowerBook does not function. There is usually a control panel, like PortShare, that can enable and disable the internal modem. You may need to experiment with the AppleTalk setting in the Chooser. You'll have to restart to test changes. We have routinely demonstrated MUSIC LESSONS I using MIDI on a Powerbook 520c and a PowerBook G3, neither of which has an internal modem.

MIDI works but the piano doesn't sound like a piano.

MUSIC LESSONS I sends a MIDI patch change when you start the program, when you switch drills, and when you switch instruments. Choose Set MIDI Patches from the sound menu. Click the Device popup menu and choose your synthesizer. If it's not listed choose the Generic device. Generic will show patches 1-128. Make sure the check box Play On Click is on. Click each patch in turn. When you find the patch number for piano, click the Permanent button. See page 33, 44.

Can I use QuickTime sounds with my MIDI controller?

Yes. If you're using MiBAC MIDI or Apple's MIDI Manager, you'll need to turn on QuickTime output on the MIDI Setup page of the Preferences dialog. OMS 2 can send MIDI output directly to QuickTime. See page 33.

IV. CREATING A HELP FILE

Files displayed in the MUSIC LESSONS I Help window are TEXT files containing colored styled text, pictures, and sound. We've included the ML Help Editor application so you can create your own help files.



The ML Help Editor application is initially located in the MUSIC LESSONS I folder but can be anywhere. You can freely mix text, pictures, and sounds in help files. The ML Help Editor supports drag and drop. You can copy or drag text, pictures, and sounds from one window to another, or from other applications to the ML Help Editor window.

Text

Type text in the ML Help Editor. Use the Font, Size, Style, and Color menus to set the text attributes.

Pictures

Create pictures in a graphics program, copy them to the clipboard or scrapbook, and drag or paste them into the help file.

Sounds

You can copy and paste 'snd' files into the help file. See Creating Sound Effects and Creating Instrument Sounds later in this appendix.

Topics

Any text phrase using the bold underline style will appear in the Topic List of the Help window.

Experiment by making a copy of one of the included help files and opening it in the ML Help Editor. Make some changes to the file, save it, and place it in the MUSIC LESSONS I Help folder. Open MUSIC LESSONS I and view the new help file. All help files in the MUSIC LESSONS I Help folder appear in the File List of the MUSIC LESSONS I Help window. See the User Guide, pages 21-22.

V. CREATING A SYNTHESIZER PATCH LIST

Synthesizers organize their sounds according to their MIDI patch number. On synthesizers that don't follow the General MIDI standard, sound number one could be assigned to anything the manufacturer decided, piano, flute, or temple bells. General MIDI specifies the exact sounds assigned to patch numbers 1-128. Sound number one on all General MIDI synthesizers is a piano, sound number 33 is acoustic bass, etc. Your synthesizer manual should list the instruments assigned to patches 1-128 (or 0-127). Type those names in a text file with one instrument name per line. Here's what the patch name file for General MIDI looks like.



For aesthetic reasons, limit names to eleven characters in the Set MIDI Patches dialog. Save the file with your synthesizer name and place it in the Synthesizer Name Files folder. It will appear in the Device popup menu of the Set MIDI Patches dialog.

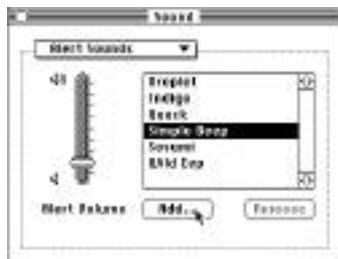
VI. CREATING SOUND EFFECTS

If your Mac has sound input capabilities you can record sounds to be used as sound effects for right and wrong answers.

You'll need additional software to record sounds. The following programs work.

Apple Computer	Commercial	Shareware
Sound Control Panel	Deck	Sample Editor
	Sound Edit	Sound Effects
		Sound Editor

Let's create a sound effect. We'll use the Sound Control Panel because it's part of System 7 and everyone has it. Other sound recording programs have more options and can create better recordings. From the Apple menu, open the Sound Control Panel. Make sure you're on the Alert Sounds page, and click the Add button.



When the Record dialog opens, click the Record button.



Say "good job" into the microphone and click the Stop button. Click Save and name the sound Good Job. Close the Sound control panel. Open the System folder and double click System file icon. When the System window opens you'll see a sound icon "Good Job." You may need to scroll to find it.



Hold the Option key down and drag the Good Job icon to any other window. This will copy the Good Job sound file to the other window. Close the System window. Place the copied Good Job sound file in the Sound Effects folder in the MUSIC LESSONS I 3 folder. Open MUSIC LESSONS I and go to the Sound Effects page of the Preferences dialog. Click the Correct Answer radio button and then select Good Job from the sound effect list.



Click OK. Then make sure Use Sound Effects is checked in the Sound menu. Answer a question correctly. You'll hear the new sound effect.

VII. CREATING INSTRUMENT SOUNDS

Make a backup copy of MUSIC LESSONS I before attempting this.

If you're technically inclined you can replace the sounds we used for the piano and guitar with your own. You'll need software to record the sounds. The following programs work.

Apple Computer	Commercial	Shareware
Sound Control Panel	Deck	Sample Editor
	Sound Edit	Sound Effects
		Sound Editor

You'll need resource copying software to copy the sound resources into the MUSIC LESSONS I application. The following programs work.

Apple Computer	Commercial	Shareware
ResEdit	Resourcecerer	Sound Mover
	Sound Edit	

Information on obtaining these programs is given later.

Piano sounds are stored in six 'snd' resources with IDs 1000-1005. All six resources are the note C recorded in different octaves. ID 1000 is the lowest octave, ID 1005 is the highest. Record six Cs at MIDI numbers 29, 41, 53, 65, 77 and 89, each approximately one second long. Middle C is MIDI note number 60. Save them as 'snd' resources with IDs 1000-1005. Copy them into the MUSIC LESSONS I application using Sound Mover, ResEdit, or a similar program.

Guitar sounds are stored in six 'snd' resources with IDs 1500-1505. Record the six strings of the guitar at the fifth fret, from bass to soprano, A-D-G-B-E-A, each approximately one second long. Save them as 'snd' resources with IDs 1500-1505. Copy them into the MUSIC LESSONS I application using Sound Mover, ResEdit, or a similar program.

VIII. THIRD PARTY SOFTWARE

Apple Computer QuickTime

Apple Computer, Inc.
1 Infinite Loop
Cupertino, CA 95014
408-996-1010

Coda Music Technology Vivace

Coda Music Technology
6210 Bury Drive
Eden Prairie MN 55346
(800) 843-2066
<http://www.codamusic.com/>

Macromedia Sound Edit 16, Deck II

Macromedia, Incorporated
600 Townsend Street
San Francisco, California 94103
(415) 252-2000
<http://www.macromedia.com/>

Pyware Amadeus

P.O. Box 399
Argyle, Texas 76226
Sales: (800) 222-7536
<http://www.pyware.com/>

Wildcat Canyon Software Autoscore

Wildcat Canyon Software
1563 Solano Avenue, #264
Berkeley, CA 94707
(800) 336-0989 General Information
<http://www.wildcat.com/>

IX. INTERNET RESOURCES

MiBAC Music Software

<http://www.mibac.com>
email: info@mibac.com
techsupport: tech@mibac.com

Apple Computer

QuickTime

<http://www.quicktime.apple.com/>

MIDI Manager

<http://asu.info.apple.com/swupdates.nsf/artnum/n10660>

Opcode Music Systems

OMS (Open Music System)

<http://www.opcode.com/downloads/>

MIDI / Music information

www.harmonycentral.com
www.midifarm.com

X. TECHNICAL INFORMATION

MUSIC LESSONS I was written in C++ using the Metrowerks CodeWarrior C++ compiler, the PowerPlant application frameworks, and the C++ Standard Template Library.

The following internet programming resources were incorporated into the program.

The WASTE text engine was used for displaying text in progress reports and help windows. WASTE text engine © 1993-1996 Marco Piovaneli.

CWASTEEdit, a Power Plant Wrapper class for WASTE © 1994-1996 Timothy Paustian.

The color popup menus used in the Preferences dialog use Color MDEF by Jordan Zimmerman. © 1995 All rights reserved worldwide.

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