

**Lime™ User's Manual**  
**Music Notation Software**

**Windows™**

and

**Macintosh®**

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Editor's note: We have combined the Windows and Macintosh versions of the Manual. This is evident when referring to keyboard keys. **Alt**, and **Control** on Windows correspond with **Option**, and **Command** on the Macintosh. In some cases separate paragraphs are written for each operating system.

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## What You Need to Run Lime™

Lime will run on all IBM compatible machines that will run Windows™ NT, 98, ME, 2000, XP, and Vista. Lime will run on all computers that run Macintosh® software using OS9 or OSX.

**Windows users:** A Windows™ compatible MIDI card or USB-MIDI interface is required.

**Macintosh users:** A MIDI interface is strongly recommended.

A MIDI keyboard and MIDI synthesizer are strongly recommended for use with Lime.

When you are ready to print the final draft of your Lime piece, do so on a PostScript® printer, or use a third-party tool to make a high-quality PDF file and print that on a non-PostScript printer. .

This manual assumes you are familiar with Windows or Macintosh. It assumes you know how to use the mouse and know what “click,” “double-click,” “**Shift**-click,” “**Alt**-click” (Windows) or “**Option**-click” (Macintosh), and “click-drag” mean. It also assumes you know how to use menus.

## Lime Viewer

A Lime Viewer is available for free download at [www.cerlsoundgroup.org](http://www.cerlsoundgroup.org). With the Lime Viewer you will be able to open, read, and print, but not edit Lime files. The full-featured version of Lime requires registration after a trial period. The Lime Viewer will not expire and does not require registration.

## How to Install Lime™ for Windows™

If you are not an expert with Windows, ask a friend for help installing Lime. This is the installation procedure:

Copy the Lime self-extracting archive (LimeInstallxxx.exe, where xxx represents the version number, e.g. LimeInstall712.exe) to the hard drive. If you are working over the net, download the file to your hard drive.

Expand LimeInstallxxx.exe by double clicking on its icon.

This will create a folder (the default folder is C:\Program Files\Lime) containing the Lime Manual and the Lime program with all its associated folders, fonts and files.

The **Marl** and **Tufa** fonts will be in the same directory as the executable Lime file. Leave all these files together in one directory.

After you are done, you can discard LimeInstallxxx.exe, or save it to a backup disk.

To add Lime to the **Start** menu, first locate Lime.exe (C:\Program Files\Lime\Lime.exe) then drag it onto the **Start** button. You can also create a shortcut by dragging Lime.exe to the desktop.

**If you have problems with your MIDI connection:** Check the cabling to your synthesizer, and check synthesizer settings. The “out” cord should be connected to the synthesizer MIDI In. The “in” cord should be connected to the synthesizer MIDI Out. Check the settings in **MIDI Input** and **MIDI Output** under the **Hear** menu. Make sure you have MIDI Transmit enabled on your synthesizer. Make sure your synthesizer's Receive Channels are set properly. If you select **Local Control Off** on your synthesizer, you need to select **Make Sound for MIDI Input** in **Options** under Lime's **Edit** menu.

If you would like to use Lime's **Print** menu option to make high-quality PDF files, you must follow the special procedure in this manual's description of the **Print** menu option (under the **File** menu).

## How to Install Lime™ for Macintosh® OS 9

If you are not an expert with the Macintosh, ask a friend for help installing Lime. This is the installation procedure:

- 1) **Extract the LimeXXXos9.sea files.** Lime is stored in a compressed file called LimeXXXos9.sea (where XXX represents the version number). (Lime exists on the server as LimeXXXos9.sea.hqx. Most browsers will automatically decode the hqx format.) To extract all Lime components, double-click on Lime.sea, specify the destination hard drive and folder, and hit Extract. Lime will take about 2 megabytes of space on your hard disk. You may throw away Lime.sea, or archive it for later use.
- 2) **Set memory.** Set how much memory is allocated to Lime: Select the Lime application, use Get Info, and set the Application Memory Size. You should allocate at least 12000k to Lime; the more you allocate, the larger your scores can be.
- 3) **Install fonts.** Open Lime's Fonts folder and drag the Marl and Tufa files from there onto your System Folder icon.
- 4) **Connect MIDI.** If you are using MIDI you will need a third party MIDI interface. The Lime package includes MIDI Manager, but also supports OMS. We recommend you use OMS (Open Music System), which is available for free download at [www.opcode.com](http://www.opcode.com). If you do not have MIDI equipment Lime will use QuickTime for playback. If you are using QuickTime no further installation is necessary.
- 5) **Install OMS.** After downloading OMS, double-click on the file "Install OMS" and follow the instructions provided with this installation program. Launch OMS Setup and follow the instructions for a new setup. Launch Lime and open a new piece. Choose **OMS MIDI Input...** or **OMS MIDI Output...** from the **Hear** menu and select a method of MIDI input or output. You can choose QuickTime Playback (if that option is enabled in OMS) or any MIDI synthesizer that is available through your OMS setup. **OMS and QuickTime:** If you would like to use OMS for QuickTime playback, double click on the QuickTime Music icon and check "on."
- 6) **Restart your computer.**

**If you have problems with your MIDI connection:** Check the cabling to your synthesizer, and check synthesizer settings. "Out" ports should be connected to "In" ports and vice versa. Check the settings in **MIDI Input** and **MIDI Output** under the **Hear** menu. Make sure you have MIDI Transmit enabled on your synthesizer. Make sure your synthesizer's Receive Channels are set properly. If you select **Local Control Off** on your synthesizer, you need to select Make Sound for **MIDI Input** in **Options** under Lime's **Edit** menu. ).

## How to Install Lime™ for Macintosh® OS X

If you are not an expert with the Macintosh, ask a friend for help installing Lime. This is the installation procedure:

- 1) **Extract the LimeXXXosx.app.sit files.** Lime is stored in a compressed file called LimeXXXosx.app.sit (where XXX represents the version number). (Lime exists on the server as LimeXXXosx.app.sit.hqx. Most browsers will automatically decode the hqx format.) To extract all Lime components, double-click on LimeXXXosx.app.sit, specify the destination hard drive and folder, and hit Extract. Lime will take about 2 megabytes of space on your hard disk. You may throw away LimeXXXosx.app.sit, or archive it for later use.
- 2) **Install TrueType fonts.** Copy the Marl.ttf and Tufa.ttf files from Lime's TrueType Fonts folder and into your ../Library/Fonts folder.
- 3) **Connect MIDI.** If you are using MIDI you will need a third party MIDI interface. The Lime package supports OSX's CoreMIDI. If you do not have MIDI equipment Lime can use QuickTime for playback.

If you would like to use an external MIDI keyboard but use the internal QuickTime synthesizer, you will need to install SimpleSynth. SimpleSynth allows Apple's QuickTime product to work with Apple's CoreMIDI product. SimpleSynth is available at <http://pete.yandell.com/software/>

If you would like to use Lime's **Print** menu option to make high-quality PDF files, you must follow the special procedure in this manual's description of the **Print** menu option (under the **File** menu).

## Part I: Getting Started

### A Step-by-Step Example

To teach you how to use Lime, this manual will begin with instructions for opening and editing a simple piece, the first four bars of “Lullaby of Birdland” (B. Y. Forster, George Shearing) shown below. You will want to read this manual as you sit at your computer, so you can follow the step-by-step instructions given here.



For this example we will use a Stationery Pad or Template. A Stationery Pad or Template is a document that has all the parameters set (such as number of voices, layout, titles), but contains no music. If you would like to create a piece from scratch, see **Creating a New Piece** below.

This example assumes Lime is running; if Lime is not running, launch the program and then go on.

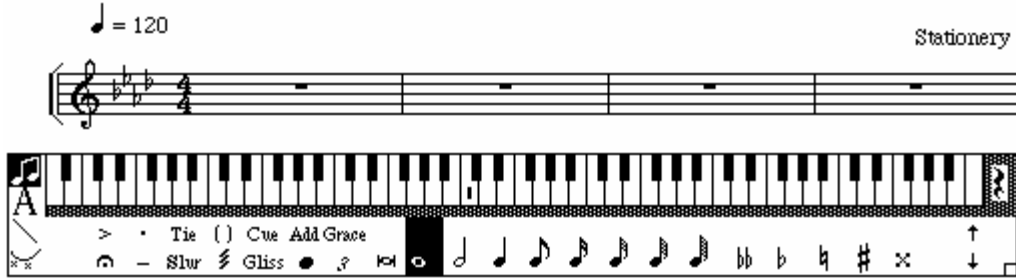
#### Open the File

Open the “Templates folder” or “Stationery folder” and double click on the file “First Piece.” You will see a blank page with a title, staff, key, and blank measures.

A Template is simply a starting point for a new piece. You may want to make some initial changes to accommodate the piece you are working on. In this example we will enter a melody in the key of A-flat. To insert a key signature of four flats, click on the first rest in the piece (it will flash), then select **Key Signature** under the **Symbol** menu. Specify four flats and click **OK**.

It is possible to create your own template copies of layouts that you use often. If, for example, you plan to do a series of melodies in A-flat major, you can save this newly modified file as “Single Voice-A-flat Major” and use it as a template. Many users find it useful to set up a layout with all the voices, instrument names, staff arrangements, format, numbering format, etc., but no music. This file is then a “stationery pad” to be used over and over, but saved as a separate file after music has been entered. **Mac users:** To change an existing file into a stationery file use the Finder to select the new file, choose **Get Info** under the **File** menu and check “Stationery Pad.” **Windows users:** To change an existing file into a template use properties to make the file “read only.”

# First Piece



## Note Entry

Before entering notes you must identify the edit point or insertion point. In this example we will begin entering notes in the first measure: Double click on the rest in the first measure or choose **Note Entry** (under the **Voice** menu). A flashing box should appear around the rest. This is called a “note-entry cursor.”

At the bottom of the screen is the “**Piano Window**.” It has a drawing of a piano, plus a rest bar and other symbols. (The **Piano Window** may be relocated by dragging the lower right-hand corner. In these examples the **Piano Window** has been relocated just below the music to conserve space.) This piano can be used with the mouse if you do not have a MIDI keyboard. Before you click on a piano key, choose the note value you need by clicking on the appropriate symbol just below the piano. For this example we will use an eighth note. (Clicking again on the eighth note symbol will select a dotted eighth; a third click gives a doubly dotted eighth.)



The middle C key on the screen is specially marked<sup>1</sup>. Now click on the C key above the middle C and watch the screen. At first, you may see the mouse cursor momentarily turn into an arrow-watch (Windows) or a hollow arrow (Macintosh) to indicate that the screen is not up-to-date yet, and the four-measure-rest symbol turn gray, to indicate that it has been changed. After a short time<sup>2</sup> the display will show your eighth note C, followed by an eighth rest and three beats of rest and then three more measures of rest. The note-entry cursor has moved to the eighth rest.

<sup>1</sup> This mark will move when **Keyboard Shift** is used.

<sup>2</sup> On newer machines the update time is negligible.

## First Piece

♩ = 120 Stationery

Now play the rest of the notes for Lullaby of Birdland by clicking<sup>3</sup> on the **Piano Window**. When you get to a quarter note, remember to click the quarter note symbol in the piano window; then, after you play the quarter note remember to click the eighth note symbol before you go on. (The next note will be an eighth note.)

You can replace a wrong note by double-clicking on it and playing a new note. If you replace a half note with a quarter note, then you will also get a quarter rest. Similarly, if you replace a quarter note with a half note, then the quarter note and the quarter note after it will be replaced.

If you want to delete a single note, click on the note, and hit the **Delete** key. It is possible to select a group of notes and delete them (see **Note Group Select** below), but if you intend to replace the notes with new music it is just as fast to enter the new music over the existing notes.

In this little sample piece we don't have any chords. You can play chords with the mouse by clicking on all the notes in the chord while holding the **Shift** key. It is much easier to use a MIDI keyboard if you have one. In this case, simply play all the notes in the chord simultaneously. A single voice can contain a chord with any number of notes. A chord on a single staff can be the result of several voices, one note per voice, or a single voice containing chords.

The next pitch in the example is an eighth note tied to a quarter. There are two methods for adding ties, slurs, dots, accents, etc.; selecting the symbol before entering the note, or using the Edit Cursor to add the marking after entering the notes. We will demonstrate the first method here.

To enter the tied eighth, first click on the “tie” in the piano window. Check to make sure the eighth note symbol is still selected. If not, select it. (Do not select it again. This will change it to a dotted eighth; a common error among beginning users.) Click on the D-natural. It is not necessary to select the natural symbol in the piano window. Lime will enter the pitch with the

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<sup>3</sup> Entering notes with the mouse as described here is the easiest and most intuitive method, but it is also the slowest. Using the computer keyboard, **Piano Window Keys** or a MIDI piano keyboard, are described below.

correct accidental. (Use the accidental symbols to force an accidental other than the default, or to change to an enharmonic pitch such as A-flat instead of G-sharp.)

The tie is deselected automatically, but you must select the quarter symbol before entering the next quarter note D-natural. Enter the eighth F and E-natural tied to the quarter E-natural. To enter the eighth rest, first select an eighth duration by clicking on the eighth symbol. Then click on the rest symbol at the end of the piano keyboard drawn on the screen or on the narrow gray strip just below the keys on the piano. For more details, see the **Piano Window** section below.

### **Edit Cursor**

When you have finished entering all the music, you can return to the “edit cursor” (single note flashing) by clicking (single click) on any note or by deselecting **Note Entry** (under the **Voice** menu). With this cursor you cannot enter new notes, but you can change the appearance of piece by adding slurs, ties, dots, keys, clefs, time signatures, etc. Any of the items in the **Piano Window** and any item in the menus that are not gray are available for editing when using the edit cursor. Most editing features that are available with the edit cursor are also available with the note entry cursor.

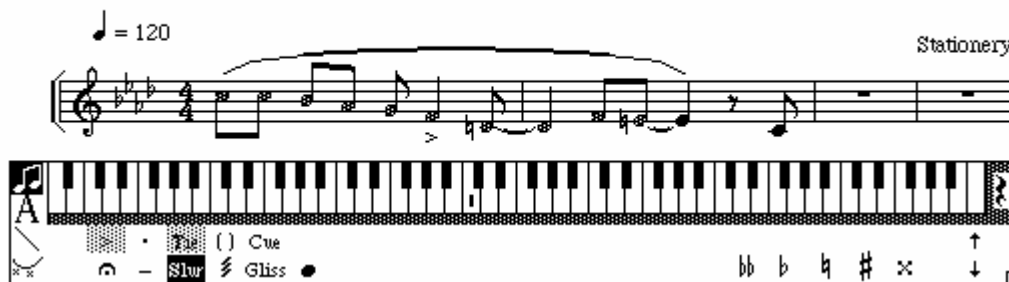
Position the edit cursor on the quarter note F. Click on the accent symbol in the piano window to add an accent.

### **Note Group Select**

Lime provides a “**Note Group Select**” feature that allows you to select and manipulate a group of notes. Normally, just one note or rest is selected, and it flashes continually. When **Note Group Select** is used, a whole set of notes is selected; the selected notes are highlighted. Go to the beginning of the piece, and select all the notes in the first measure by dragging the mouse (click and press the mouse button as you drag the mouse).

When you complete the drag and let up the mouse button, the notes are highlighted and the music symbol at the bottom left of the screen will be gray. To select additional notes (add more notes to the selected group) use the **Shift** key while dragging a box around the new notes. Go to the second measure in the piece, and select three more notes by **Shift**-dragging. These notes are selected in addition to those notes you already have selected. (If you **Shift**-drag around notes that were already selected, they are deselected. If you drag over new notes without pressing the **Shift** key, those notes will be selected and the previously selected notes will be deselected.) Do not select the quarter note E-natural.

## First Piece



Now click on the word “slur” in the **Piano Window**. Note that the final E is included in the slur. This is because a slur extends from the selected note to the next note. For this reason, when adding a slur, you must not include the last note to be contained under a slur. Click on the staccato symbol in the **Piano Window**; this makes all the selected notes staccato; click again for staccatissimo. . Select **No Stem**, **Stem up**, or **Stem down** under the **Stem** menu. Any of the symbols in the **Piano Window** that are not shaded and menu items that are not gray may be applied to the selected notes. A selected group of notes can also be deleted by hitting the **Delete** key. To end **Note Group Select**, just click on a single note in your music; this will select just that note, and end **Note Group Select**. Finally, to get rid of the staccato dots you just added, **Note Group Select** the same notes, and click on the staccato symbol to remove its shading; then click on one of your notes to end **Note Group Select** again. You can also use **Undo** (under the **Edit** menu) to remove the markings. In fact, you can continue choosing **Undo** to revert back to the beginning of the editing session.

### Piano Window Shading and Menu Check Marks

Lime illustrates which edits have been applied to each note with a dark shading in the **Piano Window** and a check mark in the menus. Click on just one of the notes you have just changed then one of the notes that has not been changed and notice how the shading in the **Piano Window** changes. Click on the **Stem** menu and notice the check marks on each of the notes. When a group of notes are selected and there is a mix of edit options (in the example above some notes have ties, some do not, some have accents, others do not), the **Piano Window** item is shaded, not dark. The menu item has a grayed check (Windows) or dash (Macintosh) rather than a regular check.

If you need to change the length of individual notes you should reenter the music using the correct note lengths. If you select **Enable Duration Edits** (under the **Edit** menu), it is possible to change the value of the note indicated by the edit cursor (including tuplets) by clicking a length in the **Piano Window**. This operation is available for correcting OMR (Optical Music Recognition) errors in scanned music or imported MIDI files. *It should not be used when doing standard copy since the length of the measure is changed along with the note length.* Conflicting measure sizes will result, particularly in multiple voice works, if this option is used incorrectly.

If you select **Enable Duration Edits**, the **Kill** symbol is also used to correct errors in scanned music. It removes unwanted notes *without* preserving the size of the measure. Likewise, **Kill**

should be used with care or conflicting measure sizes will result. Normally the **Delete** key is used to replace notes with rests.

## Adding Lyrics

Now click on the first note in the piece. You may have to use the scroll bars to bring the first note onto your screen.

There are four symbols at the left of the **Piano Window**. The top symbol is for entering music, the bottom three are for various kinds of annotations: text (and other symbols found in fonts), lines, and curves. Select **Text Category, Lyric** (under the **Annotation** menu). This will highlight the text symbol (letter A) at the left of the **Piano Window**; this allows you to type lyrics under your note.



Now type the word “Lull-” (include the hyphen). It will appear underneath the first note. Then press **Tab** to move to the next note. Type "a-", press **Tab**, then type "by". Continue to type the lyrics using **Tab**<sup>4</sup> to move to each new note and typing each part of the lyric underneath each note. There are two useful features already selected in the **Annotation, Style** menu that will make entering lyrics easier. **Center Hyphen** centers the hyphen if it is the last character in an annotation. (So type “la-“ and “Bird-” for this example.) And **Extend Underline** replaces an underscore, if it is the last character in the annotation, with a line. (So type “that’s\_” and “I\_” under the eighth note D and E.)

If you make a mistake, select the incorrect lyric by pressing **Alt** (Windows) or **Option** (Macintosh) and clicking near the beginning of the lyric (hold down the **Alt** or **Option** key as you click). Then use **Clear Annotation** (under the **Edit** menu) or press the **Delete** key, and re-type your text. You can also select **Previous** or **Next Annotation** (under the **Annotation** menu) to move through annotations for modification. Similarly you can press **Alt** (Windows) or **Option** (Macintosh) and the left or right arrow keys to move between annotations.

Once an annotation is selected you can hit **Enter** or **Return** to position the cursor at the end of the annotation for editing. You can also select a section of the text after it has been selected to delete or edit. When you have finished, click the notes symbol (the top symbol) at the bottom left of the screen. You can also exit **Annotation Mode** by pressing the **Esc** key. For

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<sup>4</sup> It is possible to switch the **Tab** and **Space Bar** in the **Options** dialog. Some users find it easier to use the **Space Bar** to move to a new note.

more details on lyrics, see the description of **Annotation Mode** and **Annotation** menus below.

If you have two lines of lyrics, you can type the first line for all the notes on the page (using **Tab** between notes); then you can click on the first note, and type the second line for all the notes on the page.

Some users find it easier to use the space bar to advance to the next annotation when entering lyrics. There is an option (**Options** under the **Edit** menu) that will allow you to swap the function of the tab key and space bar. With this option engaged the space bar will advance to the next note and the tab key will type a space.

While still in **Annotation Mode** click on the first note in the example. Choose **Text Category, Chord Symbol** under the **Annotation** menu. Choosing **Chord Symbol** has no apparent effect on the annotation when they are entered. But chords that have this designation will automatically transpose with the music if you change keys.

To reposition the cursor **Control (Windows)** or **Command (Macintosh)**-click above the note at the position where you want the chord symbol to appear. Use the **Text Assistant** (under the **Annotation** menu) and choose **Chord Symbol** to create each chord. Use **Tab** to move to the next note where a new chord symbol is used. It is possible to type in chord symbols without the **Text Assistant**. Special characters such as sharps and flats can be entered using the backslash convention described in the sections that follow.

It is important to remember that each annotation is assigned to a note. In this example, each lyric and each chord symbol should be attached to the note with which it corresponds. This allows Lime to maintain the relationship between the annotation and the note if the note is moved to another location, such as the next system.

You can also change existing annotations; for example the title or tempo markings in a template file. You can press **Alt** (Windows) or **Option** (Macintosh) and click to select the annotation. Then position the cursor to delete or change existing text. You can also use **Clear Annotation** (under the **Edit** menu) and reenter the title from scratch.

### **Copy, Paste, and Multiple Paste**

Lime has a variety of copy and paste capabilities. To copy notes select the notes you want to copy with **Note Group Select**, and use **Copy Music** (under the **Edit** menu). Alternatively, you can click on the first note you want to copy and use **Copy Measures...** (under the **Edit** menu). After you use **Copy Music** or **Copy Measures...** click elsewhere in the piece and use **Paste Music** (under the **Edit** menu).

You can use the scroll bars to scroll around the page. Alternatively, you can press **Alt** and **Control** (Windows) or **Option** and **Command** (Macintosh) while you move the mouse to the edges of the music window; this is called “**Magic Scrolling**.”

Lime also allows you to copy and paste annotations. Select the annotation by pressing **Alt** (Windows) or **Option** (Macintosh) and clicking next to it. Then use **Copy Annotation** (under the **Edit** menu). Now you can click elsewhere in the piece and use **Paste Annotation** (under the **Edit** menu). Alternatively, you can do a “**Multiple Paste**,” select several notes using **Note Group Select** and then use **Paste Annotation**. Your annotation will automatically be pasted to all the notes that are selected.

**Multiple Paste** is an economical method of annotating a large score. For example, a score may call for *tr* throughout a piece. Start by entering all the notes. Then, click on the first note which needs a *tr*, select the text symbol, select 12-point **Marl** font, type the *tr* (press the 8 key; **Marl** font charts are in the back of the manual), and use **Alt**-drag to adjust its position. (You may find it simpler to add the trill using the **Text Assistant** in the **Annotation** menu, or typing the backslash expression `\tr` in a text font; both these approaches are described later in this manual.) **Once** you have the *tr* on the first note, you can easily copy and paste it to other notes using **Multiple Paste**. **Alt** (Windows) or **Option** (Macintosh) click on the *tr*, use **Copy Annotation**, use **Note Group Select** to select all the other notes on the page that need the *tr* symbol, and use **Paste Annotation**. You will find that proper use of the annotation controls (such as **Horizontal Lock** and **Vertical Lock**, under the **Annotation**, menu) will help you make good use of **Multiple Paste**. For a *tr*, turn off **Horizontal Lock**. Turn **Vertical Lock** on if you want the *tr* pasted the same distance from the staff line wherever it is pasted; turn **Vertical Lock** off if you want the *tr* to move up and down depending on the pitch of the note to which it is pasted.

## Experiment

After learning the basics of Lime you will probably want to experiment. Most of the menu items, such as **Hear**, **Print**, **Key Signature**, etc., are self-explanatory. Open each one and read the options. If a menu item is unclear, you will want to read about them in the manual. You might also glance through the **Hints and Examples** section and try to reproduce some of those examples. It will be constructive to experiment for a while before you transcribe your first piece. As you gain experience and become more familiar with the Lime environment, your speed of music transcription will increase dramatically.

When you begin working on your first serious transcription, use **Save** and **Save As** (under the **File** menu) frequently. This way you will be able to use **Revert** (under the **File** menu) to go back to the most recently saved version of your piece if you make changes you do not like. It is always a good idea to **Save** just before an operation that may drastically change the look of the piece (such as **Systems** changes, **Layout**, or **Part Extraction**).

## Part Extraction

Once you have completed a score, you can print out the score using **Print** (under the **File** menu). If you also want to print out individual parts, Lime has a mechanism called “notation contexts” to help you. Your piece starts off with only one notation context, the score notation context. Use **Part Extraction...** (under the **Context** menu) to create more notation contexts:

one notation context for printing each individual part. The notation contexts keep track of printing information for the score and parts.

It is best to complete the score before you create the notation contexts for the parts. After you make all the parts notation contexts, changes you make in one notation context will be reflected in the other notation contexts. For example, if you correct a note in the flute notation context, the correction will automatically appear in the score notation context as well.

### **Shortcut Keys, MIDI entry.**

So far we have entered notes, selected duration values and menu items using the mouse and the piano window on the computer screen only. This method is intuitive and user friendly, but very slow. It is much faster to use keyboard shortcuts and a MIDI piano. Keyboard equivalents take a little time to learn, but it is a worthwhile investment in the long run. There is a complete list of shortcuts at the back of the manual. Most shortcuts can be customized. Here are a few.

- Pitches, chords, and rests can be entered using an external MIDI keyboard. To enter a rest press three adjacent keys on the piano keyboard (e.g. C, C-sharp, and D).
- Many commonly used menu items have keyboard equivalents. The keyboard equivalents are listed on the right side of each of the menus.
- Most items in the **Piano Window** can be engaged using the computer keyboard. **Piano Window** equivalents can be customized using **Shortcut Keys...** under the **Edit** menu.
- The second and third rows (a, s, d, and q, w, e) are set to pitches beginning with C4. The [ and ] keys are set to keyboard shift.
- The numbers on the keypad of an extended keyboard have been set to commonly used durations. With one hand on the computer keypad and one hand on the MIDI keyboard music can be entered as fast as one would type or play in real time; this is an alternative to real-time MIDI entry with **Record...** under the **Edit** menu.

## Creating a New Piece

In this section we describe how to create a piece from scratch. Start Lime by double clicking on the Lime icon.

Under the **File** menu, select **New**. This is used to make a new piece.

**Create a New Piece:**

Measures of 
 

4
4

 Time

Measures per System

Systems per Page

**Name for First Part in Piece:**

**Staff for First Part in Piece:**

Single Staff  
 Grand Staff

**After you click OK:**

- To enter notes, double-click in your piece, then play the keyboard.
- Use **Parts and Voices...** to add parts and voices.
- Use **Insert Measures...** to add pickup measures.
- Use the **Symbol** menu to specify clefs and keys.  
(First click a voice's starting note or rest; use Shift-click to do several voices at once.)

### Initial Time Signature, First Part, and Number of Measures

When you create a new piece, you are asked how many measures you want to start with, the starting time signature for your piece, a name for the first part and how many beats you want in each measure. If the piece you are working on uses changing time signatures, or different time signatures, they may be specified later. You can also insert more measures later; you will have to do this if the number of beats in a measure varies in your piece. (For example, if you are in 4/4 time but you have a 1-beat pickup measure, you will want to start by specifying the total number of 4/4 bars. Once the page of 4/4 measures appears you can click on the first note or rest and insert one measure of 1/4 for a pickup.)

You are also asked for the number of measures per system, and the number of systems per page. If your music is very dense, you will want few measures per system; if you have a large score, you will want only one system per page. For solo pieces, where each system has only one staff, you may want to put 10 or 15 systems per page. You will be able to change the number of measures on each system and page turns later, if you think certain systems are too crowded or too sparse, or if page turns are at bad places.

### **Parts and Voices**

Lime uses a hierarchy of parts and voices that allows great flexibility when creating a score. The term “part” is used for a single musical instrument. The term “voice” is used to describe a line (usually indicated by stem direction) within a part.

When you create a new piece, it always starts off with one part. You can choose **Single Staff** or **Grand Staff**. If you choose **Single Staff**, your piece will start off with one part consisting of one voice printed on one staff per system. If you choose **Grand Staff**, your piece will start off with one part consisting of two voices printing on two staves per system.

Often several parts of several voices are combined on a single staff and appear as chords. But a single voice can also contain a mixture of melodic lines and chords.

Once you have created your piece, you can use **Parts and Voices** (under the **Voice** menu) to create more parts and to arrange them on the score. If you are creating an orchestra score and you want two flute parts to print together on one staff, you should create two parts for the flutes; flute 1 and flute 2. **Parts and Voices** will let you specify that the flute parts print together on one staff in the score. If you are transcribing Bach's three part inventions, you will probably use three voices for the piano part. See the section on **Parts and Voices** for more information.

### **Clefs and Key Signatures**

You can change the key signature and clef by using **Key Signature** and **Clef** under the **Symbol** menu. If your piece has several staves in each system, you can change keys or clefs on more than one part or voice at a time using **Note Group Select**: **Shift-click** the first note on each of the staves, then use the **Key Signature** or **Clef** menu options.

If you want to print a score with transposing instruments, specify this using **Key Signature**. Use **Current Staff Only** in **Key Signature** to specify a key signature for each individual part. You also have to specify how many half steps to transpose in **Key Signature**. For example, an instrument in b-flat has a concert pitch two half steps down from the printed pitch, so specify “-2.” An instrument in f plays 5 half steps above printed pitch or 7 half steps below printed pitch, depending on the octave of the instrument.

### **The New Piece**

Once you have made any changes to the key, clef, number of measures or voices, you can begin to enter music, as explained in the previous section. You can use the scroll bars to scroll around the page. Alternatively, you can press **Alt** and **Control** (Windows) or **Option** and **Command** (Macintosh) while you move the mouse to the edges of the music window; this is called “**Magic Scrolling**.”

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