

Table of Contents

Unit 1: Exploring the Music Sequencer	5
The Transport Control	5
Understanding Measures	6
The Sequencer Timeline	8
Song Form.....	9
Exploring Tempo	11
Tempo Display	12
What is MIDI?.....	15
Exploring MIDI Tracks and Channels	15
General MIDI (GM)	16
Arranging Music	17
The Mixer	19
Extensions and Supplemental Activities	21
Unit 2: Rhythm, Melody, and MIDI Recording	23
Canon	23
Rhythm Patterns.....	25
GM Drum Kits and MIDI Channel 10.....	29
GM Standard Drum-Kit Chart	30
Rock Drum Beat.....	31
Loop Recording	31
The Graphic Editor.....	34
Melody	35
Extensions and Supplemental Activities	38
Unit 3: Pentatonic, Japanese Folk Song	39
Definitions: The Parts of a Song (Vocal).....	39
Japanese Folk Song: “Water Lily”	39
Extension and Supplemental Activities	45
Unit 4: Build a Song	47
Making Choices – What Comes First?	48
Form	48
Start the Song File: Drum Loops.....	50
The Accompaniment: Guitar Loops	53
Play and Record a Bass Part.....	53
Add the Vocal Track.....	54
Extension and Supplemental Activities	55
General MIDI Instrument List	56

Alfred's Music Tech Series: Sequencing and Music Production, Book I, is designed for the beginning student who is learning about digital composition and recording in a group lab setting. It is designed for grades 5–9, and can be used in an elective music class where there is access to a music technology lab, MIDI controllers and desktop music production software like Apple's Logic Express or Cakewalk's SONAR.

This course is unique, as it allows students to work on projects individually or in small groups with the provided lesson materials. It may be used with a variety of sequencing and digital recording programs on either Microsoft Windows or Macintosh operating systems.

Although two specific programs are referenced with screenshots throughout the book (Logic Express and SONAR), other programs may also be used.

■ The Companion CD

Included with this book is an audio/data CD that contains project files and examples. This CD is intended for use in a computer's CD-ROM drive.

■ To the Teacher

There is a comprehensive teacher's manual that may be purchased separately, which includes lesson plans and supplemental materials. Contact Alfred Publishing or any of its authorized dealers for availability and cost. There are also two other books in Alfred's Music Tech Series: *Playing Keyboard* and *Composing Music with Notation*. Please visit alfred.com for more information.

Exploring the Music Sequencer

Objectives

Upon completion of this unit, you will be able to do the following:

- Use the transport controls to play a song
- Use the tempo controls to change the tempo (speed) of a song
- Identify MIDI tracks and MIDI channels
- Identify the General MIDI families of instruments and change individual track timbres
- Create an arrangement of a song by changing instrumentation
- Use mute and solo to mute and solo tracks
- Use the track mixer to manipulate volume and panning
- Use the track mixer to create a new mix of a song

Getting Started

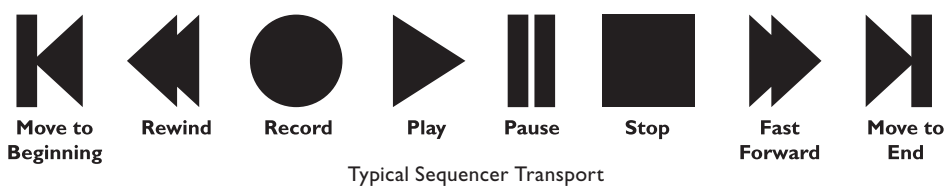
When using an electronic keyboard with your computer, be sure to follow these steps each time you use the equipment:

1. Turn on the electronic musical instrument.
2. Turn on the computer.
3. Launch your sequencing software.
4. Set the volume of the electronic keyboard to an acceptable level. To prevent hearing damage, it is very important to make sure the volume is not too loud.
5. Put on your headphones.

In order to begin using a sequencer to create and listen to music, you need to become familiar with its basic components. Begin by looking at the sequencer's playback tools.

The Transport Control

MIDI sequencers have a standard **transport control** that functions like those found on common CD and MP3 players. The buttons on the transport control allow you to play, record or move to different locations within a song. A typical sequencer transport control may include any or all of the following buttons:



Compare the above illustration to the transport controls of two popular sequencers—Logic Express (for the Mac) and SONAR (for the PC). Can you identify all the buttons?



Write in the name of each button on the Logic Express transport control below.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

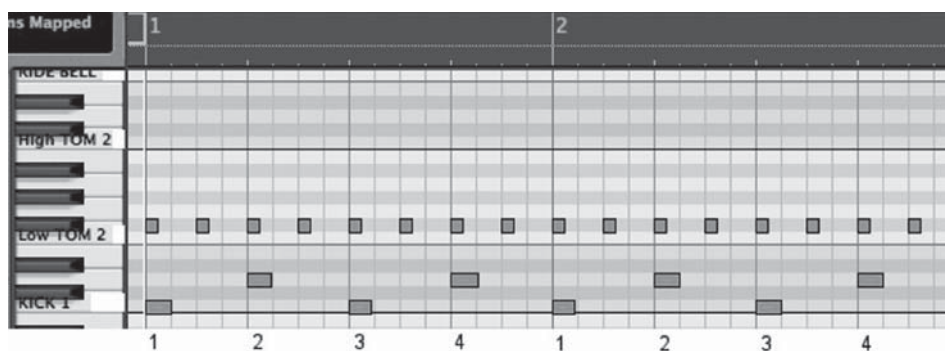
■ The Graphic Editor

A MIDI/Digital Audio sequencer has a special editor called the graphic editor (also known as the **piano roll view**). The **graphic editor** displays the notes as bars rather than traditional notation. It allows you to change (or edit) the notes in a variety of ways. Some of the most common editing techniques when using a graphic editor include changing the following properties of a note:

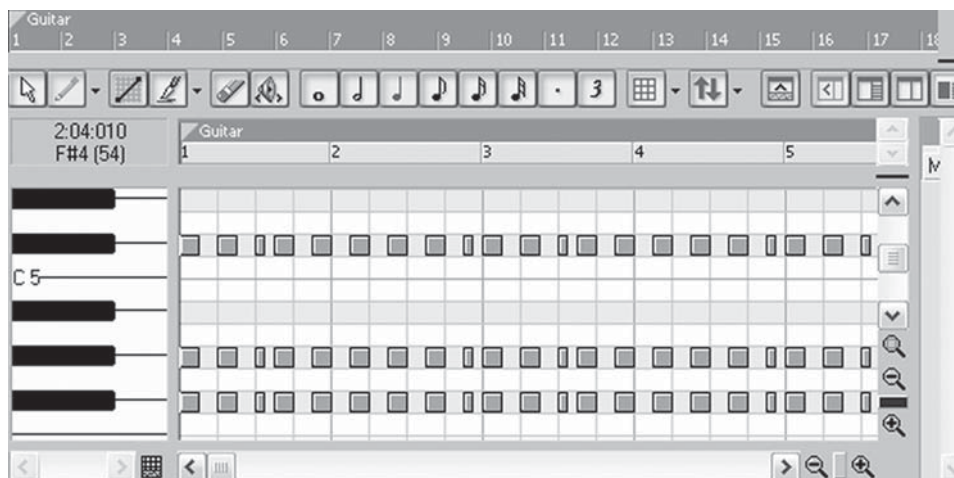
- The pitch of a note or a group of notes
- The location of a note or a group of notes
- The duration of a note or a group of notes
- The volume of a note or a group of notes

Notice the similarity between the graphic editors of Logic Express and SONAR Home Studio and the grid notation of the simple rock groove in the figures below:

Graphic Editor



Piano Roll View



Grid Notation

	Measure 1				Measure 2											
Beat	1	+	2	+	3	+	4	+	1	+	2	+	3	+	4	+
Ride Cymbal	•		•		•		•		•		•		•		•	
Snare Drum			•				•				•				•	
Bass Drum	•				•				•				•			