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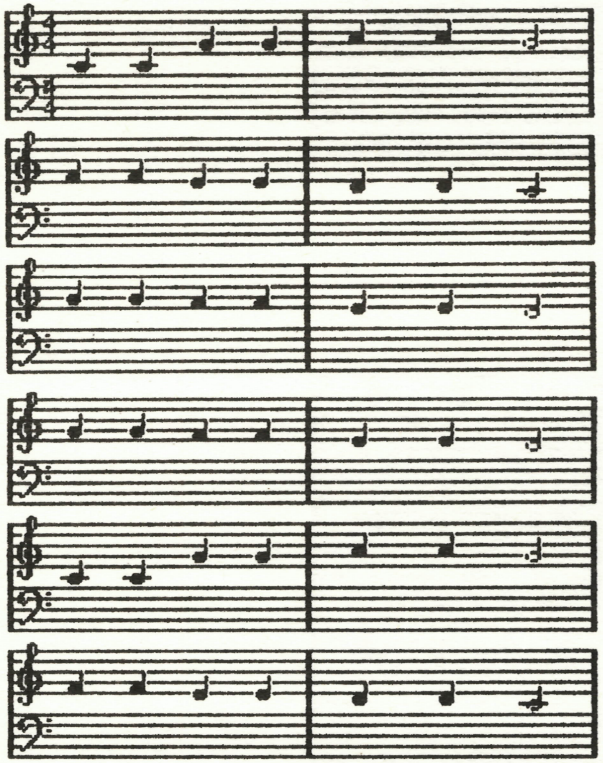
STICKYBEAR® MUSIC

USER'S GUIDE

Twinkle, Twinkle, Little Star



STICKYBEAR MUSIC USER'S GUIDE

By Richard Hefter and Dave Lusby
Graphics by Janie Worthington

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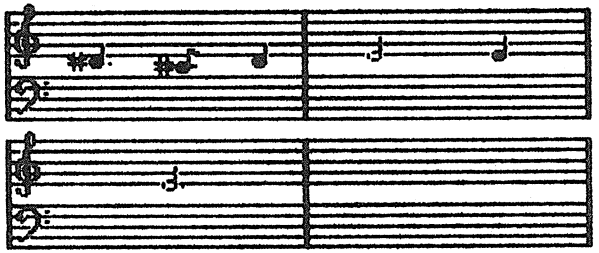
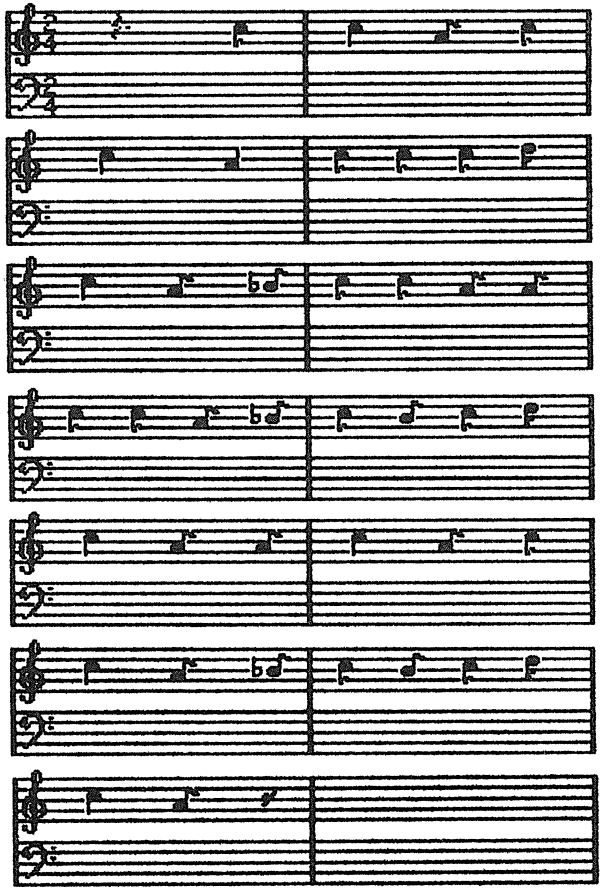
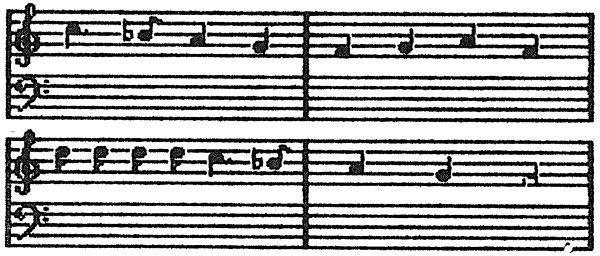
What's Inside?

The Program 3
To Begin 3
Section 1-Tutorial 4
  Loading a Stored Song and Hearing It Played 4
  Adding Notes to the End of a Song 5
Section 2-How to Use the Program 6
  The Main Menu 6
  Utilities Menu-Loading and Saving Music 6
    Exit 7
    Load Song 7
    Save Song 7
    Initializing a Disk 8
  Printing the Music 9
  Creating a New Song 10
  Writing a New Song 11
  Changing the Tempo 14
  Playing the Song 15
  Adding Notes 15
  Editing Notes 16
Section 3-What Is Music? 19
  Exercises 19
    Exercise 1A: Pitch-High and Low Notes 19
    Exercise 1B: Pitch-Octaves 21
    Exercise 1C: Pitch-Accidentals 22
    Exercise 1D: Pitch-Rests 25
    Exercise 2A: Duration-Types of Notes and Rests 25
    Exercise 2B: Duration-Measures and Time Signatures 26
    Exercise 2C: Duration-Ties 28
    Exercise 2D: Duration-Rhythm 31
    Exercise 3: Tempo 31
    Exercise 4: Using All the Components to Create a Song 31
Entering Familiar Songs 32

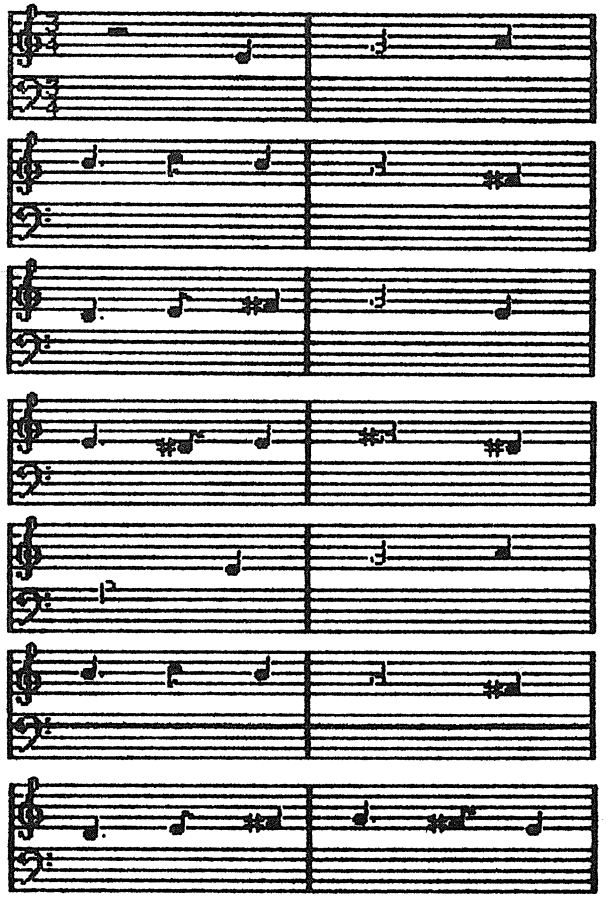


A Tisket, A Tasket





Greensleeves

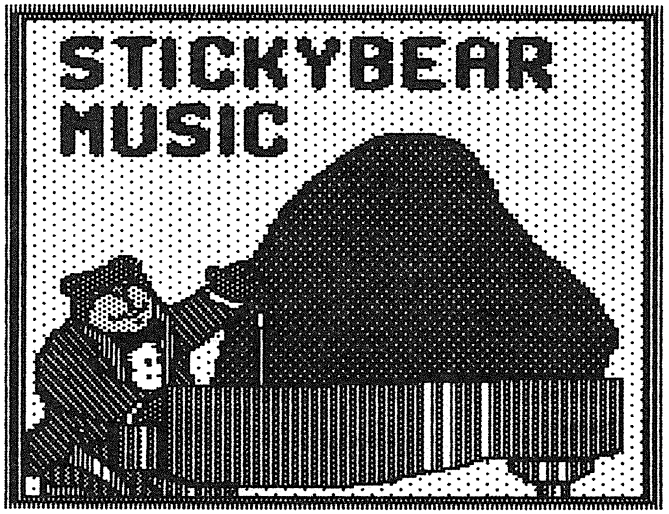


The Program

Stickybear Music lets you create, edit, play, and save your own songs while practicing your music notation skills. This manual is divided into three sections. The first is a step-by-step tutorial to guide you through some of the features of the program. The second section explains all of the available functions. The third section contains exercises to help you perfect your musical skills.

To Begin

Stickybear music will run on any Apple, Apple II Plus, Apple IIc or Apple IIe with 48k and a disk drive.
Put the program disk into the drive and turn on your Apple. If you have the Autostart ROM you will see the title panel displayed.



If your Apple does not have the Autostart ROM, you will see the monitor cursor *, and you will do the following: Press the 6 key. Hold down the key marked Control while you press the P key (6 CTRL P). Press the Return key. The title panel will appear followed by a screen with the Main Menu.

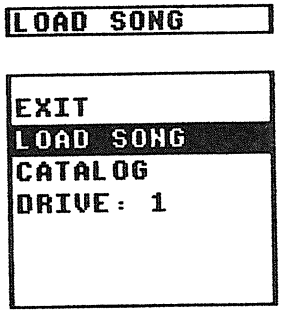
Stickybear Music is MENU driven. For each step along the way you will be presented with new menus from which to select the options. To select an item from the menu, use the up and down arrow keys (or the I and M keys) to place the cursor; then press the space bar or the Return key to make your selection.

SECTION 1-TUTORIAL

Loading a Stored Song and Hearing It Played

Boot the Stickybear Music disk. After the title panel is displayed you will see the Main Menu overlayed on a sheet of music. Use the up and down arrows or the I and M keys to move the highlighted black box to the work UTILITIES. Press the space bar or RETURN key and you will see the Utilities Menu.

Move the cursor to LOAD SONG and press the space bar or RETURN key. Now you will see the Load Song Menu.



Move the cursor to CATALOG and press the space bar or RETURN key. You will see the songs that come with the Stickybear Music disk. Press any key to return to the Load Song Menu.

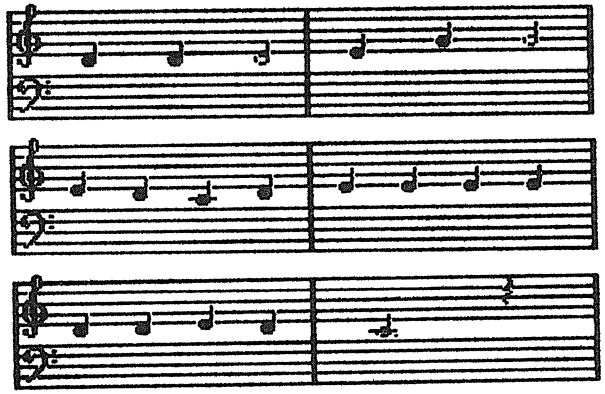
Now move the cursor to LOAD SONG and press the space bar or RETURN key. Enter the filename of the song you want to load. Let's type in BACH MINUET. Then press the RETURN key.

When the song is loaded in, move the cursor to EXIT and press the space bar or the RETURN key. This will return you to the Main Menu.

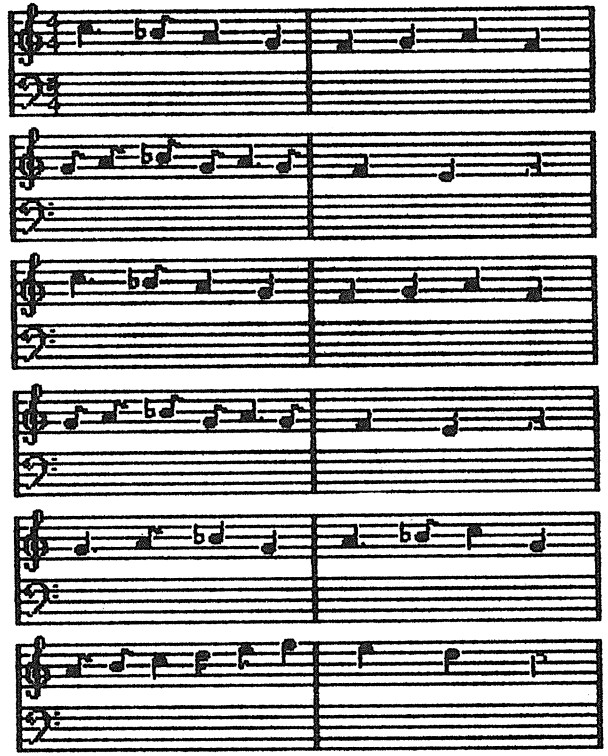
Move the cursor to PLAY SONG and press the space bar or the RETURN key. A line cursor will mark the note or rest that is being played.When the song is finished you will return to the Main Menu.

Play the song as many times as you like by moving the cursor to PLAY SONG and pressing the space bar or RETURN key.

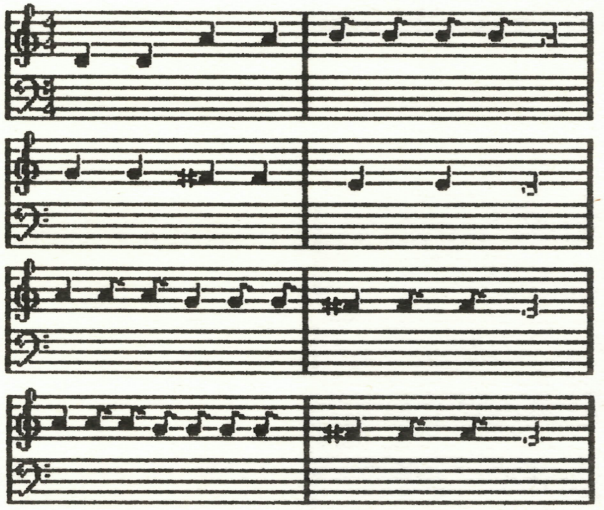
To load and hear another song, move the cursor to UTILITIES again and repeat the process described above.



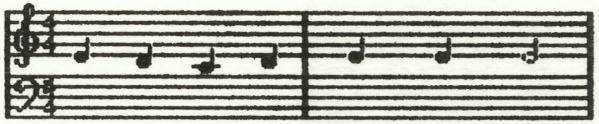
Deck the Halls



Baa! Baa! Black Sheep



Mary Had a Little Lamb

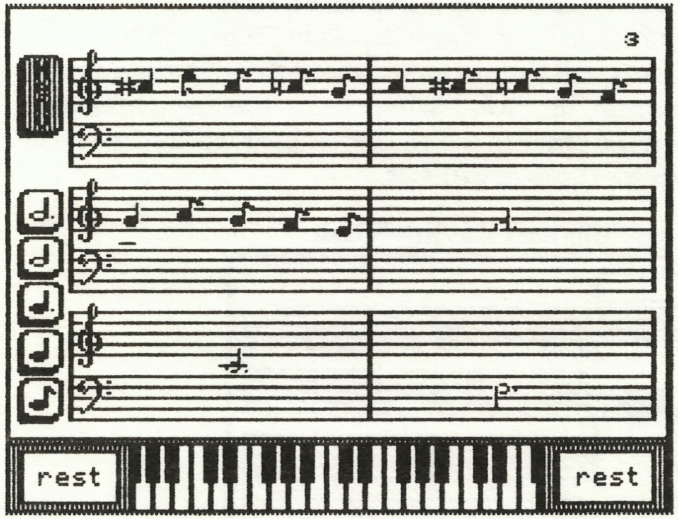


Adding Notes to the End of a Song

The song BACH MINUET should still be in memory if you have just followed the above section to load and play the song. If not, boot the Stickybear Music disk and follow the directions above to Load the song BACH MINUET.

When the song is loaded, move the cursor to ADD NOTES and press the space bar or the RETURN key. We will now add two notes to the end of the song.

Following the musical score below, move the highlighted cursor until it is at the top note at the top side of the screen. The note on the screen should now match the next to the last note on the musical score printed below. Press the space bar or RETURN key to place it in the staff. Now press the left arrow or the J key until the last note on the screen is on the second line from the top of the bottom staff. When the note matches the score below, press the space bar or RETURN key.

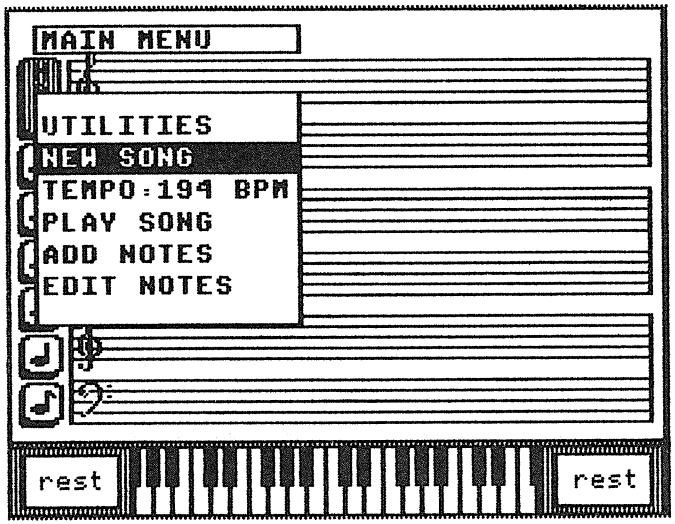


Creating a song from scratch is done in the same manner. Now move the highlight to the word MENU and press the space bar or RETURN key. Move the cursor to play song and hear the BACH MINUET played with the new ending.

The next section in the manual will give you a more in-depth explanation of all the functions in Stickybear Music.

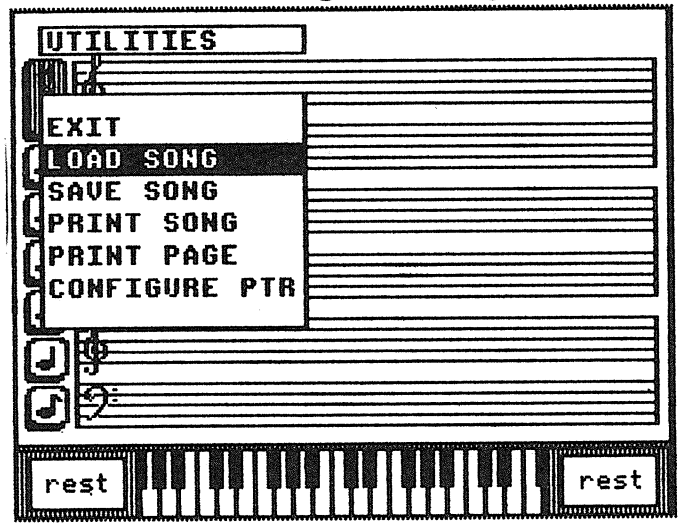
SECTION 2-HOW TO USE THE PROGRAM

The Main Menu



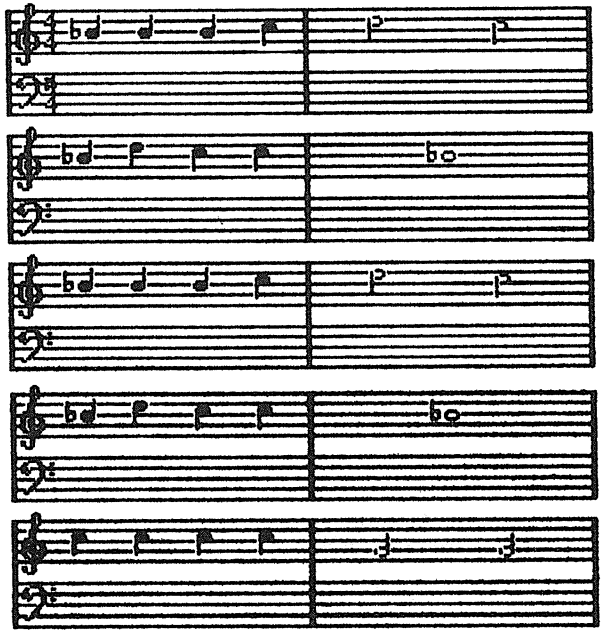
At the beginning of Stickybear Music the Main Menu will be displayed. The Menus will change as you move through the various sections of the program. In the following section the menu options will be described in the order in which they appear on the screen. The first option is to access the disk utilities.

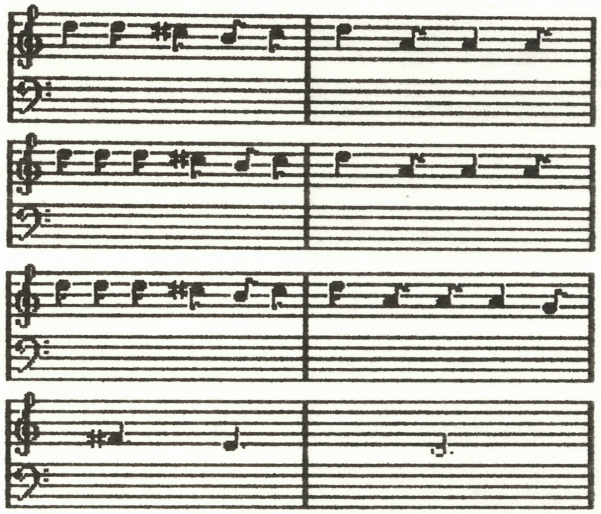
Utilities Menu-Loading and Saving Music



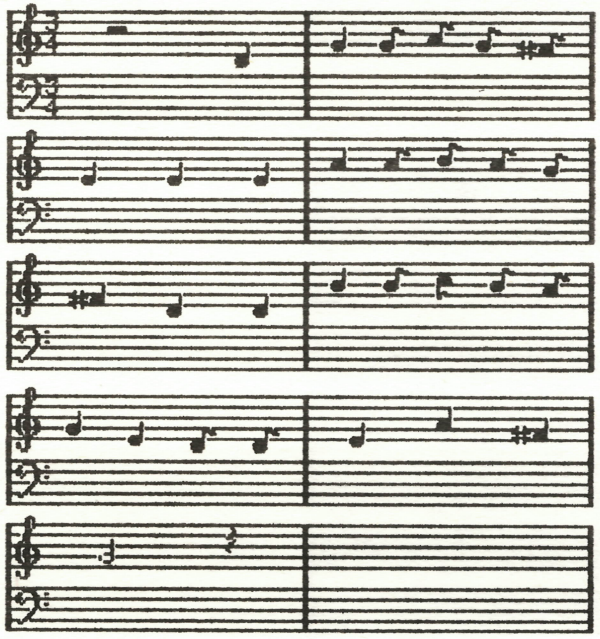
Jack and Jill

Au Claire de la Lune





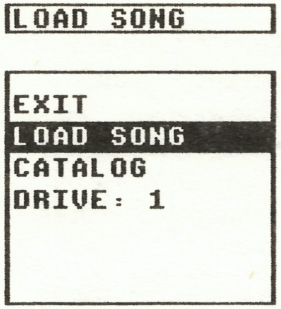
We Wish You a Merry Christmas



From the Utilities Menu you can load or save a song onto the disk or print a song.

EXIT — Selecting the Exit option will return you to the Main Menu.

LOAD SONG — Use this function to load a song that you have created using Stickybear Music and have saved onto a disk, or to load one of the stored songs that come with the program. When you select this option you will be given the following choices at the Load Song Menu:

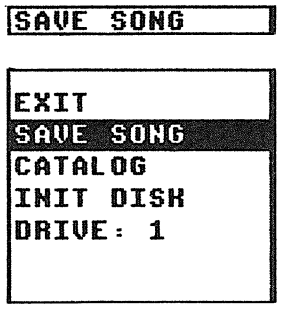


The Exit option will return you to the previous menu (Utilities Menu). To Load a song, first select the drive that the song disk is in. To do this, move the cursor to DRIVE: and press the space bar or the RETURN key. This will toggle between Drive 1 and Drive 2.

The Catalog option will show you a catalog of all the files on the disk. If you catalog the Stickybear Music disk you will see the names of the stored songs that come with the program disk.

To Load a song, move to the Load Song option and press the space bar or RETURN key. The program will ask you whether you want to load from the current disk drive. Type the letter Y to continue or press the letter N to cancel the load. You will then be asked to enter the filename of the song. Type in the name exactly as it appears in the catalog and press the RETURN key. The song will be loaded from the drive you have chosen. You can now select EXIT to return to the Utilities Menu.

SAVE SONG — When you select this option at the Utilities Menu you will see the Save Song Menu:



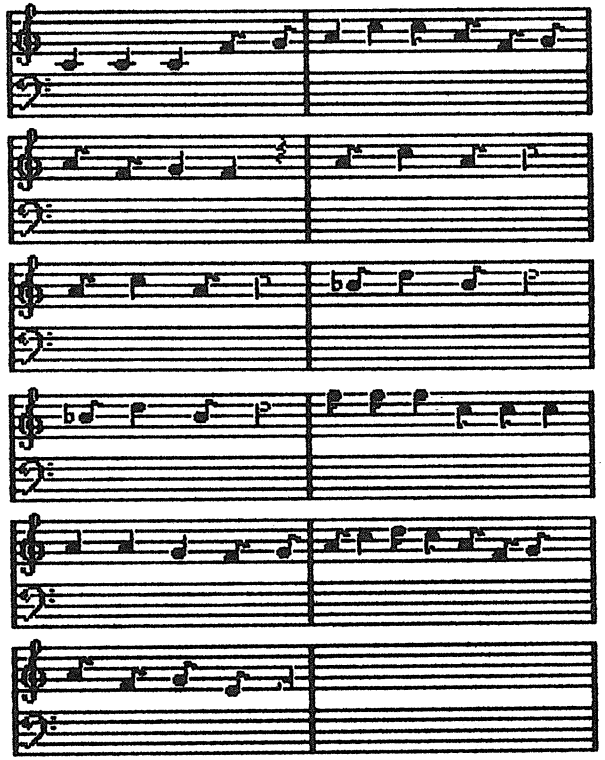
The options are similar to the Load Song Menu. The Exit option will return you to the utilities Menu. Move the cursor to DRIVE: and press the space bar or the RETURN key to toggle between the two disk drives. The Catalog option will show you the files on the disk in the drive you have selected. If you catalog the Stickybear Music disk, you will be presented with the names of the songs that come with the program.

To Save a song that you have created or edited, select the Save Song option. The program will check to see what drive you have chosen and ask if you want to save the song onto that disk drive. Press N to cancel the save or Y to continue. Type in the filename of the song and press the RETURN key. The song must be saved onto a DOS 3.3 formatted (initialized) disk.

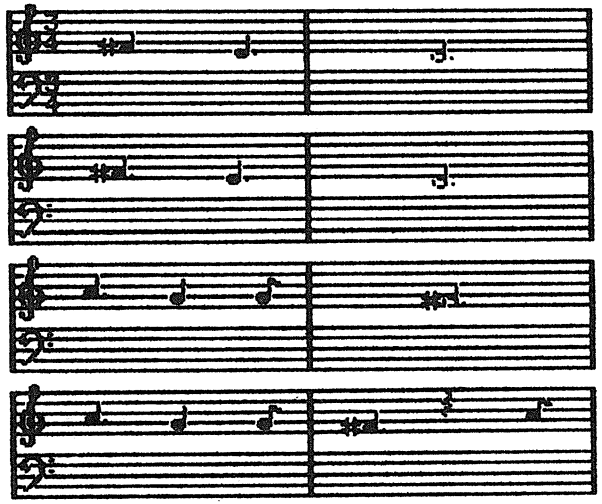
Initializing a Disk

If you do not have an initialized disk available, use the Init command to initialize a blank disk. The program will ask whether or not to initialize the disk in the drive you have selected. As with the Load and Save commands, press Y to continue or N to cancel. The program will not initialize the Stickybear Music disk as long as it remains in Drive 1. WARNING: INITIALIZING A DISK ERASES ALL THE DATA ON THE DISK. Be extra careful about what disk you choose to initialize!

Select the Exit option to return to the utilities Menu.



Three Blind Mice



discussed: PITCH, ACCIDENTALS, RESTS, DURATION, MEASURES, RHYTHM, and TEMPO are all important when creating a song.

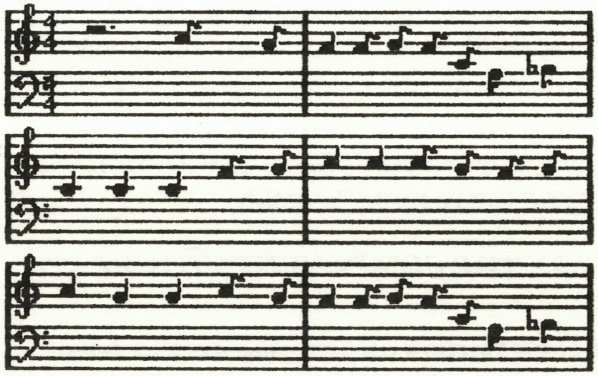
Load and play the entire song: EXERCISE 4A. The tune might sound a little familiar. The pitch of all the notes is correct, but
– no durations are set/it is made up of all quarter notes
– there are no rests where they are needed, so the rhythm is off
– because there are only quarter notes and no rests, the measures (bar lines) don't fall where they naturally would be in the song
– last, but not least, the tempo is too slow for this type song.

Load and play the entire song: EXERCISE 4B. The tune now sounds a lot more familiar. Notice the varied notes, the rests, and how the rhythm and tempo now sounds. Become proficient in editing your music so you can change any of these components to make a better sounding song. Remember that you have the option of printing out a blank sheet of music if you would rather compose the song on paper first.

Entering Familiar Songs

Here are some familiar songs which you can copy using Stickybear Music.

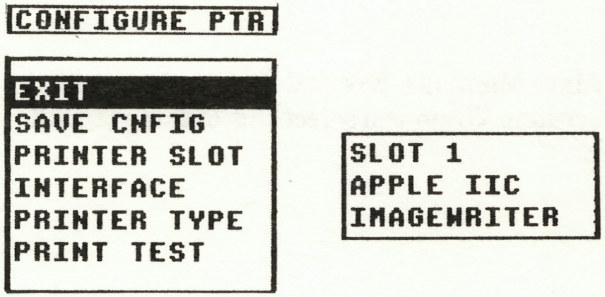
Turkey in the Straw



Printing the Music

The last three options on the Utilities Menu are used to print your music.

First, you must set the configuration for your printer. Move the cursor the CONFIGURE PTR. and press the space bar or the RETURN key. You will see the Configure Printer Menu. To the right of the menu is the configuration as it is presently set up.



With a new Stickybear Music disk, the configuration is set for Slot 1 of an Apple IIc with an Imagewriter Printer. To change any of these selections, move the cursor to the appropriate category and press the space bar or RETURN key. You will be shown a list of possible changes. When the selections to the right match your system, move the cursor to PRINT TEST. If the Stickybear Music disk is configured properly, a row of Stickybears will be printed.

You should now save the configuration onto the Stickybear Music disk. Move the cursor to SAVE CONFIG and press the space bar or RETURN key. You need to configure the disk only once. It will work from now on unless you change your system. It might be a good idea to place a write protect tab on the Stickybear Music disk after it is configured to avoid the remote possibility of initializing and, therefore, erasing the disk.

Move the cursor to EXIT and press the space bar or RETURN key to return to the Utilities Menu.

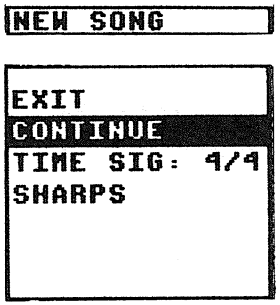
In printing a song you have two choices: print the entire song, or any individual page of the song. The Print Song option will print the entire song that is in memory, with two screen pages to a printed page.

To print only one of the pages in memory, or to print a blank page of musical staves to write your own music on, select the Print Page option. You will see a menu including EXIT (to return to the Utilities Menu), Print Blank (to print a page with no notes on it), and Print Page (1-4).

Make sure that the printer is set to the top of a page before you print the music. When the printing is completed, move to the Exit option to return to the Utilities Menu.

Creating a New Song

The second item on the Main Menu is NEW SONG. Use this option to create a new song from scratch. When you select this option you will see the New Song Menu:



Exit will return you to the song that is in memory. This is useful in case you selected New Song by accident. Whenever you create a new song, the song that is in memory is erased, leaving you with a "clean slate" to work on.

TIME SIG: refers to the time signature. Stickybear Music gives you three time signatures to choose from: 4/4, 3/4 and 2/4. When you move the cursor to Time Sig and press the space bar or the RETURN key, you will toggle between the three time signatures. When the time signature you want is showing, move the cursor. (For an explanation of time signatures and other musical terminology, see section 3 in this manual.)

next measure. If you add up all the beats for the tied notes, you will see that they equal a whole note (four beats).

Play EXERCISE 2-Page 3 to see and hear tied notes. Notice how there is no pause between the tied notes.

EXERCISE 2D: DURATION — RHYTHM

RHYTHMS are made by combining notes of different durations to create a certain feeling in a song. Remember that the time signature of a song sets the song's basic pulse. This pulse is a framework against which rhythms are heard. When you listen to the next exercise, notice how a 4/4 pulse is introduced and then played with. Your ear is surprised by the unexpected rhythms. The 4/4 pulse underlies all of the rhythms, though. It is a kind of invisible skeleton which holds all of the sounds together.

Play EXERCISE 2 — PAGE 4 to hear some exciting rhythm.

EXERCISE 3: TEMPO

TEMPO is the speed at which a song is played. Stickybear Music calculates the tempo in BPM (beats per minute).

Let's load in a song and hear how the TEMPO affects the music. Boot the disk and go to the Utilities Menu and select Load Song. From Drive 1, load in EXERCISE 3. Now exit both the Load Song and Utilities Menus to return to the Main Menu. At the Main Menu select PLAY SONG. Does the song sound familiar? It sure drones a bit, though. It was played at 128 BPM. When the song is finished, move to TEMPO and press the space bar or RETURN key once to increase the tempo to 152 BPM.

Now select Play Song again. Is it beginning to sound better? You can increase the tempo up to 936 BPM. That tempo makes the sound sound pretty hysterical. A nice tempo for this song seems to be at 300 BPM.

When you create a song, play it using the different tempos until you find the one that fits the mood you're trying to create.

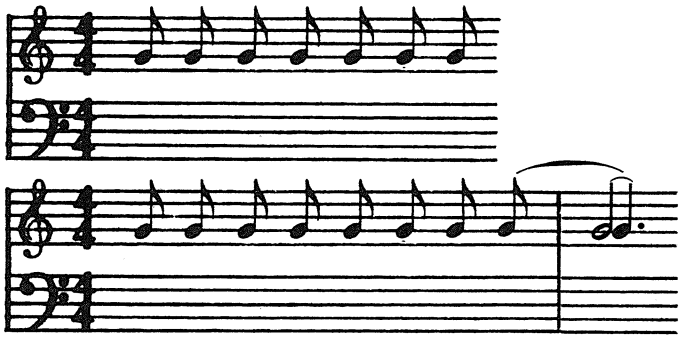
EXERCISE 4: USING ALL THE COMPONENTS TO CREATE A SONG

This exercise is meant to show you how all the componets we have

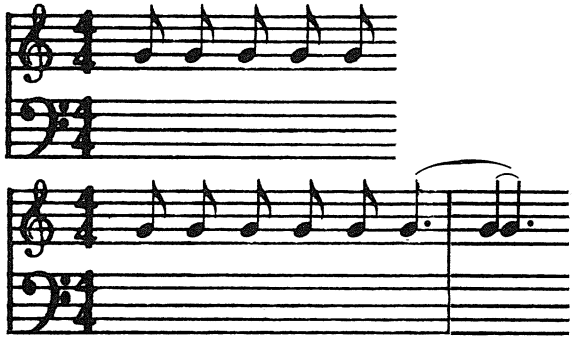
The TIED notes sound like a single tone when played, with no pause as the beats move into the next measure. When you play a song with tied notes in Stickybear Music, the cursor will stay at the first note in the tie for the length of the tone.

Here is a special case. Look at the measure below. The song is written in 4/4 time and the measure already contains seven eighth notes. What happens if you want to add a whole note to the measure?

One eighth note would be placed to complete the first measure. This would be tied over to the next measure, which would contain a half note tied to a dotted quarter note (worth the remaining three and a half beats). The value of the three tied notes would equal a whole note.



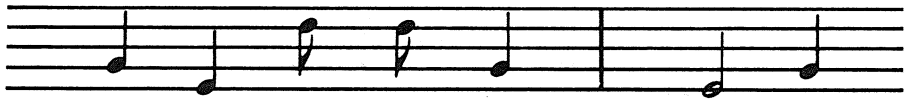
A similiar situation occurs in the following measure. There are five eighth notes in the measure (two and a half beats).



If you want to place a whole note in the measure, it would result in a dotted quarter (completing the needed one and a half beats in the first measure), tied to a quarter note and a dotted quarter note in the

In the New Song Menu you also have the choice of using either sharps (♯) or flats (♭) to notate the accidentals in your music. When the cursor is at this option, pressing the space bar or the RETURN key will toggle between the two choices. (For a more in-depth explanation of sharps, flats, and accidentals, see section 3.)

The final option in the New Song Menu is Continue. Choose this option after you have selected the time signature and decide whether to use sharps or flats. When you move the cursor to CONTINUE and press the space bar or the RETURN key, you will be placed in the song writing mode.

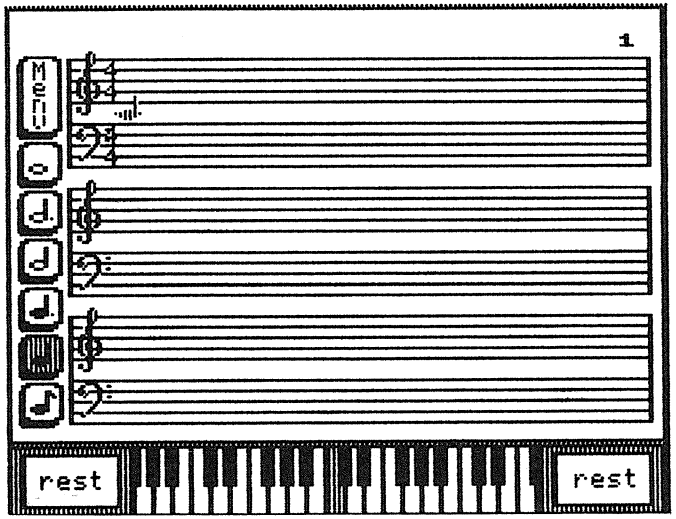


Writing a New Song

After selecting New Song at the Main Menu and deciding which time signature and accidentals to use, move the cursor to Continue and press the space bar or the RETURN key. The New Song Menu will be erased and you will be ready to begin composing a song. At the left side of the screen are the types of notes you can choose from. They may differ slightly depending on the time signature you have chosen. The notes determine the duration or length of the sound. One note will be highlighted. You can move this highlighting cursor up and down by pressing the up and down arrows or the I and M keys. At the top of the notes is the word MENU. If you move the cursor to Menu and press the space bar or RETURN key, you will return to the Main Menu.

Across the bottom of the screen is a keyboard with the word REST at each end. Notice that one key is highlighted. The key you select on the keyboard determines the pitch (how high or how low the sound is). (For a more extensive explanation on pitch and duration, see section 3.)

To change the pitch and the highlight on the keyboard, use the left and right arrows or the J and K keys.



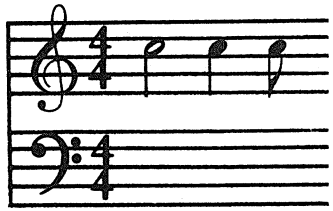
In the center of the screen are three double staffs, called staves. There is a flashing green note on the top staff. As you change the duration and pitch of a note, its shape and position on the staff also change. Notice that as you move up (to the right) on the keyboard, the note on the staff will also move up. These are the high notes. The further down on the staff that a note is positioned, (more to the left on the keyboard), the lower the note will sound. In like manner, as you move the highlight on the left side of the screen up, the duration of the note increases. The closer you are to the word Menu, the longer the note will sound.

Sometimes a note will be preceded by a sharp sign (♯) or a flat sign (♭), depending on which accidental you chose to use. Another symbol you might see is the natural sign (♮). This sign is used to "unsharp" or "unflat" a sharped note or flatted note in a measure.

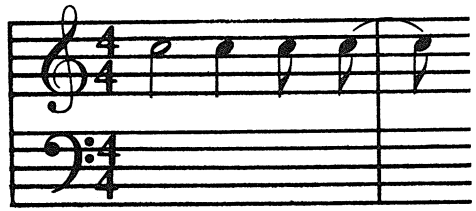
As you change the pitch and duration, the note on the staff will be flashing green. This is the cursor note. To place a note on the staff and move on to the next one, simply press the space bar or the RETURN key. When you do this, the note will be sounded at the pitch and duration you have set. When the note is set it will turn black. The "cursor" note will move to the next position. Notice that it remains at the same pitch and duration as the previous note. Change the pitch and duration and set this note as you like.

In 3/4 time you can use any note except for the whole note, because a whole note is worth four beats and you only have three beats per measure. In 2/4 time you have an eighth, quarter, dotted quarter, and half note to choose from, the half note being the longest, worth two beats.

There are times, however, when you will want a tone to last longer than the measure permits. Look at the following measure:



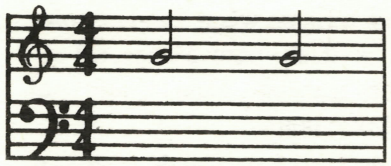
There are three and a half beats already in this measure, so there is only room for another half beat (an eighth note). The menu allows you five other choices though. What happens if you try to place a quarter note as the last note in this measure?



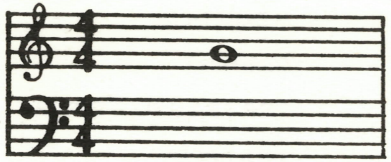
The note becomes split and TIED. An eighth note is placed in the first measure to complete the measure, and the rest of the beat (another eighth note) is transferred to the next measure.

If we try to place a half note, worth two beats in the measure, an eighth note (the half beat) will be TIED to a dotted quarter note (worth one and a half beats).

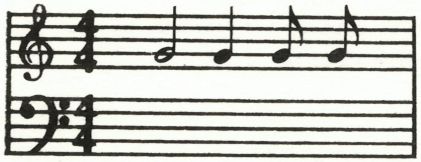
2 half notes



1 whole note



or any combination of these and the dotted notes which would equal four beats.



As you can see, the measures are separated by vertical lines called BAR LINES. A MEASURE is a length of the staff that contains the full amount of beats.

Play EXERCISE 2-Page 2 in Edit Mode and count up the beats in each measure.

EXERCISE 2C: DURATION-TIES

When you play Stickybear Music, you have six types of notes to choose from in 4/4 time: eighth, quarter, dotted quarter, half, dotted half, and whole.

If you want to hear a note before it is placed on the staff, move the note cursor and the keyboard cursor to the pitch and duration you want and press the P key. The note will be sounded at the pitch and duration you have set, but it will not be placed on the staff. If the note is correct, now press the space bar or RETURN key to place it on the staff.

A REST is a moment of silence, a pause, in your song. It's a pause of a specific duration depending on the type of note you highlight. (See section 3 for more information on rests.) If you move to a REST area, a rest will be placed on the staff instead of a note. Rests will have the same duration as whatever note you select, but they have no pitch.

Periodically, a black bar will be placed vertically across the two staves. This is the "measure line" or "bar line". It indicates when you have filled up a measure with "beats". The number of beats in a measure is determined when you select the time signature. The time signature is placed at the beginning of the first measure on each page. The top number is the beats per measure.

Sometimes you select a note duration that exceeds the number of beats left in the measure. When this happens, the duration (sound) extends into the next measure. To show this, a tie (⁀) is drawn from the last note in one measure to the first note in the next measure. The tied notes are heard as a single sound, but they take up beats in the two measures.

Continue creating the song for as long as you like. When you reach the end of a staff, the song will wrap over to the next staff. A measure will never wrap over to the next staff, however. Think of the bar at the end of the staff as a measure line. Notice that depending on how many notes and accidentals there are in a measure, the measure will stretch out to varying lengths. There will be either one or two measures per staff.

When the song reaches the end of a page, it will wrap over to the next page. Notes can be "tied" over a page boundary. You might notice that you sometimes flip back and forth between pages as you change the duration of the cursor note at the end of a page. This occurs because certain durations fill the beats in the last measure on the page, while other durations will cross over the measure bar as a tied note. When you have completed a page, the cursor note will be immediately placed on the next page. The page number is in the

upper right corner. Your songs can be up to four pages long.

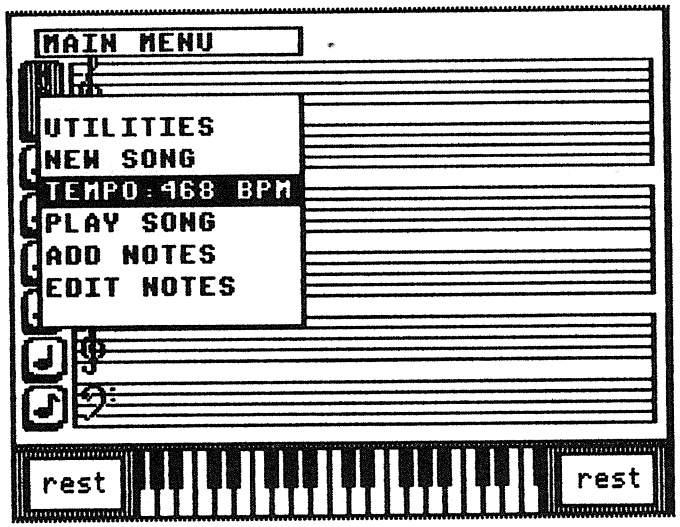
When you have completed a song, or if you just want to hear how it sounds in the middle of a composition, move the left cursor up to the word Menu and press the space bar or RETURN key.

Note: If you leave an incomplete measure at the end of your song, the program will insert rests to complete the measure. To avoid this, always make sure that you have completed the measure and that your cursor note is at the beginning of the next measure.

When you move to the Menu button and press the space bar or the RETURN key, you return to the Main Menu. Your song will remain in memory.

Changing the Tempo

The tempo of a song refers to how quickly the notes are played. The tempo is given in BPM or "beats per minute". The more beats per minute, the faster the song.



Move your cursor to TEMPO and press the space bar or RETURN key. You will toggle between six possible tempos. They are: 128 (the slowest possible tempo in the program), 152, 194, 300, 468, 936 (the fastest tempo). When you hear a song for the first time, it's safest to have the BPM set around 300. After hearing the song at that pace,

When we hear a German band playing a song that goes: **Oom**-pa-pah, **Oom**-pa-pah, it has three beats to each measure.

The bottom number in the time signature tells us what kind of note will be worth ONE beat in the measure. In Stickybear Music, all of the time signatures have a 4 as the bottom number. This means that a quarter note (think of ¼) will be worth one beat.

Let's look at our chart of notes and rests and see how much each note is worth when our time signature has a 4 as the bottom number:

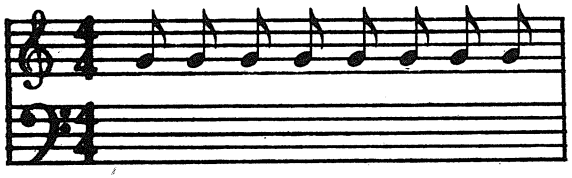
NOTES	RESTS	TYPE	VALUE IN 4/4 TIME
♪	𝄾	eighth	a half beat
♩	𝄽	quarter	one beat
♩.	𝄽.	dotted quarter	one and a half beats
𝅗𝅥	𝄼	half	two beats
𝅗𝅥.	𝄼.	dotted half	three beats
𝅝	𝄻	whole	four beats

Remember that a couple of notes and rests are dotted. A DOT increases the value of a note by one half its worth. So:

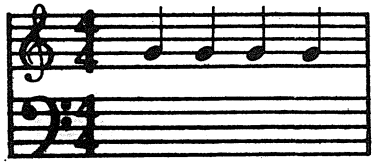
a dotted quarter = 1 + ½ = one and a half beats
a dotted half = 2 + 1 = three beats

To complete a measure in 4/4 time we would need:

8 eighth notes



4 quarter notes



The type of note or rest used determines its duration — the length of time for which the tone is held. Notice that some notes are hollow, some are filled in, some have stems, others even have flags or are dotted.

These notes are easy to understand: . An eighth note lasts half as long as a quarter note. A quarter note lasts half as long as a half note. A half note lasts half as long as a whole note.

These notes are dotted: . A dot increases the duration by one half the note's worth. Therefore, a dotted quarter note ( ) lasts as long as a quarter and an eighth note ( ). A dotted half note ( ) lasts as long as a half and a quarter note ( ).

Load and play EXERCISE 2-Page 1 to get an idea of how the different notes and rests sound because of their various durations.

EXERCISE 2B:DURATION-MEASURES AND TIME SIGNATURES

The previous exercise introduced you to the different types of notes and rests, but you might ask why we need so many different types. The reason is that a song is make up of notes of varying pitches and durations. The pitches are determined by the position of the note on the staff; whereas the duration is determined by the type of note used and the time signature that the song is written in. In music, notes are organized into groups called MEASURES.

A note's value or worth in the measure is determined by the TIME SIGNATURE. The time signature appears at the beginning of the first line, after the clef signs. It is made up of two numbers, set up like a fraction. In Stickybear Music we have three available time signatures: 4/4, 3/4 and 2/4, although there is an almost infinite number available, including 6/8, 2/2 and 5/4.

The top number tells you how many BEATS there are in a measure. In 3/4 time there are three beats to each measure. This means that when we hear the song, the basic rhythm we hear comes in groups of threes. It sounds like 1-2-3-1-2-3-1-2-3. We've made the number 1 darker than the rest of the counts because the first beat is always accented a little more than the following beats.

you can change the tempo. If you play the song too quickly, it might be difficult to hear where any errors are.

Playing the Song

When you move the cursor to PLAY SONG and press the space bar or the RETURN key, the program will play the song that is in memory. If there is no song in memory, first load a song or create a new song, and then play it.

The Main Menu will disappear while the song is being played. A small cursor line will mark the note or rest that is being played. When a tied note is played, the cursor line will remain at the first note of the tie. When you reach the end of a page, the song will automatically move onto the next page. After the complete song has been played, you will return to the Main Menu, with the song still in memory.

Now you can change the tempo if you like and play the song over again. The song will remain in memory no matter how many times it is played.

Adding Notes

This option is used to add notes to an existing song in memory. Suppose you compose part of a song and then decide you'd like to hear how it sounds. You go to the Menu and select Play Song. After hearing the song, you decide to add another section. This is when you would select the Add Notes option. This will add the notes to the end of the existing song.

Remember, if you think that you'd like to add to a song, be sure to complete the last measure you are working on. If not, the program will add rests to complete the measure for you. If this happens, you might find yourself in an awkward position for adding notes...the rests might give you a pause that you didn't want.

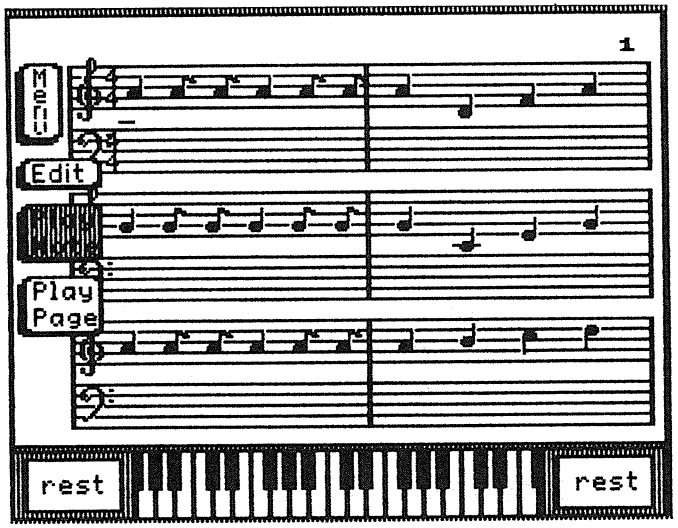
When adding notes, follow the same instructions as for writing a new song. The pitch is determined by the cursor on the keyboard at the bottom of the screen and the duration by the note you select at the left side of the screen.

If you select Add Notes when there is no existing song in memory, the program will bring you to the New Song Menu. At this point you

would select the time signature and the type of accidentals to use. Then move the cursor to CONTINUE and press the space bar or RETURN key to begin composing your song. If you change your mind and do not want to enter a New Song, simply move the cursor to EXIT and press the space bar or RETURN key. This will return you to the Main Menu with no song in memory.

Editing Notes

The final command in the Main Menu allows you to edit notes of the song in memory. When you select this option you will go into edit mode. The edit mode does not have a menu like the other modes, rather it has buttons that are highlighted with a cursor in the same way that the notes on the left side of the screen are highlighted.



In edit mode you can select the MENU option to return to the Main Menu without editing any notes.

To hear a single note, use the left and right arrow keys to move the line cursor to the note you want, and select the Play Note option. You could start at the beginning of the song and hear each individual note as you move along. Just keep moving the cursor and then press the space bar or RETURN key to select Play Note. Continue moving the cursor past the last note on the page to move to the next page.

EXERCISE 1D: PITCH-RESTS

Sometimes, instead of a note, a symbol is placed to designate a period of silence. These are called RESTS. There is no pitch in a rest because it has no tone. Rests can be placed on the treble or bass staff. In Stickybear Music there are six available types of rests:

whole

dotted half

half

dotted quarter

quarter

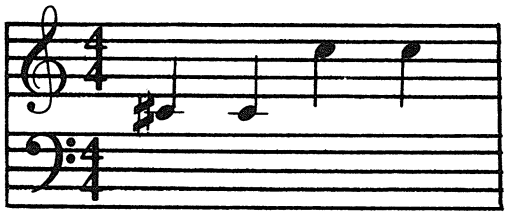
eighth

These are discussed more extensively in the next section on DURATION. To see and hear how a rest affects a song, play EXERCISE 1-Page 4 while in Edit Mode.

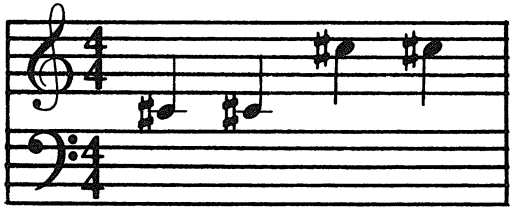
EXERCISE 2A: DURATION-TYPES OF NOTES AND RESTS

The following chart shows the types of notes and rests that are used in Stickybear Music:

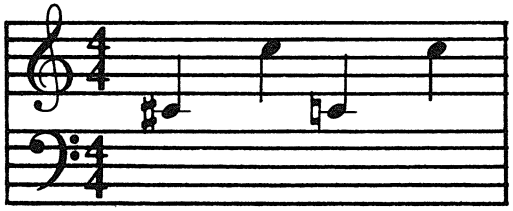
NOTES	RESTS	TYPE
		whole
		dotted half
		half
		dotted quarter
		quarter
		eighth



There is no need to write:



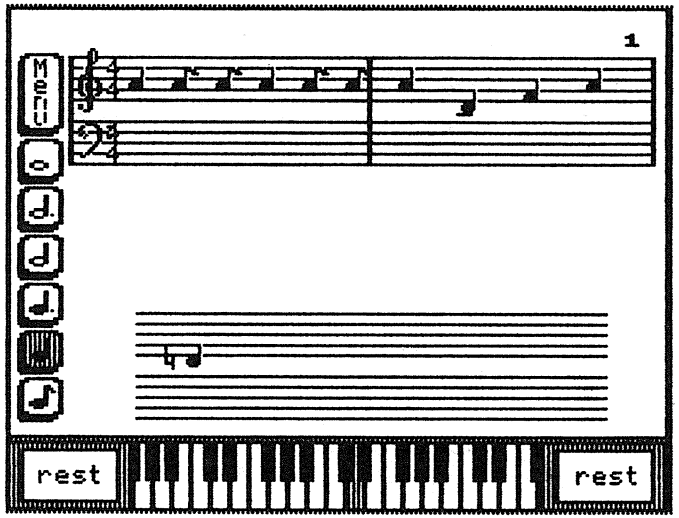
If you wish to remove a sharp or a flat from a note in a measure and return it to its original state, use a NATURAL SIGN (♮). Once a natural sign is placed, all remaining notes of the same pitch (or octaves of that note) are natural. In the following measure, the first two C's are sharped, but the last two aren't. Naturals can also be used to cancel flats.



Play EXERCISE 1-Page 3 in Edit Mode to see how sharps, flats, and naturals affect how the music looks and sounds.

At any point you can select the PLAY PAGE option. This will let you hear the page that is on the screen. For instance, if you want to hear page 2, you must first move the cursor so that it is positioned somewhere on page 2, then select the PLAY PAGE option.

To Edit a note, move the line cursor to the note or rest you want to change. Move the highlight to EDIT and press the space bar or RETURN key. If you are editing a section of the top two staves of the song, the note you want to edit will appear on a special staff line at the bottom of the screen. If you are editing the bottom stave, the edited portion will appear at the top of the screen.



The note or rest that you are editing will be flashing. The keyboard cursor will be positioned to the note/rest that you are editing, and the note highlight will be at the duration of the note you are editing.

Move the cursors to the new pitch and duration you want and press the space bar of the RETURN key. This will change the note you are editing. When you are finished, move the cursor to MENU and press the space bar or RETURN key. The changes will appear on the screen page.

If you shortened the note you were editing, subsequent notes will move back to fill in the measure. In like manner, if you lengthened

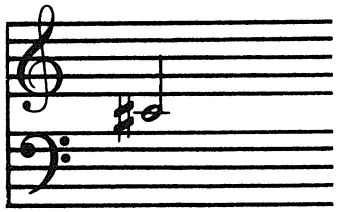
the note, the rest of the score will be moved forward.

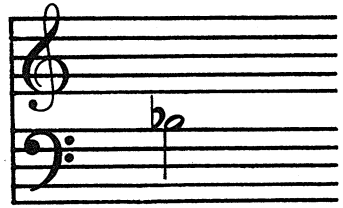
To delete a note, select EDIT in the Edit Mode. When it appears in the editing section of the screen, just move the cursor to MENU and press the space bar or RETURN key. This will remove it from the musical score. Remember however, subsequent notes will fill the gap that is left in the music.

To keep the music as it is, but insert one note, move the cursor to the note that appears *before* the note you want to add. Move the cursor to EDIT and press the space bar or the RETURN key. The note you want to keep will appear in the editing area. Press the space bar or the RETURN key to keep the note as it is. Now move the note duration cursor and the keyboard cursor to match the note you want to insert and press the space bar or RETURN key. Continue this process if you want to add more notes. When you are finished, move the cursor to Menu and press the space bar or the RETURN key to return to the Main menu.

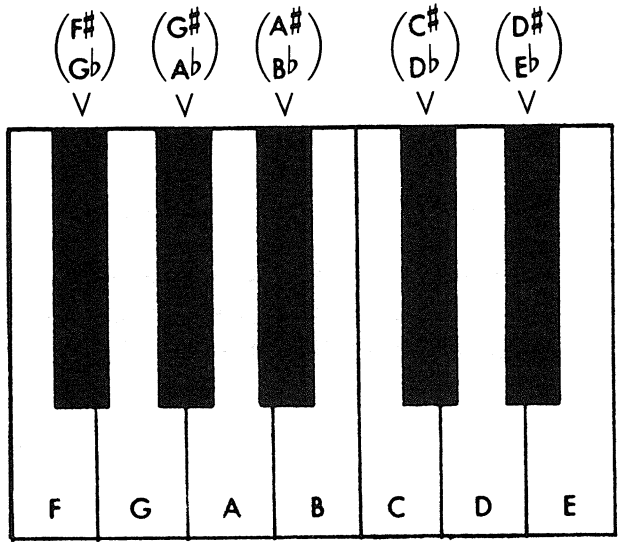
If you select Edit and decide that you want no change, just press the space bar or RETURN key. This will set the note as it was. Now you can move the cursor to MENU and return to the Main Menu with your music unchanged.

Suppose all four pages of music are full and you want to add a few notes in the middle of the song. If you add notes so that the following notes must be pushed forward, some will go past the end of the song and be lost. Keep this in mind when editing a song that takes up four pages. You want to make sure that your song sounds complete in the final measures.





A flat sign placed before a note lowers that note by a half step. Therefore, a flat sign placed before a B means to play the black key to the left of the B. This is called Bb (B flat). Notice then, that each black key has two names, the sharp name and the flat name. Bb is the same note as A#, Eb is the same note as D#. The names of the black keys are noted below:



Sometimes, a white key may be the sharp or flat of another key. For example, when you play a B#, you are actually playing the note C, Fb is E, Cb is B, and E# is F.

If you're composing a song and place an accidental in front of a note, the accidental stays in effect for the entire measure. Furthermore, any octave of the note with the accidental is affected.

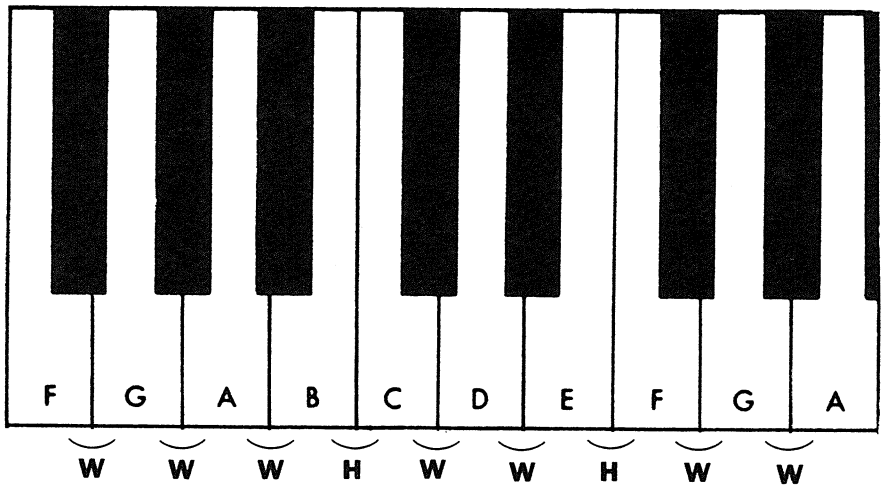
Look at the measure below. In this measure all the C's are sharped because the first one has a sharp sign before it.

EXERCISE 1C: PITCH-ACCIDENTALS

To this point we have only discussed the white keys on the keyboard. The keyboard, however, also has black keys.

The keyboard is a series of HALF STEPS. A half step, or SEMITONE is the interval between one key and the next, without skipping any notes in between. So, one half step up from middle C is the black key to the right of it. One half step down from middle C is the B key to the left of it.

The interval from C to D, however, is referred to as a WHOLE STEP or WHOLE TONE because there is a note in between them. In the following diagram, H represents a half step between the white keys, and W represents a whole step.



It is important to understand half steps and whole steps, because quite often our music contains ACCIDENTALS. There are three types of accidentals: SHARP SIGNS (♯), FLAT SIGNS (♭), and NATURAL SIGNS (♮). A sharp sign placed before a note raises that note by a half step. For example, when a sharp is placed in front of middle C on the staff, you would play the black key to the right of middle C. This is called C# (C sharp).

SECTION 3-WHAT IS MUSIC?

Exercises

These exercises were designed to help you learn some of the musical terminology associated with Stickybear Music. The first eight exercises: Exercises 1A-D and Exercises 2A-D, have a page of music on the Stickybear Music disk that will help explain the concept. Boot the Stickybear Music disk. Move the cursor to the Utilities option and press the space bar. Select Load Song. At the Load Song Menu select Load Song again. The disk drive should be set to Drive 1. Type in either EXERCISE 1 or EXERCISE 2 for the filename, depending on which exercise you are working with. When the exercise is loaded in, select Exit to return to the Utilities Menu, and then select Exit once more to return to the Main Menu.

For EXERCISES 1 and 2, move the Main Menu cursor to Edit Notes. Now that you are in Edit Mode you can move the line cursor to whatever page you are studying and select Play Page. Use this technique for all exercises on pitch and duration, since each exercise requires that you only play a single page.

EXERCISE 1A: PITCH-HIGH AND LOW NOTES

A NOTE is a written symbol that represents the pitch and duration of a musical tone. In this section we will discuss PITCH.

The PITCH is the highness or lowness, or frequency, of a tone. The FREQUENCY is how many vibrations per second a tone makes. The more vibrations per second, the HIGHER the PITCH. The less vibrations per second, the LOWER the PITCH.

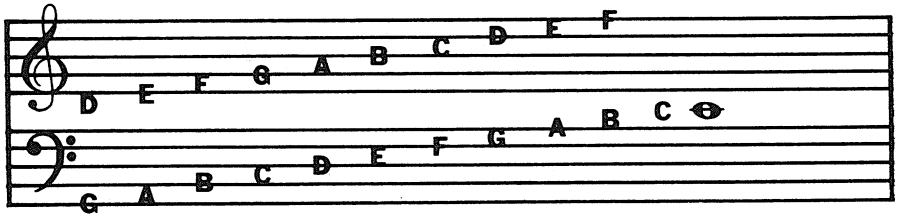
Concert instruments are all tuned to "concert pitch". This is the accepted standard, so they will all sound alike. In concert pitch, the note A above middle C beats at 440 beats per second. This is the tone that many of the instruments are tuned to.

The STAFF is a series of five lines and four spaces on which the notes are written. The notes in the high-pitch range are placed on the upper staff. The upper staff begins with a symbol called the TREBLE CLEF or the G CLEF (𝄞). The notes in the lower range are placed on the bottom staff, which begins with a BASS, or F, CLEF (𝄢).

When a note is placed on the staff, it has a particular pitch. It is also

given a specific letter name because of its position. The letters used in the musical alphabet are the first seven letters of the English Alphabet: A, B, C, D, E, F, G.

The names of the notes as they appear on the staff are:

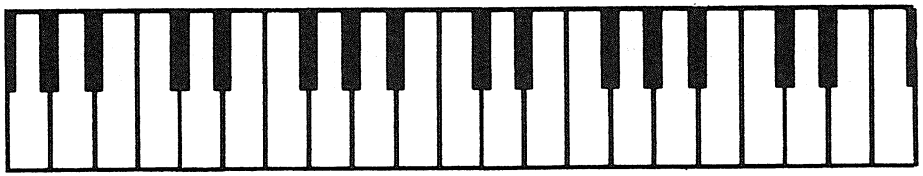


You can now see that the treble clef is also called the G clef because the treble clef symbol loops around the G line. The bass clef is also called the F clef because the dots in the bass clef symbol designate the F line.

The names of the lines and spaces follow in alphabetical order A to G, repeating the sequence again and again. An easy way to remember the lines and spaces of each clef is to associate a word or phrase with the letter names. For the treble clef, the spaces spell out the word *FACE,* and the lines can be remembered with the phrase *E*very *G*ood *B*oy *D*oes *F*ine. The bass clef spaces are represented with: *A*ll *C*ows *E*at *G*rass and the lines with: *G*reat *B*ig *D*ogs *F*ight *A*nimals.

One note falls between the two staves on a line by itself. This note is called MIDDLE C. Because there are no staff lines which go through that area, it uses what we call a LEDGER LINE to show that it's a line note. A ledger line is a small additional line which shows the same line/space alternation between notes.

The letter names are also given to the keys on the keyboard as the notes on the staff they represent.

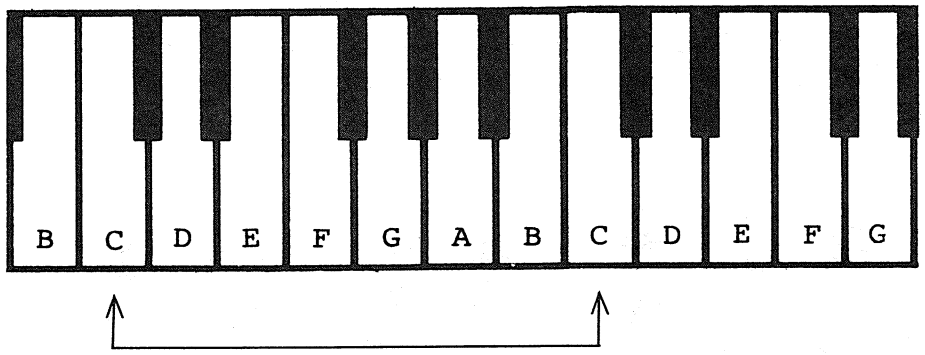


G A B C D E F G A B C D E F G A B C D E F

Load EXERCISE 1 and play PAGE 1 in Edit Mode to hear and see the difference between high and low notes.

EXERCISE 1B: PITCH-OCTAVES

An OCTAVE is the distance between two tones that share the same letter name. For instance C to C is an octave.



On the keyboard, the notes are located as follows:
C's are always left of the double black keys
D's are always between the double black keys
E's are always right of the double black keys
F's are always left of the triple black keys
G's and A's are always between the triple black keys
B's are always right of the triple black keys.

These notes have more in common that just their letter names. Their FREQUENCIES (vibrations per second) are related to each other. For instance, the A above middle C has a frequency of 440 vibrations per second. The A above that (one octave higher) has a frequency of 880 vibrations per second, whereas the A below middle C (one octave lower) has a frequency of 220 vibrations per second.

Let's hear how similar the octaves sound.

EXERCISE 1 should already be in memory from the previous lesson, if it isn't, Load the song into memory. Now PLAY PAGE 2 in Edit Mode to see and hear how octaves sound alike.