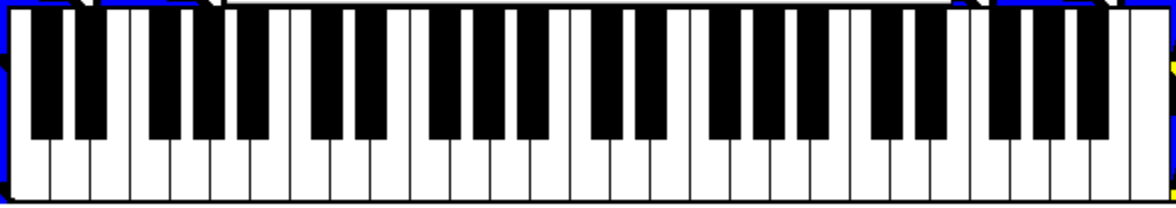
NotePlay SE

For Windows

On-Line Manual



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Also from Ibis Software

Also from Ibis Software:

DOS Programs
Play It By Ear
RhythmAce
Noteplay
RhythmPlay
Sound Sculptor

Introduction

Welcome to NotePlay SE for Windows

Welcome to NotePlay SE for Windows (hereafter referred to as Noteplay), an arcade-style game with music education in mind. With NotePlay you can work on basic sight-reading skills and never know you were actually practicing. NotePlay isolates one of the skills of successful sight-reading, pitch reading, so you concentrate on just this skill.

NotePlay is designed to develop your note-reading ability. With NotePlay you can practice sight-reading drills in a friendly, interactive environment. Whether you are a beginner or an accomplished pianist, you can find a challenge in NotePlay. Eighteen types of drills grouped into three Skill Levels provide a progressive introduction to sight-reading. At first all you play are three notes with your right hand. By the time you reach the highest level, you will be using both hands simultaneously and playing all over the keyboard.

Related Topics

The Interlude Series for Windows

Our Philosophy

Comprehensive Ear- and Rhythm-Training Programs

The Interlude Series for Windows

NotePlay is one in a series of entertaining music-education software packages from Ibis Software. The Interlude series for Windows is specifically designed to provide fun while helping you develop fundamental musical skills. One of the most difficult aspects for any musician is practicing technical material like sight-reading drills. While it's necessary for musical development, it doesn't have to be tedious. By putting some of the fun and enjoyment that comes with playing music into the practice of drills, you can maintain a higher level of concentration and find practice more rewarding.

Ibis Software also offers an Interlude series for DOS. It includes a version of NotePlay for DOS and its companion, RhythmPlay for DOS—another arcade-style program that can help you practice your skills at reading notation rhythmically.

Our Philosophy

At Ibis Software and Renga Development we believe that music is something that should be shared. We believe music is a form of communication that allows us to transmit and share human emotions. It is this aspect of music that doesn't lend itself to computer automation, nor should it. These skills can only be fully developed by working with instructors and other musicians. Because of this, we created NotePlay as a supplement to your traditional musical training, not as a replacement.

NotePlay does not purport to teach you all of the skills necessary for sight-reading. It is only intended to give you a start in that direction by helping you develop skills necessary to read pitch correctly. Although the drills imply a 4/4 time signature, playing rhythmically is not necessary to progress from level to level.

Comprehensive Ear-and Rhythm-Training Programs

If you enjoy using NotePlay and are interested in ear- and/or rhythm-training software then look no further. For your ear-training needs we publish Play It By Ear™. Use Play It By Ear to help you identify notes, melodies, intervals, chords, and scales. To help you develop your rhythmic skills, we publish RhythmAce™. With RhythmAce you can practice playing rhythmic phrases displayed on-screen, or identify dictated phrases.

For more information, contact your local software dealer, or call (415) 546-1917. Both Play It By Ear and RhythmAce are for DOS, not *Windows*.

System Requirements

Noteplay requires the following hardware and software:

- A Multimedia PC, or a PC with a Multimedia upgrade kit (386SX microprocessor, 2MB RAM, VGA graphics adapter and monitor)
- MS-DOS or PC-DOS 3.1 or later
- Microsoft *Windows*™ 3.0 with Multimedia Extensions 1.0 or *Windows* 3.1.
- A *Windows*-compatible sound card or MIDI interface

The following hardware is optional:

- A MIDI-equipped keyboard (highly recommended), or other MIDI-equipped instrument
- A Microsoft-compatible mouse

Although a MIDI-compatible keyboard is not required to use NotePlay, we do recommend it. One of the essential skills in successful sight-reading is learning your way around a keyboard by touch. Using a keyboard will help you transfer the skills you develop with NotePlay to playing real music.

Where To Go From Here

Be sure to send your name and address to: IBIS Software Special Release, 140 Second Street, Suite 603, San Francisco, CA 94105. This helps us keep you informed of program upgrades, updates and new product releases.

Once you have installed NotePlay (and a device driver for your sound card or MIDI interface), you can go ahead and give it a try. If you are using a MIDI keyboard, make sure it is turned on and set to MIDI. If you are using the computer keyboard, you might want to look at Playing the Notes, to see how the keyboard relates to the notes.

To start NotePlay from the Program Manager, double-click its icon, or select it and press Enter. Once the program is loaded, press F2 to begin a new game, or choose **Game|New**.

The first level starts you out playing three notes with your right hand. At the beginning of each level, NotePlay indicates what keys/notes will be used by highlighting the keys of the on-screen keyboard and by playing a simple melody using those notes.

When you are ready to quit, choose **Game|Exit**. If you have questions as you practice, you can use the on-line Help (press F1 or choose **Help|Index**).

If you are not quite ready to start, you may want to look through this manual for additional information. If you still have questions after reading the manual and the on-line help, our technical support phone number is provided in the next section.

Using NotePlay provides all the instructions for using NotePlay. It includes a description of the NotePlay screen, how to play the game, and explains the different options. It also provides some tips and strategies, and discusses the game levels and how scoring is determined.

Some Theory About Music is a brief outline of music theory fundamentals. In this chapter you can find information about musical notation, scales, intervals, and a musical map of the piano keyboard.

Technical Support

If you have a question about using the program that is not addressed in this manual or the README.TXT file, our product support staff will be glad to help you. To help answer your questions quickly and accurately, please have the following information ready before you call:

- the version number of the program (choose **Help|About**))
- version number of *Windows* you are using
- computer make and model, including amount of RAM
- make and model of MIDI or sound card installed
- make and model of MIDI instruments used, if applicable
- a concise and clear description of the problem

The product support phone number is (415) 546-0405. Call between 9 AM and 5 PM Pacific Standard Time, Monday through Friday.

A Note To Music Educators

Ibis Software is pleased to provide you with another music education program, NotePlay for Windows. As with our previous releases, including Play It By Ear, RhythmAce, RhythmPlay, and NotePlay for DOS, we are committed to providing music educators, students, musicians, and hobbyists with quality learning tools and support aids. We have heard from many of you and we were excited to learn how you use these programs in an instructional setting. If you have any questions, would like to share ideas, or receive any forthcoming materials, please contact our Educational Support Department at (415) 546-1917.

And Finally . . .

We would like to thank all the people whose ideas, encouragement, and spirit helped make NotePlay a reality: Sue Boyd, Ruth Cheever, Gary Dahl, Jasen Franzen, Peter George, Ed Harter, Irene Jergensen, John Kuzmich, Linda Levine, Mauro, Esq., Wilma Rogers, Denise Shephard, Patrick Shore, Skeeter Stevens, Chuck Wilder, Carol Rohan, Carol Neville, Mike Winslow, and to the spirit and music of John Cage, Astor Piazzolla, and Charles Mingus.

Using Noteplay

This chapter provides instructions for using NotePlay. It tells you how to start the program and how to play the game. It also provides details of NotePlay's eighteen levels and tells you how to start on any level.

Related Topics

Starting NotePlay

Understanding What You See

Playing the Game

About Levels and Scoring

Setting Options

Starting NotePlay

When you install Noteplay, its icon is automatically placed in the *Multimedia Audio Collection* group window in the *Windows* Program Manager

The NotePlay Icon

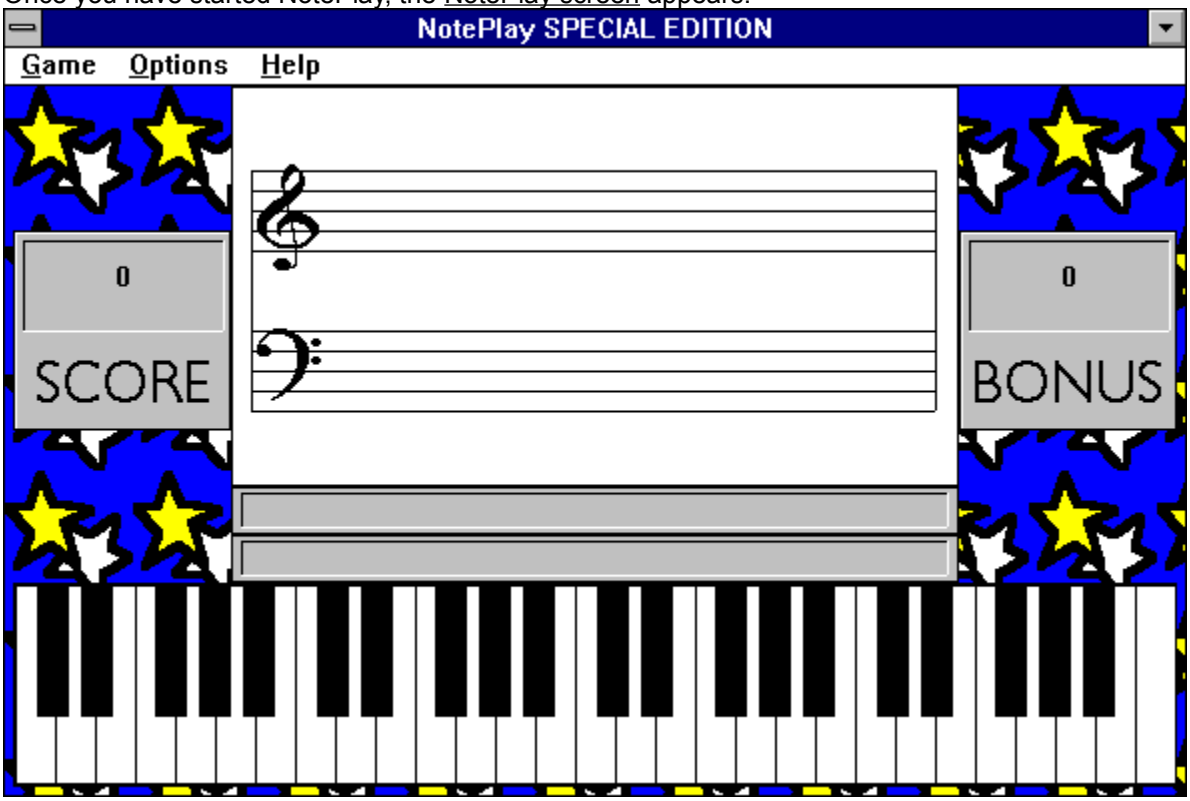
To start NotePlay

If Windows is not already running, type WIN at the DOS prompt. Open the group window containing NotePlay if it is not already open.

- Double-click the NotePlay icon.

Understanding What You See

Once you have started NotePlay, the NotePlay screen appears.



Click on the parts of the screen below for explanation.

- **Current level:** When you start a game, the current level is displayed in the title bar at the top of the screen. Each level includes a brief message providing tips or clues on how to proceed with that level.

- **Menu bar:** The menu bar lists the names of the three menus—Game, Options, and Help.

  The Game menu lists commands to start, pause, and stop a game, see the High Scores table, and exit NotePlay.

  The Options menu lists commands that you can use to affect the performance of NotePlay or your sound hardware. See Setting Options later in this chapter for details on each option.

  Use commands on the The Help menu to open the NotePlay Help, or for information about the current version of the program.

- **Grand Staff:** This is where NotePlay displays the notes you need to play for each level. If you don't know how a piano keyboard corresponds to the Grand Staff, see Some Theory About Music.

- **Score and Bonus panels:** These two panels display your current score and any possible bonus. For more details on scoring see About Levels and Scoring later in this chapter.

- **Timer and Progress bars:** The upper bar is the Timer. It shows you how much time you have left to finish the current level. The lower bar is the Progress bar. For each correct note you play, the Progress bar advances. To advance a level, you have to fill the Progress bar before the Timer fills. If you don't, the game ends.

- **On-screen keyboard:** The notes that a level may contain are highlighted on the keyboard at the beginning of each drill. You can also play the keyboard by clicking keys with your mouse, but we do not recommend this method for practicing.

Playing the Game

The object of NotePlay is to play the notes displayed on the Grand Staff before your time runs out. Notes are displayed in groups of four. Once you play these notes correctly four more notes are displayed. If you complete a level by playing all the notes presented before your time runs out, you move to the next level. With each level the game becomes a little more difficult.

Your available time for a level is tracked in the Timer bar right below the Grand Staff. When the Timer bar fills up, the game is over. Below the Timer is the Progress bar. For each correct note you play the Progress bar advances. If you fill the Progress bar before the Timer fills, you advance to the next level and the game continues.

Although you only have a limited time to complete each level, you should strive for accuracy over speed. The more accurate you are, the more points you earn, and the faster you will develop sight-reading skills.

At the end of a game, your score is compared to the list of high scores. If your score was high enough, you will be asked to enter your name. Type it in using the computer keyboard, then press Enter. The High Scores table appears. Click OK or press Enter to close it and return to NotePlay.

Related Topics

Playing the Notes

NotePlay controls

Tips and Strategies

Playing the Notes

There are three ways you can play the notes you see on the Grand Staff.

- **MIDI-equipped keyboard.** The best way is to use a MIDI-equipped keyboard. There is no replacement for the experience you gain when playing an actual keyboard instrument. Using a MIDI-equipped keyboard will help you translate the skills you learn from NotePlay to playing real music.
- **Computer keyboard.** You can also use your computer keyboard. The keys are arranged in the following manner:

The letter S is middle C, the letter E is C#, the letter G is F, the letter Y is F#, and so on. To raise a note an octave, hold down the Ctrl key while pressing the correct letter. To lower a note an octave, hold down the Shift key. To lower a note by two octaves, use the Caps Lock key.

When you are not actively playing a game, you can play a key, or press a letter on the keyboard, and the corresponding note is displayed on the Grand Staff and its letter name appears at the top of the screen. Use this method to explore the keyboard assignments.

Note: *You can only play through level 13 using the computer keyboard. You cannot play beyond level 13.*

- **On-screen keyboard.** The final way to enter notes is to click the keys of the on-screen keyboard with your mouse. This method is not recommended. It is awkward and too far removed from the actual experience of playing a keyboard instrument.

NotePlay controls

- To start a game, choose **Game|New**, or press F2. NotePlay indicates the keys on the keyboard that represent the notes used in the current level. It also plays a brief melody using these possible notes.
- To pause a game in progress, choose **Game|Pause**, or press F3. To resume playing, choose **Game|Pause**, or press F3 again. You can pause a game at any time. If you minimize NotePlay, or activate another window, the program automatically pauses the game.
- To stop a game, choose **Game|Stop**, or press F4.
- To exit NotePlay and return to the Program Manager, choose **Game|Exit**. If you changed any of the Options, NotePlay asks if you want to save the new settings.
- To see the High Scores table, choose **Game|High Scores**. To clear the High Scores table, choose the Clear Scores button in the High Scores dialog box.

Tips and Strategies

- If you are a beginning piano player, start with your hands in the following position: place the thumb of your right hand on middle C and the remaining fingers on D, E, F, and G so the pinky is on G; place the pinky of your left hand on the first C below middle C and the remaining fingers on D, E, F, and G so the thumb is on G. Keep your hands slightly cupped and placed near the black keys.
- At the beginning of each level, look at the keyboard to see what keys/notes will be used as NotePlay plays the brief melody. Also, take a look at the top of the screen for any hints.
- Try to play in tempo, even if you have to go too slow to finish a level. This not only helps you concentrate but will make it easier for you to apply the skills you learn with NotePlay to real music.
- Don't play too fast. Accuracy is more important and you receive more points for being accurate. Once you begin playing accurately, speed will follow naturally.
- When you are on a level with vertically-aligned notes, that is notes that are played simultaneously in both hands, read from low to high. Reading the lowest note first can often give you harmonic clues.
- Accidentals (sharps and flats) carry through a complete measure.
- Use your right hand for playing notes in the Treble clef, and your left hand for notes in the Bass clef. Use middle C as a convenient divider. See "Pitch" for more information about hand position.
- Use good posture. Try to remain relaxed without slumping down in your chair. Keep both feet flat on the floor and make sure your arms are not outstretched or cramped.
- And finally, practice traditional sight-reading drills at your piano or keyboard everyday.

About Levels and Scoring

There are eighteen individual levels in NotePlay SE. The levels are divided into three different Skill Levels. You can select a Skill Level from the Options menu and each game you play will begin at this level. For example, if you select Getting better as the Skill Level, each game begins with level seven, not level one.

Each of the three Skill Levels, and each of the individual levels that it includes, are described (which hand and what notes are used when playing on that level) below.

- Just Starting
- Getting Better
- Pretty Good

Related Topics

Scoring

Skill Level: Just Starting

Level	Hand	Notes
1	right	middle C, D, and E
2	left	C, D, and E one octave below middle C
3	right	middle C, D, E, F, and G
4	left	C to G one octave below middle C
5	right	B below middle C to A above
6	left	same as level five one octave lower

Skill Level: Getting Better

Level	Hand	Notes
7	alternate left/right	C to G
8	same as 7	B one octave below middle C to A above
9	right	E above middle C to D, thumb on F
10	left	same as level 9, one octave lower, pinky on F
11	right	B above middle C to G, thumb on C
12	left	same as level 10, one octave lower

Skill Level: Pretty Good

Level	Hand	Notes
13	right	introducing accidentals A#/Bb, F#/Gb, with same position as level 11
14	both	parallel motion, C to G one octave apart
15	both	contrary motion, same as level 14
16	right	accidentals C#/Db, D#/Eb, from B below middle C to A
17	right	full octave in the key of C
18	right	all keys from B below middle C to A

Scoring

For each note you play correctly you receive one hundred points. This means harmonic intervals are worth two hundred points, triads are worth three hundred, and so on. In addition, for each correct note you play, points are added to the running bonus. This bonus is added to your score after each correctly played note. But if you make a mistake, the running bonus is reset to zero.

For example, after the first correct note your score is one hundred and the bonus is five. If you play the next note correctly, you get one hundred points for the note and the five bonus points, making your score 205. And five more points are added to the running bonus making it ten. If you play the third note correctly, you receive one hundred for that note and the ten bonus points, so your score would be 315. Once you play an incorrect note, the bonus is set back to zero.

If you finish a level without making any mistakes, you are awarded an extra one thousand bonus points. Although accuracy is richly rewarded, speed is not entirely forsaken. At the end of a level you are awarded extra points for the amount of time left on the Timer.

If you start a game at a Skill Level other than the first level, you are not penalized. Scores are adjusted accordingly. For example, starting at the second Skill Level doubles your potential score. Starting at the third level triples your score, and so on.

Setting Options

There are five commands available on the Options menu you can use to tailor NotePlay to suit your needs. If you change an option, NotePlay asks you if you want to save the new settings when you exit. Choose Yes or press Enter to save them.

Related Topics

Skill Level

Play Mode

MIDI Options

MIDI Input/Output

Track High Scores

All Notes Off

Skill Level

This command adjusts your initial level of play. Choose **Options|Skill Level**, then select the desired Skill Level from the cascading menu. A check mark appears next to the current level. See About Levels and Scoring above for more information about levels.

Play Mode

There are four play modes. To select a play mode, choose **Options | Play Mode** to open the Play Mode dialog box, then select the appropriate option button and choose OK.

Slow doubles the time you have to complete a level. Use this mode to make NotePlay more accessible to small children, or to help you through a difficult level. The Slow mode lowers the points awarded.

Normal follows the regular game procedure. This is the default.

Practice allows you to choose one of the eighteen levels to practice. Enter the desired level in the Level text box. When you begin a new game, NotePlay uses only this level; it starts here and does not advance to a higher level.

Automatic lets you use NotePlay with a non-MIDI instrument, like a regular piano. Use the Delay option to set the amount of time between each measure, and use the Speed option to set the tempo NotePlay plays each measure.

MIDI Options

Use the MIDI Options command to select a MIDI channel and patch, and to specify MIDI thru. To set MIDI options, choose **Options**|**MIDI Options**, then specify the desired options and choose OK.

MIDI Channel changes the MIDI channel that is used to play sounds if you have a MIDI controller card. You can use any channel you want. Type the desired channel in the MIDI Channel text box.

Patch specifies a patch on your synthesizer. A patch is a particular sound or voice your synthesizer can generate, such as a piano or horns. Changing this option is equivalent to manually selecting a patch, or voice, from your synthesizer.

MIDI Thru sends MIDI information coming to the computer from your MIDI instrument directly out to a sound module. An X in the box next to MIDI Thru indicates this option is on. Choose the check box to toggle between on and off.

MIDI Input/MIDI Output

If you have more than one sound card or MIDI interface installed in your computer, you can use these commands to select the devices you want to use with NotePlay.

To specify a device, choose **Options|MIDI Input/MIDI Output**, then select the desired device from the cascading menu. A check mark appears next to the current device.

Track High Scores

When a check mark appears next to this command, NotePlay is keeping track of the high scores earned. By choosing this command, you can toggle it on or off.

All Notes Off

This command can help you with an occasional problem.
Sometimes notes that you play in the program do not get turned off and the result is a note that is sustained and will not stop. If this ever occurs, choose **Options|All Notes Off** to turn on this command; a check mark indicates the command is on. It has no other effect on the game.

Some Theory About Music

Sound

Sound is the sensation your ears perceive when vibrations are produced in the air. These vibrations are called *sound waves*. All music is just the manipulation of the four properties of sound: *pitch, intensity, duration,* and *timbre.* Pitch is the highness or lowness of a sound, or musical tone, usually expressed in relation to other tones. Intensity is the loudness of the sound. Duration is its length. And timbre is the quality of the tone, also known as the color of a sound.

Notation

Musical notation is a system of symbols that can describe three of the four properties of sound: pitch, duration, and intensity. Pitch and duration can be notated quite specifically, while intensity can only be indicated relatively. In addition, pitch and duration are notated simultaneously.

Related Topics

Pitch

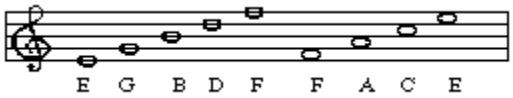
Duration

Meter

Pitch

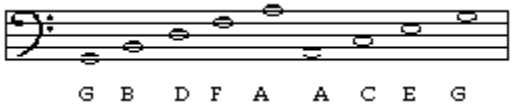
The first seven letters of the alphabet, A to G, are used to designate various pitches. Pitches are written as notes on a *staff.* The lines and spaces of the staff identify specific notes. The symbol at the left of a staff is called a *clef.* The clef establishes the letter names of the lines and spaces.

The two most common clefs are the *treble clef* and the *bass clef.* The treble clef is an ornate letter G. It establishes the second line of the staff as G. Notice how the curved line at the bottom of the treble clef wraps around this line. The other notes are written on the remaining lines and spaces as shown below.



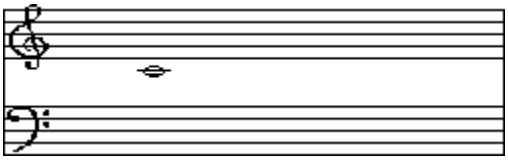
Treble Clef

The bass clef is derived from an ornate letter F. The two dots above and below the fourth line of the staff designate that line as F. As with the treble clef, the remaining notes can then be written as follows.



Bass Clef

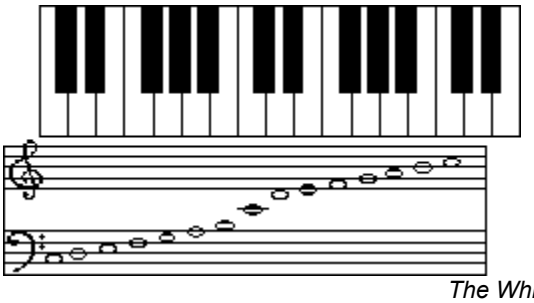
When placed together, these two staves form the *grand staff.* The two staves converge at the same pitch. This pitch is called *middle C.*



Grand Staff With Middle C

If a note goes beyond the edges of the staff, it is written with a *ledger line.* Middle C in the illustration above is written using a ledger line. A ledger line can only accommodate one note.

The following illustration shows you the relationship between the keyboard and the grand staff. The notes of the treble clef are usually played with the right hand, and the notes of the bass clef with the left hand. Middle C serves as a convenient point to split the duties of each hand and is sometimes played by either the left or right hand. There is a 90 degree relationship between the grand staff and the keyboard: the higher a note is on the staff, the farther right it is, the lower a note, the farther left it is.

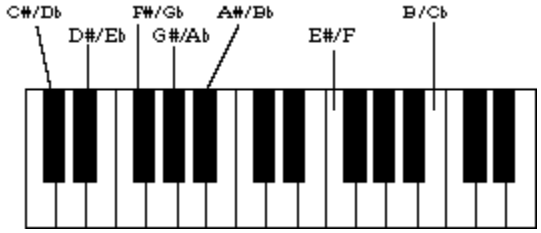


The White Keys Of The Keyboard

The previous illustration only identifies the white keys of the keyboard. The black keys are designated using symbols called *accidentals.* Accidentals are placed to the left of a note on the staff. A *sharp* (#) symbol indicates the pitch is raised by a halfstep. A *flat* (♭) symbol indicates the pitch is lowered by a

halfstep. A *natural* (

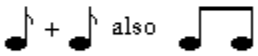
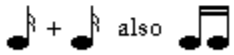
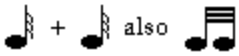
♮) symbol cancels any previous sharp or flat and returns the note to the natural, or unaltered, pitch. A *halfstep* is the smallest distance between two notes in traditional Western music and is equivalent to the distance from one piano key to an adjacent piano key.
Look at the next illustration. The black key to the right of C can be identified two ways: C# or Db. When a pitch can be identified by two different letter names it is called an *enharmonic equivalent.* Notice that B is only a halfstep from C. This means B and Cb are enharmonic equivalents. Also notice the enharmonic equivalent of E#.



The Black Keys Of The Keyboard

Duration

Duration of a pitch is expressed in musical notation in terms of relative time value. *Notes* indicate the relative duration of sound and *rests* indicate the relative duration of silence. The following chart shows the value for commonly used notes and rests.

Name	Note	Rest	Equivalent
Whole note			
Half note			
Quarter note			 also
Eighth note			 also
Sixteenth note			 also

Meter

Meter may be defined as the arrangement of beats into measures of equal size with a recurring pattern of accents. Measures are defined by bar lines (vertical lines drawn through the staff). The meter of a composition is indicated by the meter signature, or time signature, which has two numbers. In general, the first number indicates the number of basic beats per measure, and the second number indicates the value of the note that receives a beat. So in the time signature 4/4, there are four beats to the measure and the quarter note gets the beat.

Scales and Keys

A *scale* is a series of notes that ascend and descend in a specific order following a pattern of halfsteps and wholesteps. If you begin at C and play every key on the keyboard, going up or down, until you reach the next C, you will play the *chromatic scale*. This scale is easily divided into a constant pattern of halfsteps. That is, each note in the scale is separated from the previous and next notes by a halfstep.

Another type of scale is called a *diatonic scale*. This type of scale uses a mixed pattern of halfsteps and wholesteps. One of the most common diatonic scale is the *major scale.* If you begin at C and play only the white keys of the piano up or down until you reach the next C, you will play the major scale. This scale has a pattern of wholesteps and halfsteps as shown in the following illustration.

The Major Scale in the Key of C

The notes in a scale can be assigned numbers called *scale degrees.* Scale degrees describe the position of the notes in the scale. These scale degrees also have names. For example, the first scale of degree in C major is called the *tonic.* The fifth scale degree is called the *dominant.*

The pattern of whole and halfsteps that makes the major scale can be transferred to start on any other note. This is called *transposition.* The following illustration shows you the major scale transposed so it begins on G. It is now called the *G major* scale.

G Major

As you'll notice, there is now one sharp (#) included in G major. This keeps the pattern of whole and halfsteps constant. When a melody is written using the notes of the G major scale, it is in the *key* of G. To make sure that the music is played correctly when a key is used that contains sharps or flats, a *key signature* is placed at the beginning of each staff in a composition.

The major scale can be written in any one of fifteen different keys, seven containing sharps and seven containing flats. Although there are only twelve different notes the major scale can begin on, three of these can be spelled with enharmonic equivalents (B/Cb, F#/Gb, and C#/Db).

Intervals

An *interval* is the difference in pitch between two notes. The smallest interval in traditional Western music is the halfstep. This is the distance from one piano key to the adjacent piano key. The intervals between the degrees of a diatonic scale, such as the major scale, are called *diatonic intervals.* The following table illustrates the twelve intervals of an octave based on C. The diatonic intervals of C major are marked with an asterisk (∗).

Interval	**Example**	**# of halfsteps**
minor 2nd	C to C#/Db	1
major 2nd∗	C to D	2
minor 3rd	C to D#/Eb	3
major 3rd∗	C to E	4
perfect 4th∗	C to F	5
augmented 4th/ diminished 5th (tritone)	C to F#/Gb	6
perfect 5th∗	C to G	7
augmented 5th/ minor 6th	C to G#/Ab	8
major 6th∗	C to A	9
minor 7th	C to Bb	10
major 7th∗	C to B	11
octave∗	C to C	12

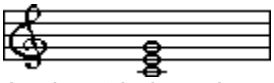
Harmony

Harmony is the study of playing notes simultaneously. You can think of harmony as the vertical dimension of music, as opposed to melody, which is the horizontal dimension of music.

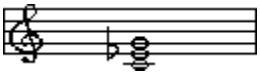
At the heart of harmony are *chords.* A chord is a group of three or more notes played at the same time. Chords are built beginning with a *root.* Then notes are added to the root, each a third higher than the previous note. The names of the notes in a chord are determined by their interval from the root, with the name of the root determining the name of the chord.

The basic chord is the three-note *triad.* Triads contain three notes: a root, a third, and a fifth. The triad is named using the letter name of the root. So a triad built from C will be called a C triad. There are four common types of triads: major, minor, augmented, and diminished.

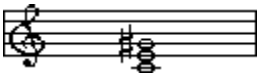
A *major triad* consists of a root, a major third, and a perfect fifth.



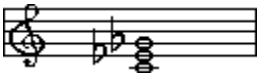
A *minor triad* consists of a root, a minor third, and a perfect fifth.



An *augmented triad* consists of a root, a major third, and an augmented fifth.



A *diminished triad* consists of a root, a minor third, and a diminished fifth.



If you continue to add thirds to a triad you get 7th, 9th, 11th, and 13th chords. Chord tones beyond the 7th are often called *chord extensions.*

When a chord uses the notes of a scale, it is called a *diatonic chord.* For example, the V major triad (the triad built from the fifth degree of a scale) is a diatonic triad in a major key. In the case of C major, this means G major triad is diatonic. If you build a diatonic triad from the second scale degree of C major, the result is a D minor triad: D-F-A. To keep the triad diatonic, you have to use F, and F is a minor third above D.

Related Topics

Basic Chord Progressions

Basic Chord Progressions

When chords are played in a particular order, they are called *chord progressions.* Chord progressions are analyzed by key, the root of the chord, and its quality. For example, a common chord progression is one, four, five (usually written with Roman numerals I, IV, V7). In the key of C, this means you play C, F, and G major triads. These are the chords in C built on the first, fourth, and fifth scale degrees.

Another common progression involves the movement of fifths. In this progression, the root of each chord is a fifth lower than the previous chord. In the key of C major for example, the movement from G major to C major is down a fifth.

Troubleshooting

This section identifies the most common problems that may occur when using NotePlay. General troubleshooting procedure:

1. Remain calm. Computer hardware problems are just another addition to life's rich pageant.
2. Make sure that your hardware is properly installed and cabled as per the manufacturer's instructions.
3. Make sure you have setup *Windows* correctly. If you are having similar problems with other applications, the problem is most likely due to *Windows*. If you are having problems with your mouse or display adapter, the problem is related to *Windows*. If you experience problems you think are related to *Windows*, try to resolve them through Microsoft Technical Support.
4. Refer to the following list. If your problem appears in the list then follow the directions to correct the problem.

   MIDI is unresponsive.

   MIDI instrument does not sound during drill playback.

   Program recognizes MIDI input but no sound is heard.
5. Refer to the README.TXT file in the NPLAY directory.
6. If you are still unable to resolve the problem, call us. Our technical support staff will be happy to give you a hand.

MIDI is unresponsive.

This can be caused by a MIDI cabling problem. Make sure that your MIDI instrument is properly connected to your MIDI adapter. A common mistake is to connect a cable between two MIDI In jacks and two MIDI Out jacks, but a cable must run from a MIDI In jack to a MIDI Out jack.

MIDI instrument does not sound during drill playback.

MIDI Thru not enabled. Turn on MIDI Thru with the MIDI Options command. Choose **Options|MIDI Options**, select the MIDI Thru option—an "X" in the check box indicates it is turned on—and choose OK.

Program recognizes MIDI input but no sound is heard.

The MIDI out channel of the program does not match the MIDI channel of your instrument. To correct the problem, determine the MIDI channel of your instrument and either change it or adjust the MIDI Channel option (**Options**|**MIDI Options**) of the program.

You should also check if your device driver is properly installed using the Drivers option in the *Windows* Control Panel. You may also need to modify your MIDI setup in *Windows* using the MIDI Mapper option in the Control Panel. Consult your *Windows* manual for details on using the Drivers and MIDI Mapper options.