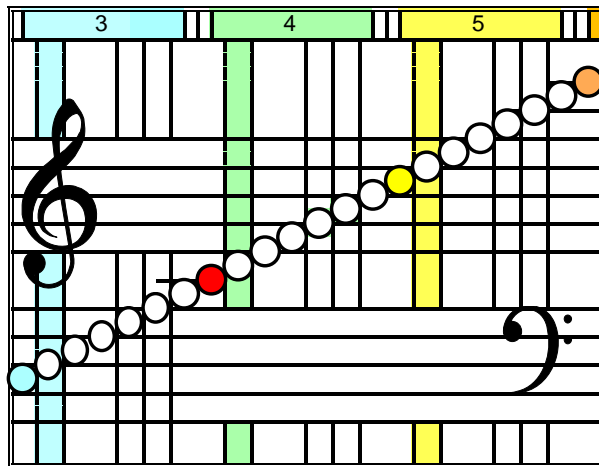


Pitch Notations Compared: The Grand Staff vs Key Diagrams

KMA

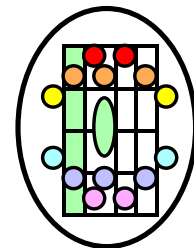


An Overview



A C Major Scale on a Grand Staff Overlaid With a Keyboard Diagram

From the Music Innovator's Workshop



**On the Grand Staff there is a
Natural Note for Each of the 52 White Piano Keys**

These same notes are used for the 36 *black* piano keys but must be used with a flat (b) sign or a sharp (#) sign to signify which black key to play. Traditional notes are black and white only. They are colored here to show which octave groups they belong in.

In piano music, several additional ledger lines (and notes) are used between the treble and bass staves. See page 8.

Range of the Grand Staff: Indigo F thru Yellow G

Time runs from left to right.

Some notes are overlapped on the diagram to show locations of half-steps between B/C and E/F.

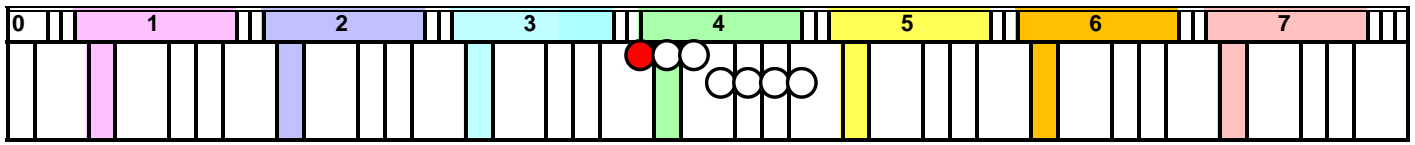
The notes above and below the grand staff require ledger lines. The ranges of the ledger lines are shown in yellow.

Flat signs (b), double flat signs (bb), sharp signs (#), and double sharp signs (x) are used with these notes to change the piano key that you play when you see the note with the sign.

These signs are most often put at the beginning of each musical staff line. Then you are expected to remember while you are playing the rest of the line, which notes are required to be altered. These signs are called key signatures. Ten different key signature signs are commonly used. These key signatures run from 1 thru 5 sharps and from 1 thru 5 flats.

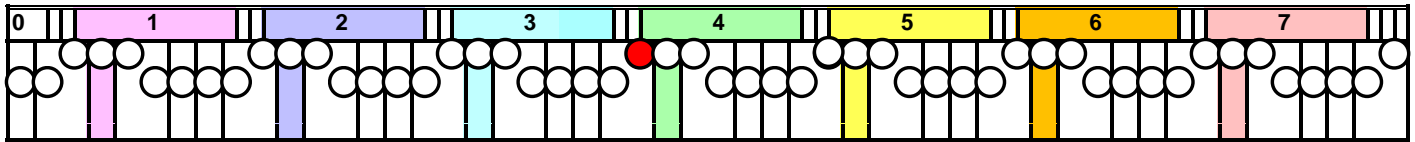
These *notes* and *signs* are abstract symbols. They bear no physical relationship to the *locations of the keys* that they represent on the keyboard! What they actually are, are a generalized composers' shorthand that has not been translated into keyboard notation. Basically, these notes tell you what SOUNDS to play, rather than telling you what KEYS to play. They provide a wonderfully universal musical language understood in every country of the world -- and a musical notation for all of the musical instruments of the orchestra as well as keyboards and voice! Unfortunately, though, it is very hard to learn to read them.

The Key Diagram Format Has a Note for Each of the 7 Different White Piano Keys

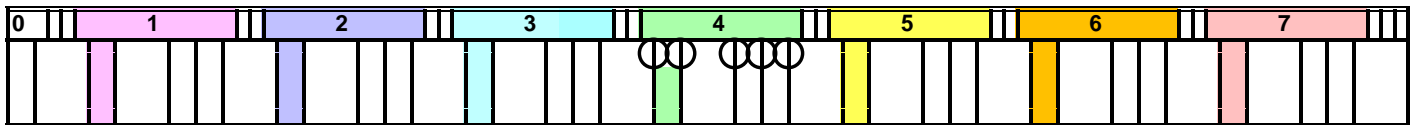


These same 7 notes are used for each octave of the diagram. The octaves are distinguished from each other both by their positions to the left or right of each other (just as are the octaves on the keyboard), by their numbers 1-7, and by their different rainbow colored backgrounds.

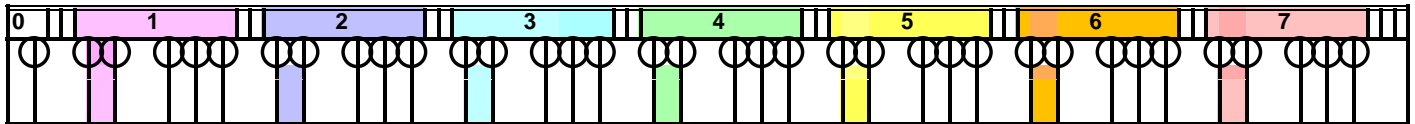
Time runs from the top to the bottom of the page.



There is also a note for each of the 5 different black keys.



These same 5 notes are used for each octave group of the diagram.



The notes on a key diagram visually show which keys to play. The diagram is a cartoon-like image of the keyboard that provides an authentic visual connection between the sheet music diagram and the keys of the keyboard.

Sharps and flats are not used to alter what key you play. A given note position on the diagram always represents the same key. It is entirely unnecessary to know the sign of any note (flat or sharp) in order to play it correctly.

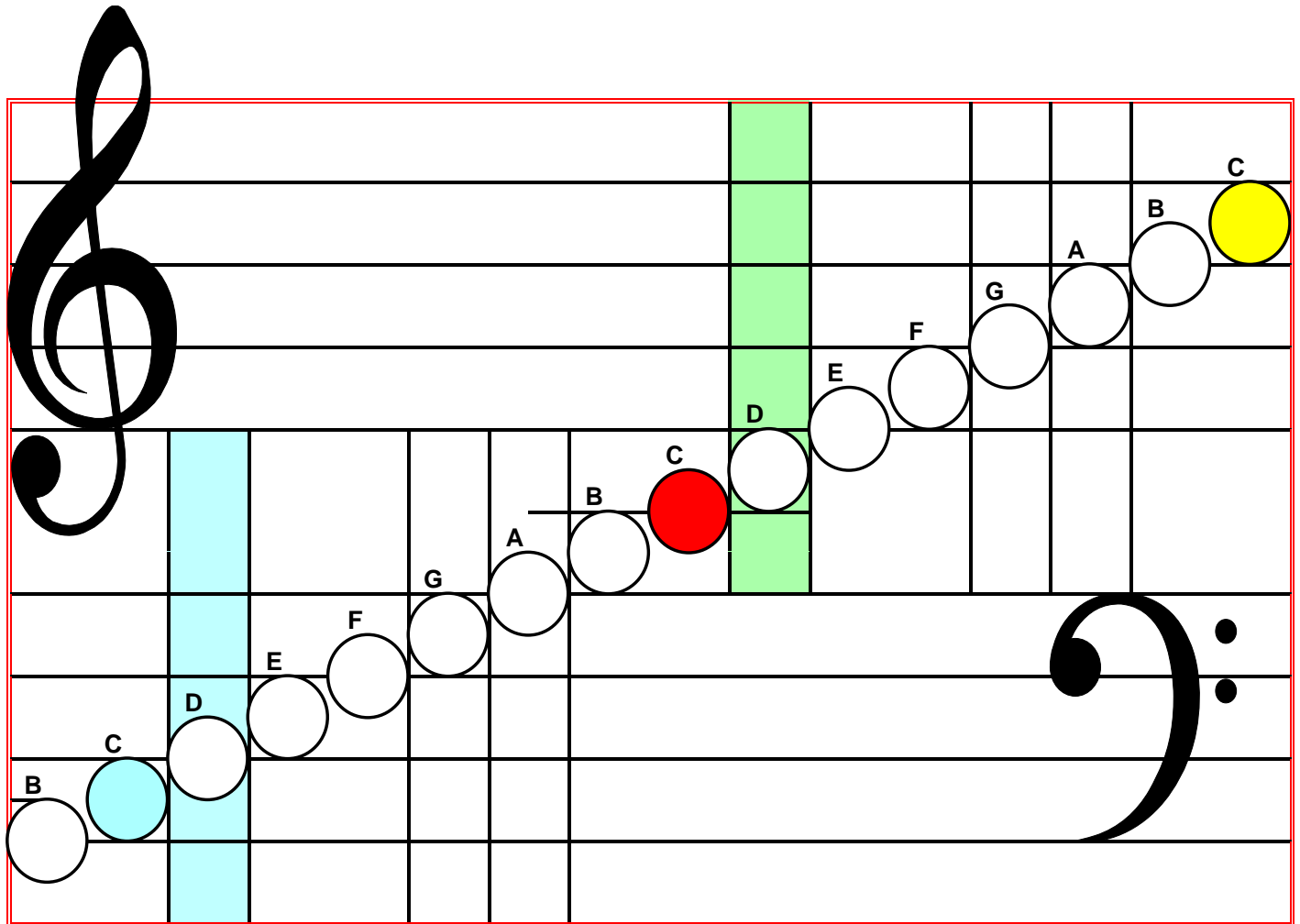
Technical Note: For advanced players who care about note names, you will always know whether a note is a sharp or flat. In diagrams, at the beginning of every piece and key change, there is a key signature that tells you how many sharps or flats define the key.

*Intersection of the Grand Staff
And the Key Diagram Showing the Natural
Notes for All 52 of the White Piano Keys*

To assist in comparing the notations from here and to the end of this unit, all C's are colored with the color of their respective octave groups - except Middle C's, which are colored **RED**.

See the enlarged view, next page.

Detail – Notes for the White Keys at the Middle of the Keyboard

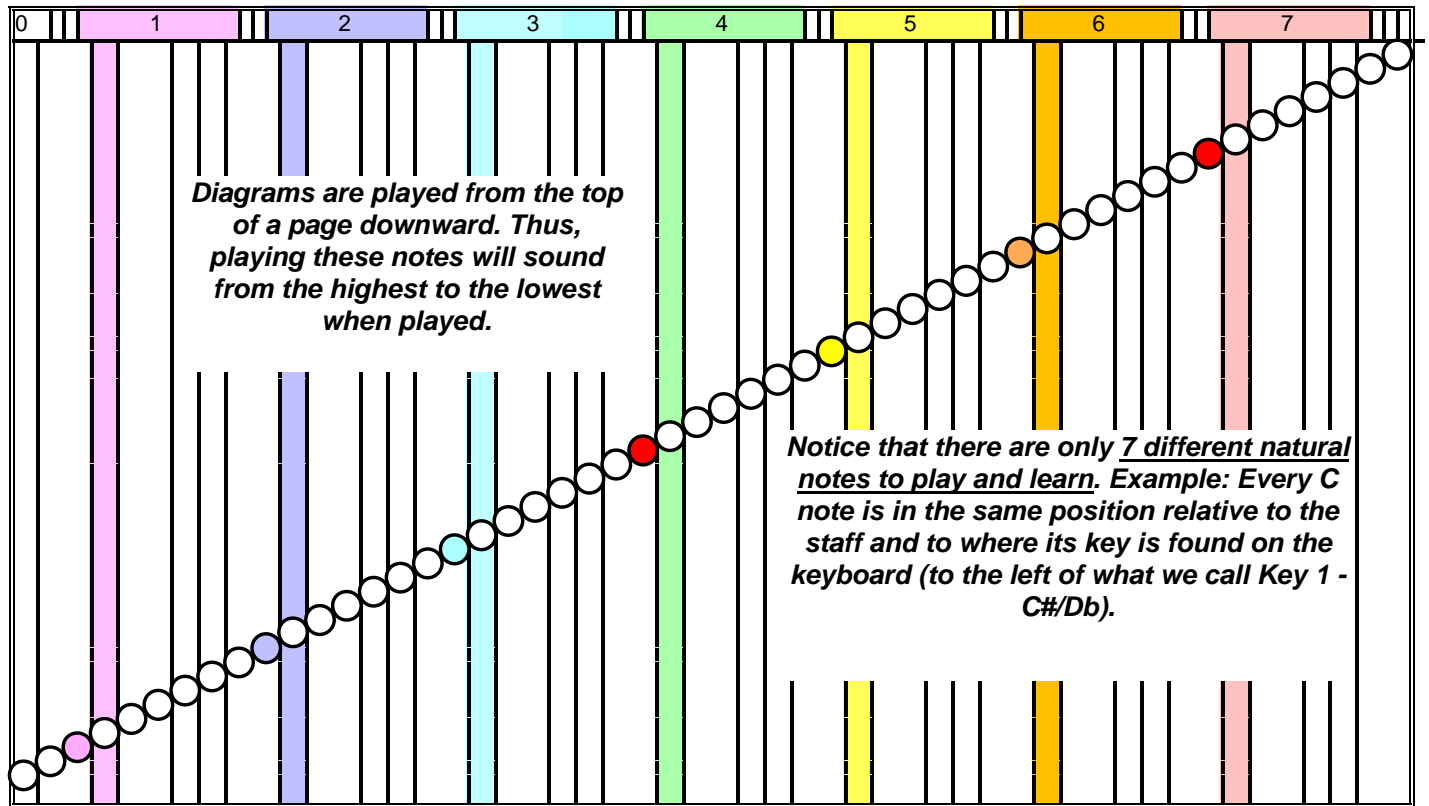


Grand Staff
Showing the Natural
Notes for All 52 of the White Piano Keys

Grand Staff notes are played from left to right. Thus, playing these notes will sound from the lowest to the highest when played.

Notice that there are 52 different natural notes to play and learn. Example: Every C note is in a unique position relative to the staff. Also, the notes have no visual connection to the keys that they stand for on the keyboard.

The Diagram Staff
Showing the Natural
Notes for All 52 of the White Piano Keys



**Grand Staff Altered to Show a
Typical Piano Configuration – Treble and Bass Separated --
8va Signs Used to Reduce Number of Ledger Lines**

Separated bass and treble staves, and ledger line extensions of each.

With 8va signs

With 8va basso signs

Separation of the Bass and Treble Staves

For the grand staff, it is understood that the left hand will play the notes of the bass staff, and the right hand will play the notes of the treble staff. To be able to notate higher notes for the left hand and lower notes for the right hand, and yet remain on the appropriate staff, the bass staff must be extended up, and the treble staff must be extended down. This extension is done with ledger lines. **TO MAKE ROOM FOR THESE EXTENSIONS, THE BASS AND TREBLE STAVES MUST BE SEPARATED,** as you can see on the piano staff above.

In addition, this widened space is often used for song texts, and for comments and directions.

The 8va and 8va basso Signs

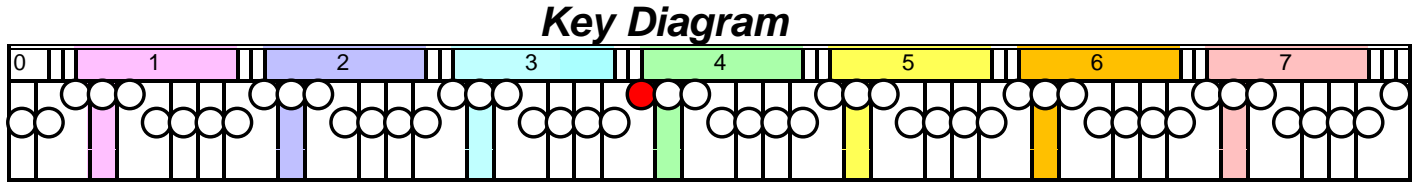
The notes above and below the grand staff also require **ledger lines**. Here the 8va sign (8va = octave) is used to reduce the number of ledger lines needed for the highest and lowest notes of the keyboard. (Plain) 8va means play an octave higher than written. 8va basso means play an octave lower than written.

The Key Map Staff

Key maps do not use ledger lines except on very rare occasions. There is no separation in the middle of the staff as there is for the piano version of the grand staff.

About the Two Pitch Formats of MIW Notations

There are different pitch formats for key diagrams and key maps. The format used throughout this unit shows notes for white keys having horizontal spacing matching the spacing of the wide dimensions of the white keys. This is the format of the key diagrams. See the example below, reprinted from Page 3.

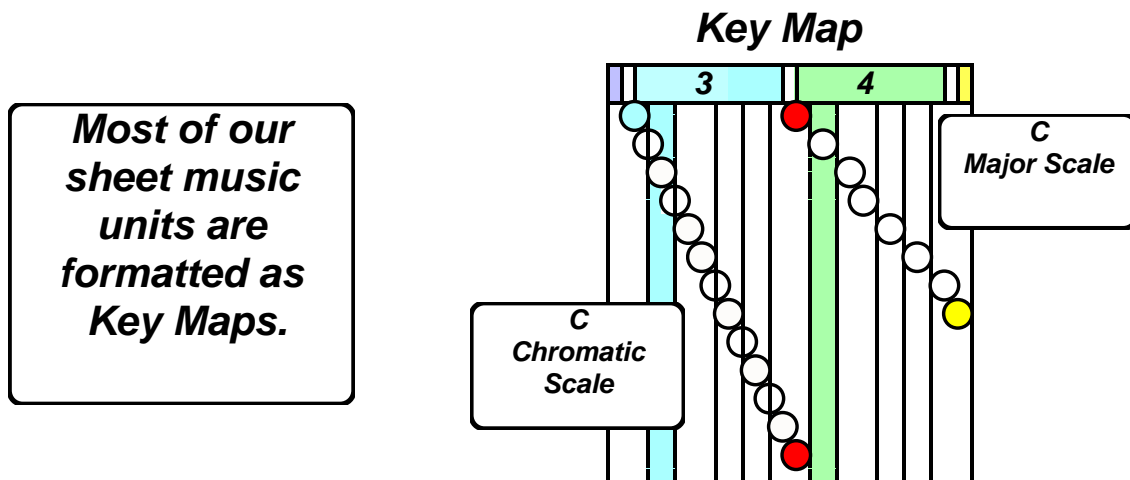


The Key Map Format for the Spacing of the Notes for the White Keys

The problem with the keyboard diagram format shown above is that though it shows an accurate horizontal spacing of the SIZE of the white keys, it does not show the proportional spacing of the SOUNDS of these keys. This is not a serious problem for some pianists, and for many pianists, it is no problem at all. But some prefer, along with us, to have notes that show (visually) this proportional spacing of the sounds. The proportional visual spacing of the notes is easily accomplished by slight changes in the spacing of the vertical lines standing for the black keys on the diagram. This spacing is reflected in the "key map" format.

This spacing is accomplished by reducing by 1/4 the width of the spaces between the vertical lines creating the spaces for notes E and F and notes B and C. (This reduces the width of the spaces on the diagram between keys 2 and 3; and between keys 5 and 1; each by 1/4.) This change is barely noticeable when playing from the diagrams, and it doesn't change the playing difficulty of a piece either for better or for worse. The change, however, makes the notation a truly accurate reflection of the intervals between the sounds produced by the keyboard.

The effect of this change is that all of the notes of the chromatic scale on key maps are equally spaced (horizontally). All whole steps have equal spacing. In fact, all intervals of a given kind have equal spacing. You can see this in the examples of a chromatic and major scales shown below. We use both the key diagram and key map formats in our sheet music. Typically, the key diagrams are used for beginning students and the key maps are used for all others.



Key Map Example - The First Noel

Moderately #: 2 Beats: 3

Traditional tune

The image displays two musical score examples for the lyrics of 'The First Noel'. The left example is labeled 'Moderately #: 2 Beats: 3' and the right is 'Traditional tune'. Both use a grid system where vertical lines represent beats and horizontal lines represent pitch levels. Red ovals indicate specific pitch points, and white ovals indicate other pitch points. The lyrics are written to the right of each grid. The 'Moderately' version has a yellow highlight on the first three beats of each measure, while the 'Traditional tune' version has a green highlight on the first four beats of each measure.