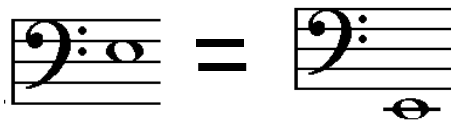
Transposing Instruments

1. Concert Pitch means that the note seen by the performer on the staff and heard by the listener are the same note. All voices and many instruments operate at concert pitch. For reasons both historical and practical, some instruments do not.

2. Range transpositions are used by several instruments in order to keep them within the staff of a particular clef. These transpositions are typically by octave, so, for example, a C remains a C, just not the same C.

string bass (an octave lower than written)
all guitars (an octave lower than written)
tenor banjo (an octave lower than written)
xylophone (an octave higher than written)
glockenspiel (two octaves higher than written)
celesta (an octave higher than written)

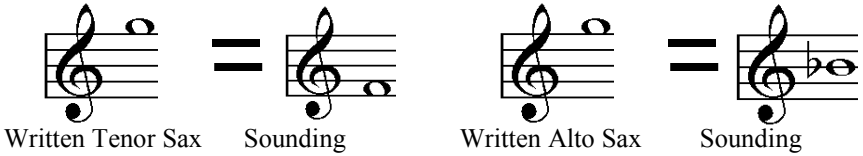
Example: A string bass player sees E in the staff, fingers that note, but the instrument produces E below the staff.



3. Fingering Transpositions are used within families of instruments to allow the player to learn a single set of fingerings rather than relearning fingerings or clefs for similar instruments. In general, these instruments sound lower than written (with a few exceptions).

piccolo (an octave higher than written, fingers like flute)
alto flute (sees C, plays G, like flute)
English horn (sees C, plays F, fingers like oboe)
all clarinets finger the same, and may be higher or lower than the standard "B♭" clarinet
contrabassoon (an octave lower than written, fingers like bassoon)
all saxophones finger the same, similar to flute

Example: A saxophone player who switches from tenor saxophone to alto saxophone will use the same fingering for a written G, but different notes will be heard.



4. Historical Transpositions are used by some instruments as the result of traditions which reflect the development of those instruments. In particular, the trumpet, horn and clarinet were not always capable of playing all the chromatic pitches, and players would have to change instruments to change keys. The most popular and effective sizes of these instruments have become the standard, but these instruments are frequently seen in other transpositions in music before the mid-20th century.

trumpet in B♭
clarinet in B♭ and A
horn in F

Example: A horn player using a modern horn in F may be confronted with a part for "Horn in E" in orchestra playing. Since the player is accustomed to looking at C and having F come out, she will need to play every note a half-step lower than written to create the correct pitch. Historically, a horn player would have changed the length of his instrument and continued to play C.

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