# **Instrument Range Charts**

Comprehensive range charts for common jazz instruments

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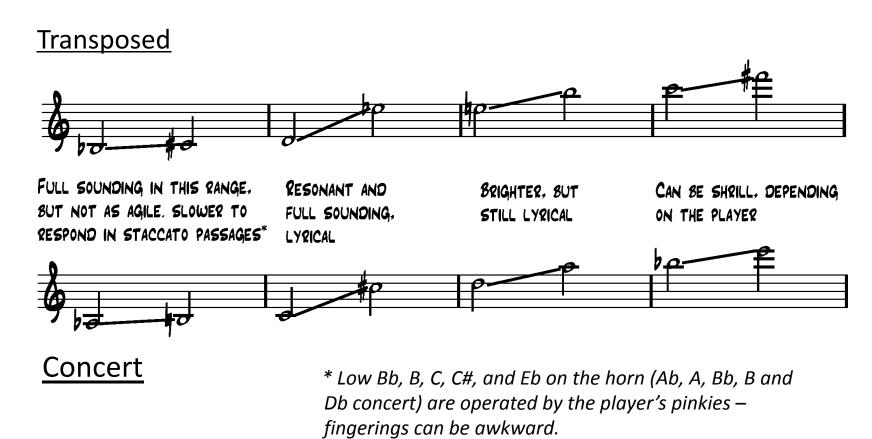
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## Instrument ranges - recommendations

- The following charts show suggested instrument ranges for common jazz instruments, with notes about characteristics of different registers in the instrument's range.
- Some details about top ranges, timbre, difficulty, etc. depend on the individual player, along with their mouthpiece and instrument. Use these charts as a rough guide.
- When writing, think about how high a note is within the range of the instrument, not just how it sounds on the piano or computer playback. For example, concert C an octave above middle C sounds more intense on tenor sax (near top of range) vs. trumpet or alto sax (comfortable range).
- Consider saving higher, more intense parts of an instrument's range for climactic parts of a passage or the entire piece.

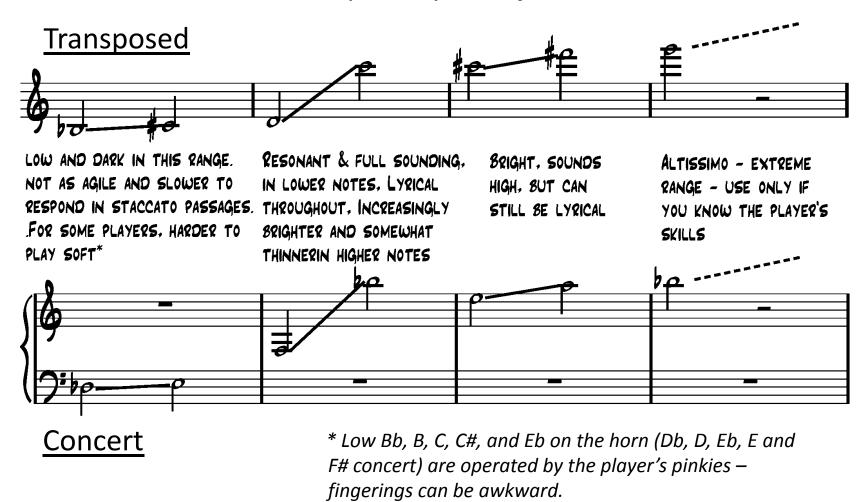
## Soprano sax

Transpose up a major 2nd



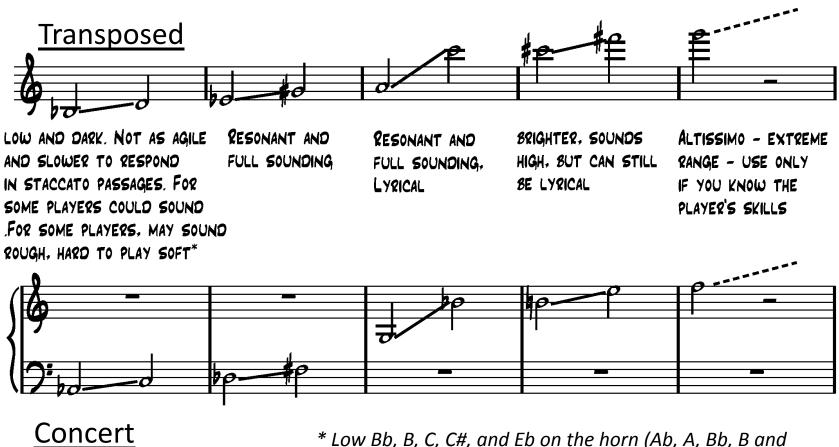
### Alto sax

Transpose up a major 6th



#### Tenor sax

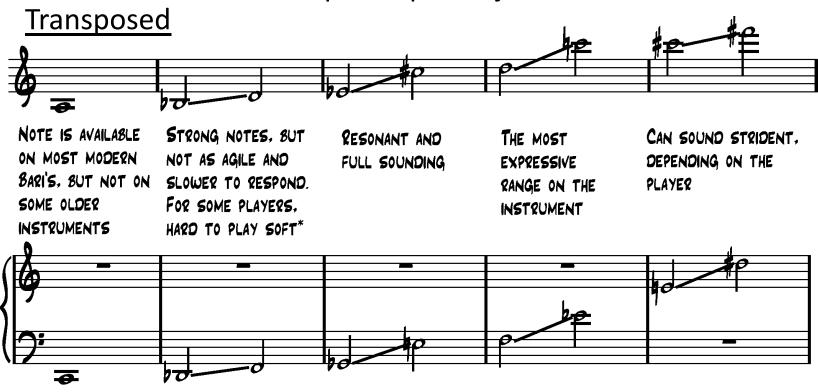
Transpose up a major 9th



\* Low Bb, B, C, C#, and Eb on the horn (Ab, A, Bb, B and Db concert) are operated by the player's pinkies — fingerings can be awkward.

### Baritone sax

Transpose up a major 13th



#### **Concert**

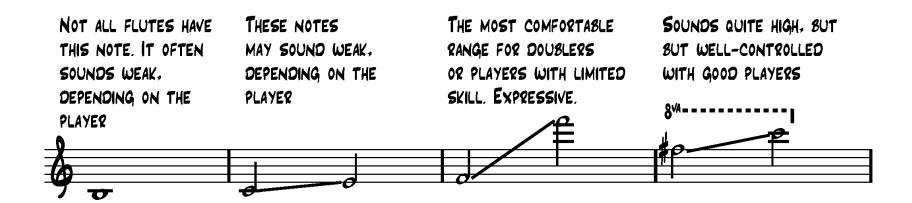
\* Low Bb, B, C, C#, and Eb on the horn (Ab, A, Bb, B and Db concert) are operated by the player's pinkies — fingerings can be awkward. These keys, plus low A (C concert) are keys on long rods that take longer to move

## A note about student and school saxophones

- The low notes written C# down to low Bb on saxophones are particularly affected by small leaks or misadjustments in the instrument
- Students might struggle playing low C# down to low Bb for a few reasons
  - Their embouchure is not well developed or they are not using enough air support
  - They are using reed that is too stiff for the mouthpiece
  - The instrument is poorly adjusted and there are leaks in one more more pads
- When writing the lowest notes on the instrument, be aware of these possible issues if you have novice student players or poorly-maintained instruments.
- Low notes on the clarinet are less likely to be effected by instrument issues, because of the physics of the instrument, and because the pads, keys, and mechanics are smaller and less prone to bending.

## Flute

No transposition needed

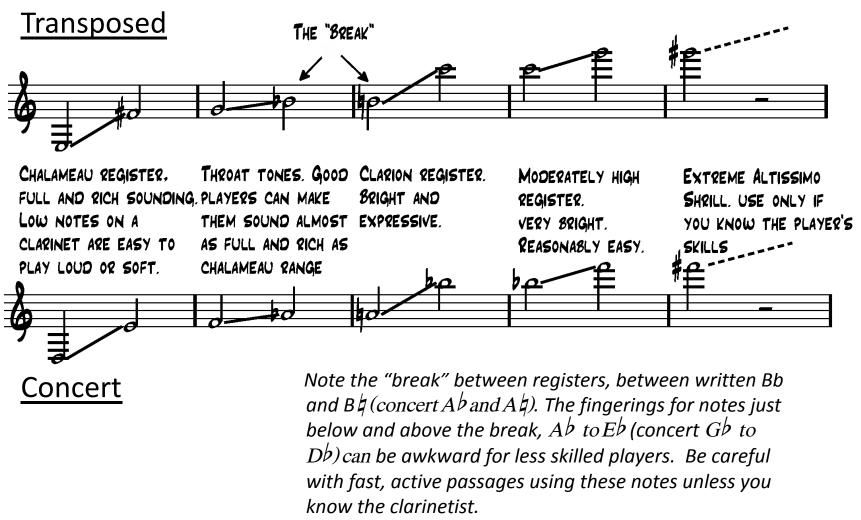


The top octave of the flute has more difficult fingerings, and players with limited skill may struggle with fast, active passages in this range.

In a jazz context, the flute works well playing a solo line, or doubling another instrument in unison or octaves. As part of a harmonized melody, it can blend well with a clarinet, saxophone playing softly, or muted trumpet. It may not work as well harmonizing with open brass instruments or saxophones.

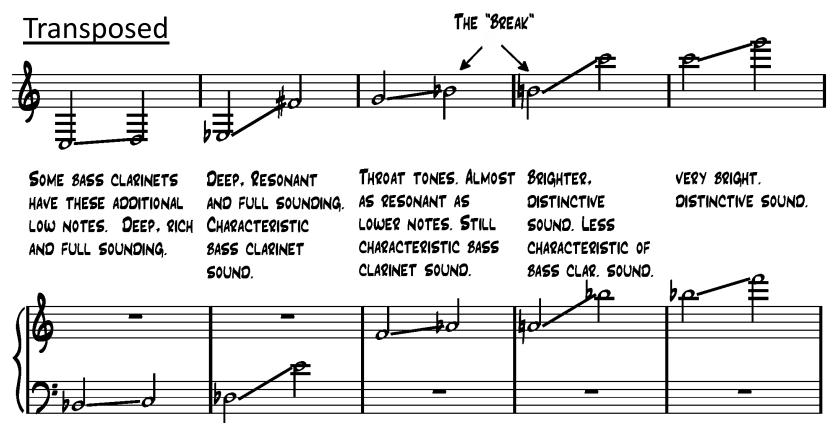
## Clarinet

Transpose up a major 2nd



## **Bass Clarinet**

Transpose up a major 9th



**Concert** 

Note the "break" between registers, written Bb to  $B \not\models (concert A \not\triangleright and A \not\models)$ . The fingerings for notes just below and above the break,  $A \not\triangleright to E \not\triangleright (concert G \not\triangleright to D \not\triangleright) can be harder for some players. Be careful with fast, active passages.$ 

## Trumpets in a small ensemble

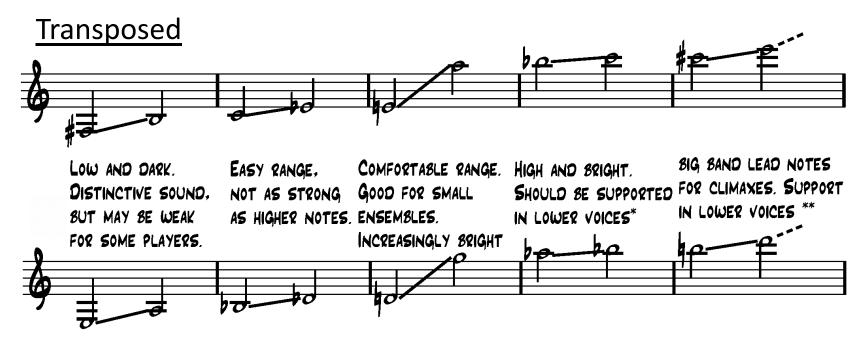
- When writing for small ensembles, with 2 6 horns, do not write the lead trumpet part as high as you would in a big band.
- For small ensembles, keep most of your writing for trumpet no higher than written G or A above the staff.
- For trumpets in a small ensemble, a few higher passages are OK if supported by other players within a 4<sup>th</sup> or 5<sup>th</sup> below. Doubling a part in octaves also provides support.

## Trumpets in big bands

- When writing for a big band with 3-4 trumpets, it is common for the lead trumpet part to have some passages going 2 or 3 ledger lines above the staff.
- When writing a high trumpet part for big band, also support it: Harmonize within a 4<sup>th</sup> below, or double the line an octave below.
- There often is a lead trumpet specialist particularly skilled with power and range. Others in the section might be specialists in improvisation, but not high notes.

## Trumpet

Transpose up a major 2nd



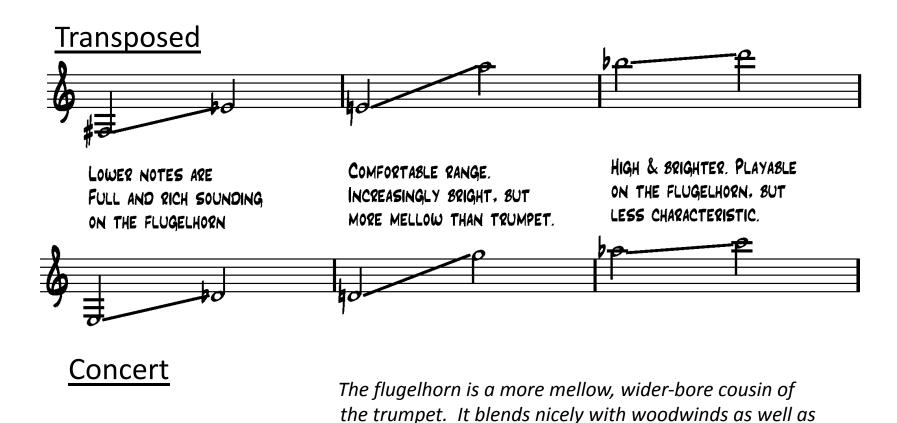
#### Concert

<sup>\*</sup> High notes in the lead trumpet should be supported by lower voice a  $3^{rd}$  or  $4^{th}$  below, or voice the passage in octaves.

<sup>\*\*</sup> Big band lead trumpet specialists commonly play these notes and higher notes. Use theme sparingly, in the climax portion of a chart, and support them in lower voices.

## Flugelhorn

Transpose up a major 2nd



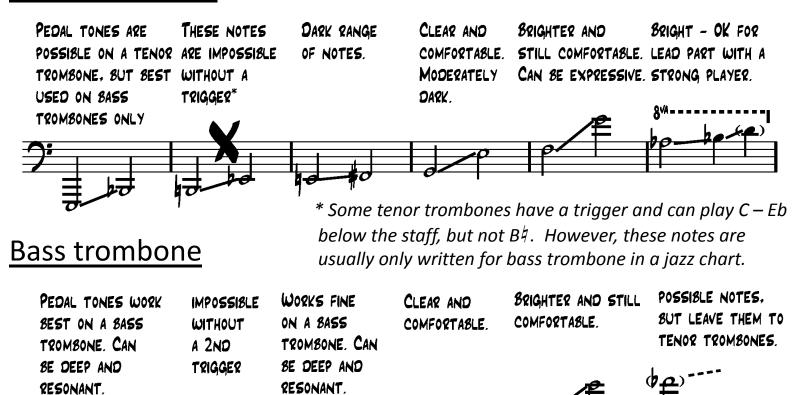
brass. It can get a full, rich sound in lower notes that

might sound weak or thin on the trumpet.

## Trombone

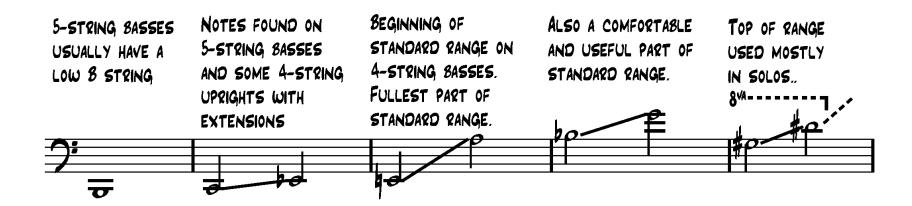
No transposition needed

#### Tenor trombone



#### Bass

Sounds an octave lower than written

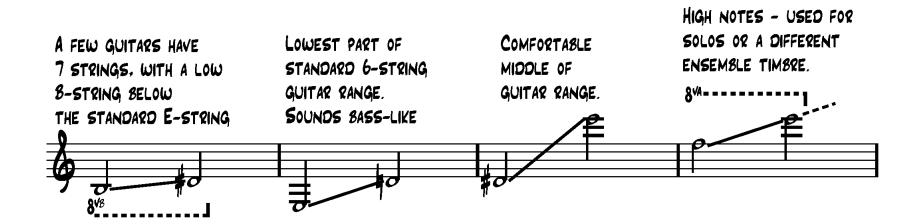


Before 5 or 6-string basses were common, electric bass players would sometimes tune their E-string (lowest string) down to Eb or D for a piece that needed a lower note. This is less common now that 5-string electric basses are common.

Upright bass players in symphony orchestras often have mechanical extensions on their E-string going down to C. This is less common for jazz players.

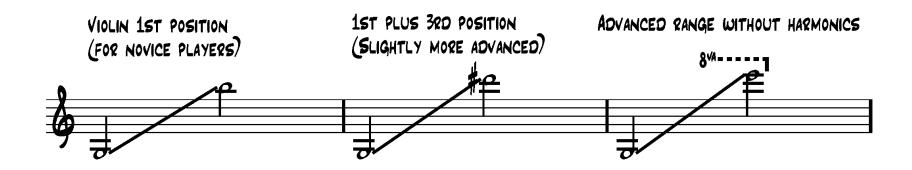
## Guitar

Sounds an octave lower than written



## Violin

No transposition needed



 The upper range can be extended further using harmonics. Harmonics also can create an ethereal effect. The player fingers a note and lightly touches the string higher on the fingerboard to produce an overtone. Use only for special effects with advanced violinists.