













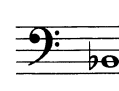

CHAPTER 1


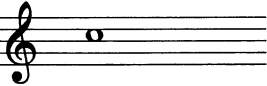

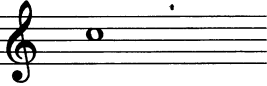

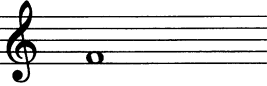
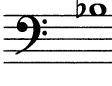
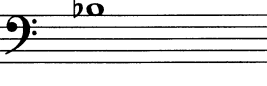

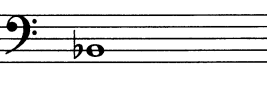

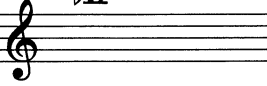

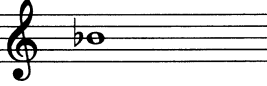

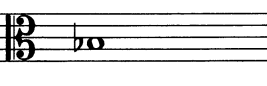
Instrumental Information

1-1 Transposition

Use the table below to transpose the concert pitch of an instrument (the pitch that actually sounds and the note that appears on a concert score) to the corresponding note that is written on that instrument's part. For example, in order to have a B \flat clarinet play a concert *b-flat* pitch, you must write the note *c* on the clarinet part a major second higher than the actual concert pitch. For instruments not shown here, consult any reputable text on orchestration or instrumentation.

Transposition Table

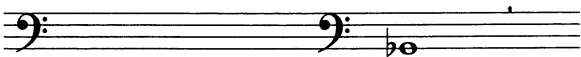
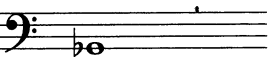
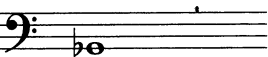
Instrument	Concert Pitch	Written Note	Transposition from Concert Pitch
Flute			Non-transposing
B \flat Clarinet			Up a major 2nd
B \flat Bass Clarinet			Up a major 9th (octave + major 2nd)
B \flat Soprano Sax			Up a major 2nd
E \flat Alto Sax			Up a major 6th
B \flat Tenor Sax			Up a major 9th (octave + major 2nd)
E \flat Baritone Sax			Up a major 13th (octave + major 6th)

Instrument	Concert Pitch	Written Note	Transposition from Concert Pitch
B♭ Trumpet			Up a major 2nd
B♭ Flügelhorn			Up a major 2nd
Horn in F			Up a perfect 5th
B♭ Trombone			Non-transposing
Tuba			Non-transposing
Guitar			Up an octave
Violin			Non-transposing
Viola			Non-transposing (Note the use of alto clef)

MODERN JAZZ VOICINGS

Instrument	Concert Pitch	Written Note	Transposition from Concert Pitch
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Cello			Non-transposing
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Bass/Electric Bass	 		Up an octave
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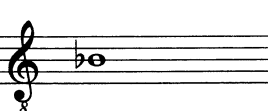
Piano/Sythesizer			Non-transposing
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Vibraphone			Non-transposing
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Human Voice (Soprano, Alto)			Non-transposing
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Human Voice (Tenor, Baritone, Bass)			Non-transposing
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Sometimes tenors use a special G-Clef () . When this is used, tenors sound an octave lower than written.

Tenor			
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1-2 Ranges and Sound Characteristics

An arranger needs to know the ranges within which instrumentalists can play comfortably as well as the qualities of the sound from one extreme to the other. The chart below shows the overall technical range for each instrument; the limits of the practical range are marked by vertical arrows pointing to darkened note heads. Throughout the range, the chart also describes sound quality and the useable scope of dynamic levels.

Range and Sound Characteristics Chart

↓ = practical range

Flute

written & sounding

Velvety, soft *pp - p* Gradually clearer *pp - f* Clear *mp - mf* Bright *mf - f* Brilliant, shrill *f - ff*

B♭ Clarinet

written

sounding

"The break"
Awkward fingering: rapid passages that cross and recross this area are a problem.

"Chalumeau" register, dark, rich, becoming thinner *pp - f* Throat tones, weak *p - mf* Clear, bright "Clarion" register *pp - ff* Piercing, shrill *mf - ff*

Bass Clarinet

written

sounding

"The break"
Same problems as above.

Some bass clarinets have the low E♭ key

Full, rich, dark becoming thin... *pp - f* *p - mf* Thinner to shrill *mf - ff*

MODERN JAZZ VOICINGS

B♭ Soprano Sax

written

sounding

Some sopranos have F# key

Harsh sound, difficult to control *f*

Clearer sound, more blendable & expressive *pp - f*

Bright, projecting *mp - ff*

Thin *mf - ff*

E♭ Alto Sax

written

sounding

Some altos have F# key

Harsh sound, difficult to control, "honk" register *f*

Rich → thinner *p - ff*

Bright to brighter *pp - ff*

Becoming thinner to shrill *mp - f*

B♭ Tenor Sax

written

sounding

Some tenors have F# key

Not as hard as alto, but still difficult to control *f*

Rich *p - f*

Becoming less rich *pp - ff*

Rich to thin, very blendable & controllable *pp - ff*

Thin, difficult to control *p - ff*

E♭ Baritone Sax

written

sounding

Some baris have F# key

Many baritones have the low A key

Full, rich *mf - ff*

Becoming less full and foundation-like *mp - ff*

Rich, blendable *pp - ff*

Thin, but very expressive *pp - ff*

Difficult to control intonation *p - ff*

B♭ Trumpet

written

sounding

Weak, non-projecting, difficult to control
mp - mf

Clear, rich, very controllable
pp - ff

Clear, bright
mf - ff

Piercing, penetrating (lead trumpet range)
mp - f

B♭ Flügelhorn

written

sounding

Full, dark, sonorous
p - mf

Very rich, mellow (softer quality than trumpet)
mf - f

Becoming thinner and constrained, penetrating
mf - f

Horn in F (French horn)

written

sounding

"Pedal tones," difficult to control
mf - f

Dark
mf - f

Warm, blendable
p - f

Rich, more expressive
p - f

Bright Penetrating, projecting
ff

B♭ Trombone

written & sounding

Pedal tones
p - mf

These notes unavailable without F attachment

Low, dark spread sound
p - f

Centered, low sound
pp - ff

Clear, melodically expressive
pp - ff

Bright Penetrating
mp - ff ff

MODERN JAZZ VOICINGS

Tuba

written & sounding

Full, spread sound *p - f*

Focused, "Foundation" sound *pp - ff*

Clear, sonorous, very blendable *p - f*

Becomes thinner and penetrating, difficult to blend *p - f*

Guitar

written

sounding

(Six open strings) E A D G B E

Darker...

Less dark, very blendable...

Thinner, gradually more piercing...

For a better understanding of the guitar's capability to play and voice chords, consult *The Jazz Style of Tal Farlow* by Steve Rochinski, *The Advancing Guitarist*, by Mick Goodrick, or *Everything About Guitar Chords* by Wilbur Savidge.

Violin

written & sounding

(Four open strings) G D A E

Dark, very broad, sonorous

Subdued quality

Mellow to brilliant

Strong carrying power; bright

Viola

sounding & written in alto clef

(sounding in bass clef)

(Four open strings) C G D A

Foreboding, dark

Rich, warm

Gentle, blendable

Nasal, piercing

Cello

written & sounding

(Four open strings) C G D A

Full, rich...

Neutral, blendable

Very expressive, warm and brilliant

Bass

(Four open strings)

written

Some basses have a fifth (low-C) string

sounding

E A D G

Rich, warm Rich, but thinning Cello-like, lighter

Arco: heavy, course, dark
Pizz: dark, sonorous

Piano

written & sounding

8vb - 2 (loco) 8va - 1

Dark, rich Brighter, but blendable Very bright, light

Dark, percussive, heavy

Vibraphone

written & sounding

Dark Rich, blendable Brighter

Voice: Soprano

written & sounding

Non-projecting Flexible, more projecting and blendable Bright, harder to control, penetrating

p - mp *pp - ff* *mp - ff*

Voice: Alto

written & sounding

Non-projecting, vibrant Rich, blendable Brighter, thin

pp - mp *pp - ff* *p - ff*

MODERN JAZZ VOICINGS

Voice: Tenor

written but sounding 8vb

written & sounding

Dark *pp - mp*

Rich, very expressive *p - ff*

Bright, projecting, thin *p - f*

Voice: Baritone

written & sounding

Dark, thin *pp - mf*

Full, rich *pp - ff* — increasingly bright

Bright, penetrating, thin *mp - f*

Most men are baritones. They can sing a low E, but the sound is usually too thin.

Voice: Bass

written & sounding

Very dark, vibrant *pp - mf*

Rich, fuller, expressive *pp - ff*

Bright, penetrating, thin *mp - f*

Synthesizer

There are two reasons for including synthesizers or samplers in an orchestration. First, through emulation of other instruments, synthesizers can fatten an otherwise small orchestra. In this case, you should write “idiomatically,” in a style appropriate to the instrument you are emulating. Second, synthesizers may offer timbres you could not otherwise find. Many synthesis techniques are available, including additive, subtractive, physical modeling, and FM. If you are not a programmer and are unfamiliar with synthesis, work closely with your synthesizer player to get the sound you want. *Keyboard Magazine* and similar publications are good sources of information.