## **Euphonium B.C. Fingering Chart**

(Non Compensating)

Notes on gray background are pedal tones.

Notes on gray backs	ground are pedal tone	s.							
A <b>‡</b> B♭	В		C		C# Db			D	
9:	1082-91: 10.95 ##\$55.00.97.25 ##\$5.00.97.25 ##\$4.00.97.25								
20	<u>-</u>		<del>-</del>		<del> </del> <del>0</del>			σ	
<b>1</b>	1234		7.004					224	
Open	(lip down)		1234		134			2 3 4	
D# E	E		F	F#	G	G		G# Ab	
9:									
‡ <del>o</del> Þ <del>o</del>	•	O		#o Þo		•		#0 DO	
1	04 100	4 13		9.2		1 2 2		1	
1 4 or 1 2 4	2 4 or 1 2 3	4 or 1 3		2 3		1 2 or 3		1	
								•	
A A# Bb		В		C		C♯ D♭		D	
9:	40 90	0		0		10 >	•	0	
0	10 10					π			
2	Open	2	4 or 1 2 3	4 or 1 3		2 3		1 2 or 3	
		1		<u> </u>	1				
D# E	E	F		F#	G	G		G♯ A♭	
"	0	<b>O</b>		#e "	0 0		F	#o •	
2 10 10								•	
1	2	Open		2 3		1 2 or 3		1	
Δ	A A♯ B♭				C			C# D	
	A DO		В			•			
9:									
					,				
2	Open		1 2 or 3		1		2 or 2 3		
·	_ !!	.1				-		mu ol	
D	D∦ E♭ ‡Ω ♭ <u>⊕</u>		E		<b>F</b> <u><b>Ω</b></u>			F# Gp	
<u>O</u>	#a b€	<u></u>	• •					<u> </u>	
Open or 1 2	1		2 or 1 2 3		Open or 4 or 13			2 3	
			L				l	· · · · · · · · · · · · · · · · · · ·	
G	G# A♭ # <u>⊕</u> ♭Ω		A	A# # <u>⊕</u>	$\mathbf{B}_{\mathbf{b}}$	В		C <u>a</u> =	
<u>•</u>	عدا جا		<u>0</u>	<u> </u>	Þ <u>⊕</u>	<u>♥</u> =			
	<u>⊕</u>				_	<del></del>			
<u>=</u>									
	1		2		en	1 2		1	

(When more than one fingering is shown, the first is the most common.)

## Euphonium B.C. Harmonic Series

The fundamental pitch of the euphonium is determined by the length of the tube. Its characteristic tone quality is determined not only by the size of the opening in the tube, but also the amount of conical tubing or flare.

Regardless of the length of tubing, a natural overtone series is produced when the air inside the tube is activated through the vibration of the lips. By changing the tension of the lips and air speed, the performer can move higher and lower within the harmonic series, without changing valves.

Although the harmonic series is (in theory) endless, the chart below begins with the fundamental and continues through the 12th partial.

The 7th and 11th harmonic (partial) is so flat that it is unusable in the series (note the triangular shape of the note head).

