

SOUND THE TRUMPET

HOW TO BLOW YOUR OWN HORN



JONATHAN HARNUM

*Author of Basic Music Theory: How to Read,
Write and Understand Written Music and
All About Trumpet*

CHAPTER 17 - SO MANY TRUMPETS, SO LITTLE TIME

If you wish in this world to advance, your merits you're bound to enhance; you must stir it and stomp it, and blow your own trumpet, or trust me, you haven't a chance.

— W. S. Gilbert (1836-1911)

This Chapter Covers:

- Flügelhorn
- C trumpet
- Eb trumpet
- D trumpet
- Piccolo trumpet
- Other trumpets

Terms to Know:

piston valve: A type of valve that uses up and down motion of a cylindrical tube to divert air to the appropriate slide.

rotary valve: A type of valve that uses rotating motion of a cylindrical tube to divert air to the appropriate slide.

overtone series: Also known as the *harmonic series*. Tones above a fundamental pitch which are related to the fundamental. As you blow harder/faster through a tube, you'll play successively higher tones. These are the tones in the overtone series.


Superbone: A slide trombone with valves, invented by Maynard Ferguson.

A Trumpet for Every Occasion

The Bb trumpet is far and away the most common trumpet in the world, but there are many others which you can and should explore. Some trumpets, like the flügelhorn, have a special sound that works well with certain tunes. Others, like the C and Eb trumpets, are pitched in a certain key to make playing a piece easier. And of course there is the piccolo trumpet, an instrument whose range is an octave above that of regular trumpets.

All of these horns have specific uses and also particular challenges that are slightly different than the Bb trumpet. It's good to know what you're getting yourself into, so this chapter will cover the basics of all these types of trumpet and then some. Here we go!

Cornet

This is the most common type of trumpet after the Bb trumpet. The cornet is also in the key of Bb but has a more mellow tone than the trumpet because it has a conical bore, like the French Horn. A conical bore, means the tubing of the instrument is cone shaped, like so: . The cornet has a very gradual conical shape, about 33%, whereas the tubing of the next type of trumpet, the flügelhorn, is 100% conical. The more conical, the more mellow the sound.



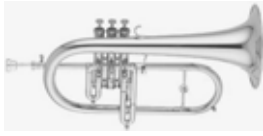
Cornet
(Bach Stradivarius 184ML)

Cornet music used to be very popular, especially in the heyday of the concert band in the late 1800s through the early 1900s. The influence of the cornet can still be seen today in every school band across the country. Most band music has both cornet and trumpet parts, but it's rare for a band to actually use cornets for the cornet parts. Trumpets are somewhat ubiquitous these days.



Cornet
(Holton Bb)

Flügelhorn



Flügelhorn
(Leblanc F357 Arturo
Sandoval model)



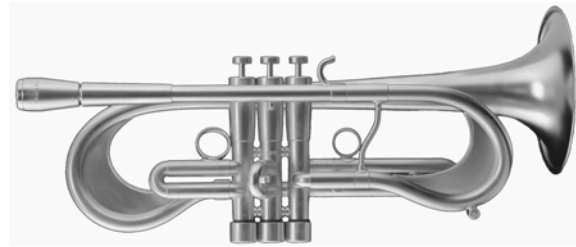
4-valve Flügelhorn
(Getzen Eterna 896S)

This is a beautiful sounding instrument and though it has been used in classical music it's primarily a jazz instrument. The flügelhorn is a conical bore instrument like the cornet and French horn. Instruments with a conical bore have a mellow tone and the flügelhorn is no exception.

This horn is used often for ballads and softer tunes because the flügelhorn isn't as loud an instrument as the trumpet, though it can still play pretty loud. Often in a jazz band setting, a tune will call for the entire trumpet section to use flügelhorn.

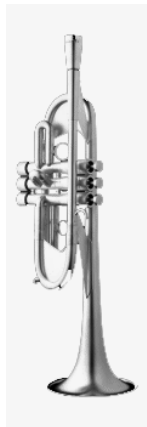
Flügelhorns come in both a three-valve and four-valve version. Because they are notoriously out of tune in their extreme low and high registers, a fourth valve can be used to correct these troubles with pitch.

Some famous and gifted flügelhorn players are: Art Farmer, Hugh Masakela, and Chuck Mangione. Art Farmer played a hybrid horn made by Dave Monette, called a Flumpet. The Flumpet has qualities of both the flügelhorn and trumpet.



Flumpet
(Dave Monette)

The C Trumpet



C Trumpet
(Monette Raja)

After the *Bb* trumpet, the C trumpet is probably the most commonly used trumpet in orchestral music. Many orchestral trumpet parts are written in C, and if you don't like transposing by sight, you can just buy yourself a C trumpet.

The C trumpet is shorter than the *Bb* trumpet, shorter by the length of the first valve slide. This makes the C trumpet higher by a whole step. Consider buying a C trumpet if you're serious about playing classical music.



C trumpet
(Bach Stradivarius)

The E \flat /D Trumpets



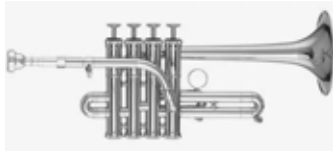
D/E \flat trumpet
(LeBlanc T353)

Two trumpets for the price of one. These horns usually have interchangeable lead pipes and/or bells to convert between E \flat and D trumpet.

These trumpets aren't used nearly as much as the first three horns. These horns are notoriously difficult to play in tune, but are useful when playing a piece that requires and E \flat or D transposition. The E \flat trumpet is often used for both the Haydn and Hummel trumpet concerti, both of which are in E \flat .

The E \flat trumpet sounds a perfect fourth higher than the B \flat trumpet. The D trumpet is a major third higher than the B \flat trumpet.

The Piccolo Trumpet



piccolo trumpet
(Getzen custom 3916)

This is the highest sounding trumpet, but don't get your hopes up for playing an easy double-high C. The difficulties in range with this instrument are the same as with a normal, B \flat trumpet.

Piccolo trumpets come in both B \flat and A versions, often with interchangeable bells and/or lead pipes, so that one horn can do double duty. Piccolo trumpets are also used exclusively in classical music.

Maurice André pioneered the use of piccolo trumpet as a solo instrument.

The Pocket Trumpet



pocket trumpet
(Amati)

Going on a road trip? Backpacking through Europe? Well, don't forget to take your pocket trumpet. These little trumpets sound exactly like a B \flat trumpet but the tubing is wrapped much more tightly, making them more compact. Pocket trumpets are more for convenience than anything else. If you have access to a full-sized horn, you'll find it plays better and sounds better than the pocket trumpet, but a full sized horn doesn't fit well into a suitcase or backpack, or a large pocket. Free jazz pioneer Don Cherry usually played a pocket trumpet.

Rotary Valve Trumpet



rotary valve trumpet
NY Bach

The trumpets you are probably most familiar with have piston valves, valves that work up and down like the pistons in your car's engine. A rotary valve trumpet has valves which move the air stream by rotation instead of moving up and down.

French horns and some tubas use rotary valves. Rotary valves need more maintenance than piston valves.



1890 rotary valve trumpet
(Austro-Hungarian)

Modern orchestras in Germany and Austria still use rotary valve trumpets. In this country they're being used more frequently now in the works of Austro-German Classical and Romantic composers from Mozart to Mahler. Some feel that the warmer tone quality of the rotary valve trumpet is more similar in sound to the natural trumpet used in the Classical and early Romantic periods. For the later Romantic period in the late 19th and early 20th centuries, the rotary valve trumpet was the trumpet then in use. To preserve the authentic sound, rotary valve trumpets are still used for these pieces.

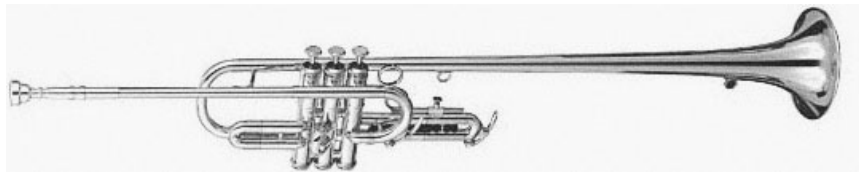


closeups of rotary valves

These images have been generously donated by Roy Hempley, Doug Lehrer and the Conn-Selmer Corporation.

Heraldic Trumpets

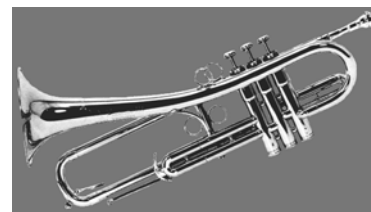
These are fun trumpets and are usually in the key of B \flat or C but can also be found in the key of G, A, and others. Banners are often hung from the bell for an added effect, though this makes the horn much more difficult to hold up for long periods. These horns are shaped for visual effect and not playability. They're fun to play and add a certain pomp and circumstance to special occasions.



heraldic trumpet
(Getzen 593 B \flat)

A Trumpet You Can't Have: the Firebird

This is a trumpet developed and played by Maynard Ferguson in the 1970s. It's a trumpet with a little bitty trombone-like slide attached. Originally, the slide had less positions than a trombone slide (7), but apparently in 2000 Maynard toured with a 7-position Firebird. If you know a trumpet manufacturer, or someone who is good at tinkering with things, you might talk them into making you one. Otherwise, you're out of luck. There are only a couple of these horns in existence.



Satish is the name of the artist pictured at left playing a Firebird. He's a New York musician who plays with the group Indofunk. You can check them out (and find links to video clips of Maynard Ferguson playing the Firebird) at <http://www.konakkol.com/firebird.html>.

Do you like the idea of playing with a slide? Well, all hope is not lost. You can find yourself a soprano trombone, a much easier task than trying to locate a Firebird. Miraphone makes a pretty good one, like the one pictured to the right.

Soprano trombones have the same range as trumpet, but changing notes is a little tricky if you've never used a slide before. Any beginning trombone book will help you start to figure out where the slide positions are. The tone of this instrument is mellow and warm, much like a flügelhorn. Playing this itty bitty trombone will take a good ear if you want to play in tune. It's a fun instrument and is always a hit visually. It's so little!



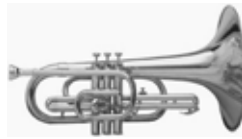
soprano trombone
(Miraphone)

If It's Got Valves, You Can (probably) Play It

There's no reason you have to stick with only trumpets. Once you understand the fingering on trumpet you can transfer that knowledge to any instrument that uses three (or four) valves. A few of your options are: mellophone, Sousaphone, tuba, baritone, euphonium, valve trombone, French horn, and an instrument with one of the greatest names, the Superbone (this is a valve trombone with a working slide). Maynard Ferguson often played a Superbone. It was probably developed right alongside the Firebird.



French Horn
(Holton Farkas H281)



Mellophone
(Blessing M100)



Holton Superbone



Tuba
(Besson Sovereign 993-1-0)



Sousaphone
(Amati ASH260)



Euphonium
(Jupiter 470S)

Natural Trumpets

Natural trumpets have no valves and in some ways are more difficult to play, especially if you're doing a piece like the Brandenburg Concerto. Natural trumpets are restricted to the notes in the overtone series. In order to get a scale, you must play high in the instrument's range.

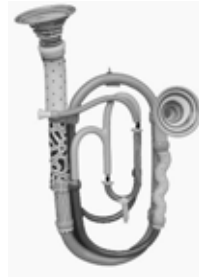
Some natural trumpets are below. You can make your own natural trumpet with any length of tubing (yes, even a length of garden hose) and a mouthpiece. The pitch of a trumpet is a factor of tube length. Go experiment!



bugle



**over-the-shoulder
Rhein Horn**



**double-belled ceramic bugle/
euphonium**

to buy such instruments, go to
[http://members.ispwest.com/clay/
bugles.html](http://members.ispwest.com/clay/bugles.html)



garden hose trumpet

for instructions on how to
make one, go to: [http://
www.mudcat.org/kids/
blowers.cfm](http://www.mudcat.org/kids/blowers.cfm)

or

[http://www.philtulga.com/
HomemadeMusic.html](http://www.philtulga.com/HomemadeMusic.html)



didgeridoo

learn more about this fascinating natural trumpet from Australia in Chapter 23

Up Next

So all you have is your trusty *Bb* trumpet and you've got a piece of music that calls for an *Eb* trumpet? Not to worry. You can transpose the part in your head (after some practice, of course). The next chapter is all about transposition: reading one pitch and playing a different pitch. Sound confusing? Better read the next chapter.