



# Xaphoon



"The Pocket Sax"

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## About the Xaphoon

Congratulations on your purchase of a Maui Xaphoon! Your Xaphoon (pronounced “za foon”) is a very unique instrument, which produces the deep, rich sounds of a saxophone or clarinet, yet is lightweight and extremely portable. Ideal for beginners and experienced players alike, the Xaphoon is designed to be taken everywhere, allowing the user to play and spread joy wherever they go.

Using the expressive power of a tenor sax reed, the Xaphoon boasts a fully chromatic, 2-octave range; providing an awesome sound with tremendous versatility. The experienced player will find the Xaphoon capable of all the subtle shadings and vibrant power of a saxophone. The beginner will find it fun and easy, and good practice for other reed instruments.

The Xaphoon is a brand new instrument; it is neither a sax nor a clarinet nor a recorder. Because it is different, all things are possible. Feel free to experiment – *there are no rules!*

## A tour of the Instrument

The Xaphoon is comprised of only four pieces: the main body, a tenor sax reed, a brass ligature to hold the reed in place, and a plastic cap to protect the delicate reed when not being played.

### *Finger Placement*

The Xaphoon has a total of 9 holes, and the fingers are placed as in the illustration at the right. The left hand goes on top, and the thumb of the left hand closes the hole in the back (not visible in the illustration). This left-thumb hole is NOT an octave hole (as it would be if this were a recorder); instead think of it simply as the 2<sup>nd</sup> hole from the top. It was placed there because, well, that's where your thumb is. This is the 2<sup>nd</sup> hole you will close on your descending scale.



### *Mouthpiece*

The mouthpiece of the Xaphoon is actually built right into the instrument; there is no mouthpiece to adjust or replace.

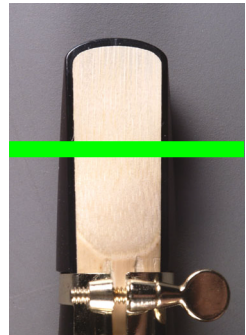
To play properly, your lower lip should be curled over your lower teeth. Your upper teeth should rest directly on top of the plastic mouthpiece. Place the mouthpiece far enough into your mouth to allow the

reed to vibrate freely. Your tongue should be out of the way and not touching any part of the instrument.

Your lower lip should come into contact with the reed approximately where the line is at the right. Everything above the line should be free of obstruction.

As you become experienced, you will find that moving your lower lip above and below this line as you play will enable easier playing of the lower and higher registers, respectively.

## ***How Reed Instruments Produce Sound***



If you examine the Xaphoon's mouthpiece from the side carefully, you'll find that there is a small gap between the tip of the reed and the mouthpiece. This gap gives room for the reed to vibrate when you blow through it. As it vibrates, it will alternately bend toward the mouthpiece (forming a perfect seal and stopping all air) and then move away from the mouthpiece (allowing your breath to flow once more). If this open-close-open-close activity happens 440 times per second, the Xaphoon will produce a frequency corresponding to the note "A". This is how all reed instruments work; vibrating at the desired frequency, all the while alternately allowing and blocking the wind from entering the instrument. It is very important, then, that the reed be positioned to allow it to form a perfect seal when it bends; it is also important that the instrument be placed far enough in the mouth to allow the tip of the reed to vibrate freely without touching the lips, teeth, tongue, or any other part of the mouth; but not so far in the mouth that it prevents you from producing the lower notes.

The Xaphoon uses a standard Tenor Sax reed, which is available in any music store. The unit comes with a #2½ strength reed, which is a good general-purpose strength. Experienced jazz sax musicians might want to use the harder reeds like a #3 or #4 to get a stronger, more powerful sound. People who are used to playing recorders might feel more comfortable using a #1½ or 2 which is softer and easier to play.

Placement of the reed relative to the opening of the mouthpiece is critical to the quality of the sound produced. As pictured in the left image below, the edges of the reed should be even with the edges of the mouthpiece opening. If the reed is placed too low, a “fuzzy” sound results. If placed too high, it can require more breath to get the reed to start vibrating, plus it could break more easily.



Just Right



Too High



Too Low

For best results, the reed should be moist (this will happen automatically as you play); many musicians moisten the reed in their mouths prior to playing. Reeds can last for thousands of hours of playing, but in the real world most reeds will end up becoming chipped, broken, or slightly warped before they actually die of old age. Should this happen, a new reed will always bring you a fresh and bright sound; and any tenor sax reed will do. Choose one whose strength matches your type of playing.

## ***Vibrato, Lip Control and Fine Tuning***

Vibrato is a common technique used by all reed instrument players. It's easy to learn and uses the same lip motion that fine tunes the pitch, so it's good to learn this right away.

While holding any long note, make a slight regular “chewing” motion with your lower jaw, and you will hear the pitch going up and down with the amount of lower lip pressure on the reed. Try playing like a singer...First establish the exact pitch of the note...Next, apply a very subtle vibrato with a steady rhythm toward the end of the note...Then, finish the note with the exact pitch again. Also try some exaggerated lip motion, which will make very expressive pitch bends. Every motion in your lip will come out in the sound.

Lip tuning is also necessary while playing, much like steering when you drive a car. Even on a straightaway, you have to pay attention and make adjustments.

# Learning to Play

## *Instant Gratification*

If you've never played a reed instrument before, this section can help you to quickly learn how to get a sound out of it. If you are an experienced sax or clarinet player, you may wish to skip the next two sections and go right to the fingering chart that follows.

As mentioned in the previous section, your lower lip should be curled over your lower teeth to provide a cushion for the reed. Your upper teeth should rest directly on top of the plastic mouthpiece.



The easiest way to get your first sound is to keep all the holes open, put the instrument's mouthpiece in your mouth so your lower lip rests approx. halfway down the reed's length, seal your lips tightly around the mouthpiece and blow as hard as you can. You should hear a very loud, high-pitched squeal. Congratulations! You've just made your first sound! (With some practice and control, you'll be able to get this note to sound more pure, and will become a high "F" on the 2-octave scale.)



If you couldn't get a sound, try moving the mouthpiece further into your mouth and try again. An adjustment of lip pressure on the reed may also help produce a note.

Now that you've made your first sound, the next thing to try is a descending scale. Starting with all the holes open, start playing your high note, and while you continue to blow close the holes one by one starting from the top and listen to the descending scale. (Don't forget to close the thumb hole in the back as the 3<sup>rd</sup> note in your descending scale!)

Continue closing the holes from top to bottom until all the holes are closed. The final note should be the instrument's lowest sound, the low "C".

If you experience some notes sounding kind of fuzzy, then most likely one or more holes are not sealed tightly with your fingers. Make sure you feel for the holes as your fingers close them. If you are having trouble descending all the way down to the lowest notes, try putting less pressure on the reed (i.e., allow it to vibrate more freely) as you descend.

Some beginners who have only played recorders in the past get surprised when they learn how much breath is required to get a note to sound. Because the Xaphoon uses reeds instead of a whistle mechanism (the sound source used in recorders), more wind pressure is required. Worry not; for just as horseback riding becomes more natural over time, with practice you will find the amount of breath required to make music flow freely will appear to be dramatically reduced.

## ***The Upper Register***

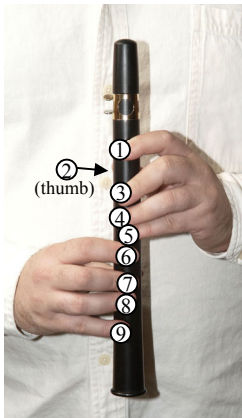
If you were successful in following the above procedure, you will find you can play the first 1½ octaves (C to F) of the Xaphoon's 2-octave range. By changing the lip position on the reed and repositioning the instrument in your mouth slightly, you can also attain the high register (High G to High C).

The high register is usually the sound the beginner makes unintentionally when making their first notes. To get the upper register, you may need to reposition your lip slightly, moving it further below the green line as depicted in an earlier section, while at the same time applying a little more lip pressure.

(You may have noticed that F# is kind of left out of the above range. You can get it; just play a high F and apply greater lip pressure to bend the note upward. Alternatively, some people play the high G using lower lip pressure to achieve the same results.)

With some practice, you'll be able to play a complete 2-octave "C" scale while you seamlessly transition between the lower and higher registers. Many Xaphoon beginners, though, are perfectly happy playing the hundreds of millions of songs that require only the first 1.5 octaves of the lower register.

# Fingering Chart



To finger the Xaphoon, all 5 fingers of the left hand are used on top; whereas 4 fingers of the right hand are placed at the bottom. (The right thumb is not used.) Take special care to make sure you can feel the edges of the holes and that they are sealed all around. Sealing the holes does not require a lot of finger pressure; you just have to be mindful of it.

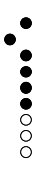
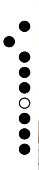
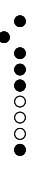

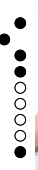




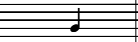

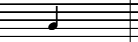
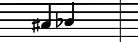
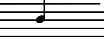




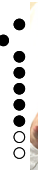


For those of you who really need precise and exacting guidelines, try the hints below:

- ① Left Index – well-curved at both joints; fingertip at hole.
- ② Left Thumb – right angle to instrument. Fingerpad on hole.
- ③ Left Middle – Bent at main joint only, extending flatly beyond hole. Fingerpad on hole.
- ④ Left Ring – Same as middle.
- ⑤ Left Baby – Completely straight fingertip on hole.
- ⑥ Right Index – Slightly Curled.
- ⑦ Right Middle – Almost straight, extended flatly. Fingerpad on hole.
- ⑧ Right Ring – Closely touching middle finger; fingerpad flatly on hole.
- ⑨ Right Baby – Straight, fingertip on hole.

# Fingering

C	C# Db	D	(Use slightly less lip pressure) D# Eb	E	
C	C# Db	D	D# Eb	E	F

# Chart

						
F	F# Gb	G (Right baby finger used only to support the instrument above "G".)	G# Ab	A	A# Bb	B
						
						
F# Gb *	G	G# Ab	A	A# Bb	B	C

SECOND REGISTER – USE HIGHER OVERTONE

# Instrument's History

The original Xaphoon was invented by Brian Lee Wittman, a musician who lives in Maui, Hawaii. For over 25 years Brian has been making Xaphoons out of the bamboo that grows wild on the island. The bamboo has a beautiful burnt finish and possesses an old-world, handcrafted charm. Brian estimates that he has made over 40,000 instruments over the years.

## Brian's Story

*"I have made over 40,000 such instruments over the years, all because of a single instrument I made on the whim of a child. The young lad lived with his mother in a tent in the woods, and heard me playing the sax (the expensive metal variety). He approached respectfully and then boldly asked if perhaps I had a little one he could play. Why not? I fiddled around and whittled a small end-blown block flute out of bamboo. Its tone was wheezy and small, and satisfied neither of us. I had a small grinding wheel I was using to shape some wooden boat cleats, and in sudden inspiration I applied the flute to the wheel and ground off the whole corner of the mouthpiece at an angle, re-shaping it to take a sax reed. With a bit of string holding the reed, I blew a test note ... it screamed!*

*The child was delighted and couldn't wait to have it, so I passed it on, but immediately made myself another, this time a bit longer, and I made the mouthpiece first so I could hear the pitch as I located the finger holes. Somehow by chance I ended up with a serviceable scale in E, and I couldn't put it down. I even played it one-handed as I drove into town, not noticing the speedometer was reading 80 until I heard the sirens.*

*Finally I arrived at the rehearsal studio where I was due, only to find a major hero, Mr. Airo Morierra (the Brazilian percussionist) just happened to be there jamming with my delighted band members. I jumped in on my new axe, and found that its strong warm tone could be as full as a sax, and amplified very well in an electric band setting. Airo was fascinated. so I offered this #2 instrument as a token of my respect for his music.*

*So I made a third and played it on gigs. People would come up and ask about it ... Where did you get it? ... You made it? Can you make me one? ... What do you mean you don't have time -- Here's my money! So I ended up in business. A name developed from "bamboozaphone" to "bamboozafoon" to "bamboo zafoon" to just "zafoon", also spelled "xaphoon". I eventually moved closer to the bamboo forests, and even took out a patent in several countries. And as I answered my mail and filled the orders, the years went by. My children were born into a house built of bamboo saxophones, and heard them from the womb onward.*

*The instrument I have made commercially all these years is not much different than the first experimental models. I did construct several larger instruments, some with conical extensions (usually cow horn), but rather than complicate the design with a number of pieces, I have elected to maintain the "one stick" concept with the mouthpiece carved directly on the end of the instrument body. Fortunately the bamboo naturally lends itself to this type of construction if it is carefully chosen in the forest for the correct length and diameter.*

*After some experimentation, I eventually found a hole placement and fingering system that will allow two complete chromatic octaves, though the instrument remains primarily diatonic. For example, it would be simple enough to play a C# note on a C instrument, or sketch through a riff in that key while following*

*the chord changes, but it would not make much sense to transpose the entire tune to C#. There would be just too many cross-fingerings and lip adjustments.*

*I have generally restricted my output to C instruments, mostly to avoid confusing beginners with too many choices. I will gladly make instruments of any key, but only if the customer is still interested after having attained some skill on the C. The C plays best in the keys of D,F, G, Gm, Dm, Am, etc.*

*Some of my customers have surprised me by adopting radically different styles, from Baroque to Peruvian to Irish to African. I greatly appreciate the occasional recordings I receive from my customers. One can well imagine that the actual construction of 40,000 of anything can become tedious, so it has become the satisfaction of customers that drives me (as well as the opportunity to feed my family). It is truly rewarding to receive orders from distant places and it does get easier to make them now that I know how.*

*I can only wonder though, if perhaps my punishment in the next world will be to hear them all played at once.”*

## **Plastic Xaphoon**

Worldwide demand for Brian’s Xaphoons has been so great that, in the year 2000 the quest for a high-quality, mass-producible version of his instrument was realized. The folks at Indiana Plastics demonstrated the requisite talent and dedication to undertake this important task. (If you think making a high-quality, precision plastic instrument is easy, check out the full story on the Xaphoon web site: <http://www.xaphoon.com>.)



## Care for the Instrument

The Xaphoon is made of the same high-quality materials as many clarinets and oboes. Although the unit is remarkably maintenance-free, you can keep the instrument looking new by giving it a treatment of Armor-All once a year. Some players also like to wipe the inside clean after each playing. If an instrument's appearance isn't important to you, have at it – the Xaphoon can double as a percussive tool (aka, a drumstick or wooden sticks). For a more subtle washboard-like sound, you can also take the cap and slide it over the fingering holes. (As was stated earlier, the Xaphoon is a new instrument, and there are no rules!)

# Troubleshooting Tips

Symptom	Suggested Actions
I can't get a sound, no matter how hard I blow.	<p>This is probably because the reed is not free to vibrate. Try sticking the instrument into your mouth an additional inch or two; then leave the holes open and blow as hard as you can. (This increases the chances of hearing a sound; a pleasant sound takes more work. ☺)</p> <p>Another thing to check is proper placement of the reed; the edges of the reed should be aligned with the edges of the mouthpiece opening.</p>
I can get the high notes, but not the lower notes.	Try the descending scale exercise described in the "Learning to Play" section. When you start to approach the lower notes, reduce the amount of lip pressure and allow the reed to vibrate more freely.
I can't get the higher register sounds.	Higher register can be attained by repositioning the mouthpiece in your mouth: place the mouthpiece into your mouth some more, and apply a little more lip pressure.
Notes sound kind of fuzzy & impure.	This usually results from some of the holes not being fully closed. Check all closed holes for inadvertent leaks.

<p>Some notes sound a little flat or sharp.</p>	<p>Variable lip pressure, which allows the player to “bend” notes, can also cause the player to inadvertently play a note a little sharp or flat. This can easily be corrected by adjusting the lip pressure: More lip pressure produces a sharper note; less pressure produces a flatter note. A little practice will allow you to “know” the instrument’s required pressure for in-tune playing.</p> <p>The strength of reed you use may affect your overall tuning as well. If you find you are playing a little flat, try a stiffer, higher-numbered reed. A softer reed may likewise help those who play a little sharp.</p>
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## Do you enjoy your Xaphoon?

Some people feel that our purpose in life is to spread joy and happiness to others. The Xaphoon was designed with this philosophy in mind. The instrument is portable so that you may take it everywhere – a mountainous hike, in the subway, a campfire, a bus stop, you name it. Anywhere you wish to bring people together and bring a smile to someone's face, and create a sense of community, if only for the moment. Many people seek out the best acoustic environments – caves, cathedrals, even public restrooms – to bring out the “sax” quality of this instrument and to evoke comments like “You get such a big sound of *that little instrument?!?*”

If you have stories to tell of how you have been playing it and/or spreading the joy of music to others, please tell us about it! We love to hear stories and recordings of how people are enjoying the Xaphoon. You can contact us at:

Maui Xaphoon  
PO Box 1163  
Paia, HI 96779

Web site: <http://www.xaphoon.com> (With links to Japanese and German language sites)  
e-mail: [info@xaphoon.com](mailto:info@xaphoon.com)

