

# **Steps to Good Intonation**

## **by Ryan Janus**

One of the most common reasons for a musician to be fired from a playing job is his or her lack of ability to play in tune. Most of us know how important intonation is, yet with all the other things we need to practice, we sometimes forget to budget our time to actually practice playing in tune. Below are some simple things a player can do to which have proven to be extremely effective in improving intonation.

### **Become aware of the tendencies of your instrument**

If you don't own a tuner, buy one right now. It's not a crutch, it's a tool. Preferrably buy an analog tuner that plays pitches in several octaves, although any tuner is better than none at all. Make a tuning chart like the one for saxophone at the end of this article, and under every note in the entire range of the instrument, mark the pitch tendencies of each note. Do this by playing into the tuner with your eyes closed, and then after opening them to look at the gauge, immediately write down the pitch tendency before you subconsciously adjust to what you see. Better yet, have a friend mark down the tendencies. Date your tuning chart, and make another one every few months or so to keep track of your progress.

Often, simply being aware of pitch tendencies goes a long way to improving intonation. If, for example, you find that on your alto sax the middle D is sharp (as it usually is), you will be cognizant of this fact and adjust accordingly for all future middle D's. You will probably find similarities between yourself and like instruments – throat notes are usually flat on clarinets, middle B and C are usually sharp on bass clarinets, palm key notes (except for F and F#, for some reason) are sharp on alto, tenor and bari saxophones, and so forth. But BEWARE! Tuning tendencies differ from instrument to instrument, from mouthpiece to mouthpiece, and even – believe it or not – sometimes from reed to reed. The process of becoming aware should be a continuous one.

### **Make sure your equipment works**

Although a common excuse of the novice player is to blame all his woes on the poor quality of his instrument, it is true that intonation can be adversely affected by the quality and condition of the equipment. It is of utmost importance that the instrument be in pristine working condition. Leaks on the horn ANYWHERE can cause the player to adjust his playing artificially in a way which would be unnecessary with a working instrument. These adjustments almost always cause certain notes to be out of tune. Another problem is that the corks which hold the pads at a certain height may be too high or too low, causing the pitch of that note to be sharp or flat, respectively (as is done when a clarinetist shades his tone holes). This is especially problematic on saxophone.

Assuming the instrument is in working condition, the quality of the workmanship on the horn and mouthpiece can also affect intonation.

### **Using a tuner**

I stated above that I have never thought, as many music teachers do, that the tuner is a “crutch.” Almost without exception, my students who own – and USE – tuners play with better intonation than my students who do not. Following is a list of tuning exercises I use in my own practicing, all of which have proved helpful in different situations. Unless noted, practice these exercises both with the pitch and the gauge.

1. Long tones at one dynamic
2. Long tones with crescendos and decrescendos
3. Short staccato notes
4. Long tones on the same note, but alternating octaves every few counts
5. Long tones at a perfect fifth above and/or below a sounding pitch.
6. Long tones at a perfect fourth above and/or below a sounding pitch.
7. With a sounding pitch, play a unison note in tune. Then, gradually, de-tune the note sharp by a few cents. Come back to pitch. Then, de-tune the note flat by a few cents. Come back to pitch and repeat. This helps you to adjust quickly when you find yourself out of tune, as we all do from time to time.
8. Play notes that move down or up chromatically every four seconds with gauge.
9. Slow major or minor scales
10. Slow sonata or concerto movements with the gauge. Look at the gauge whenever possible. If possible, memorize the slow piece.

### **Playing with others**

It should go without saying that the ultimate test of one’s intonation is in a “real-world,” ensemble setting. Duets and small chamber ensembles are especially good teaching tools. I always have my saxophone quartets and woodwind quintets begin by playing unison, octave, or open fifth intervals chromatically slowly down and up the horns. When this is done successfully, they move on to Bach chorales. The players will find after a few of these that intonation often depends on context. For example, if a player is holding a D, that D will need to be played slightly flatter than normal if it is the third of a major triad. If the D is the fifth of a major triad, it will need to be played slightly sharper than normal. These conventions only apply when playing with instruments whose pitch is flexible. Many accompanying instruments, piano, guitar or harp, are bound by the conventions of equal temperament. To learn more about the differences between Equal Temperment and Just Intonation, visit <http://www.jinetwork.com>.