Tuning Bagpipes



A Basic Guide to Using Tuners with Bagpipes

For CA-30, CA-40 & TM-40 Chromatic Tuners



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This information sheet is intended to give the piper basic guidance on how to use the tuner effectively. The tuner is a useful tool and may help beginner pipers to develop their listening/tuning skills. Use the tuner as a reference only. Trust your ears.

This sheet is divided into two sections. The first is intended for beginner pipers who are attempting to set their pipe chanters correctly and tune their drones. The second section is intended to help band pipers tune their chanters and drones together. Pipe Majors may find this section useful.

Please note the following:

When the tuner is first switched on the calibration setting will read 440. This means that the value of A is 440 Hz. **You should not attempt to set your low A to this value.** An A on a highland bagpipe chanter is not the same as an A on other instruments, and unless you have an A440Hz or very old pipe chanter, you will not be able to pitch it at this level.

A common misconception is that the pipe chanter is in the key of Bb (B flat). Actually, it is in its own scale of A, which just happens to be close to Bb (Bb being 466Hz). The pitch has risen steadily over the years and continues to climb. Many years ago the pitch of early bagpipes <u>may</u> have been around 440 Hz, although there continues some disagreement over this.

Section 1: Individual Pipers

Setting your pipe chanter

- **1. Seat the reed firmly in the pipe chanter.** This does not necessarily mean as far as it will go.
- **2. Put the chanter in the pipes, cork the drones off and blow low A and high A alternately.** Try not to over-blow. Remember that you are only blowing one reed at this point instead of four.

3. Listen and decide whether the octave is good. (Your low A and high A are eight notes apart). Use your low A as the indicator.

Does your high A seem to be overly bright or "scream" compared to your low A? If yes, then your high A is probably sharp. Raise the reed in the seat a little and test again. You may have to add more yellow hemp to the bottom of the reed to gain a secure fit.

Does your high A seem dull compared to your low A? If yes, then the high A is probably flat. You should sink the reed in the seat a little and test again. When you are happy with these two notes (do not be concerned with any other notes at this time) move on to the next step.

- **4. Turn on the tuner.** Notice the number in the top left corner. It should be 440hz. This means that the reference pitch is A 440hz. Blow a low A and notice the letter in the top right of the screen. It will probably be Bb. Also notice the needle position. It will probably point to the right and the red # (sharp) indicator light will illuminate. What this is telling you is that your low A is really a Bb that is significantly sharp of concert. It's somewhere between Bb and B. **This is normal.** The easiest way to proceed is to change (calibrate) the reference pitch.
- **5. Calibrate the reference pitch (low A).** It is helpful (but not essential) if you have someone to help you at this point. Play low A on the pipes (drones off). Your assistant should press either the up or down "calib" button until the needle is steady at 0, the red b and # buttons remain off and the letter in the top right corner reads A. If in step 4 you found that the needle was pointing to the right you should use the "calib" up button for this step. Try to blow as steady as you can and take care not to over-blow.
- **6. Play low A** The needle should be steady at 0. No red lights should be lit and the letter in the right corner should be A. The number in the left corner will probably be between 465 and 480.
- **7. Play high A** The needle should be steady at 0 or just to the left of 0. This means that your low A is slightly flat which is fine.

Do not proceed to tuning the drones unless you are sure that your low A and high A are in tune with one another.

Tuning your drones

You now have a good low A and high A. Uncork one tenor drone, remove your chanter, and cork the stock. Now, blow up your pipes with the one tenor on (usually it is easiest to start with the outside tenor). Hold the tuner as near to the drone as you can while still being able to see the display. Move the drone up or down until the needle is at 0 and no red lights are on. Take care not to over blow at this point. Remember that you are only blowing one tenor reed. Once you are happy this tenor is in tune, then bring on your bass and tune it to the tenor by ear. Once the bass is tuned, bring on the second tenor and tune it in also by ear. Now, blow up your pipes with the chanter and all three drones going. The tuning will not be perfect, but they should be roughly in tune with your low A and high A.

We do not recommend using the tuner to set all the notes of the scale as due to variance in blowing pressure the results will be too inaccurate. For the solo piper, we believe that the tuner should only be used as an aid to train your ear until you no longer need it.

Once the tuner has been calibrated to read A when you play low A, it will show the notes of the scale as follows:

Low G=G Low A=A B=B C=C# D=D E=E F=F# High G=G High A=A

For more in depth guidance on setting up you chanter (setting all the notes of the scale) and tuning your drones, we highly recommend the Pipes Up! DVD by Jim MacGillivray.

Section 2: Band Pipers

This section is intended for pipers who are using their tuner in a band setting. Although there are more efficient ways of tuning a pipe band, below is a simple method to get you started in matching the band's low As and tuning the drones.

Quick Tuning of the Drones

- **1. Decide on which piper is the steadiest blower with the most reliable bagpipe.** This is the master bagpipe. All others will tune to this bagpipe.
- **2. Allocate one person to tune drones.** Choose someone with a good ear who can carry out this task quickly and efficiently.
- **3. Tune the master bagpipe by ear.** This will be far more accurate than using the tuner.
- **4. Calibrate the tuner.** Hold the tuner up to the outside tenor of the master pipe and press the calib button up or down (probably up) until the needle is steady at 0 and the note in the right corner is A.
- **5. Tune the rest of the band.** Have each piper blow up one at a time and play a slow air. Tune the outside tenor until the needle locks in at 0. Tune the bass and middle tenor by ear. This is faster and more accurate. If, after the drones have been tuned to the master, you find they are not in tune with the individual's chanter then it is the chanter that is out of tune with the master chanter. You can check it by holding the tuner next to the offending chanter while the piper plays low A. Note whether it is sharp or flat compared to your desired pitch. If this is so have someone

adjust the chanter the process.	r while the tuner i	moves on to the	e next piper. Co	ome back to thi	s bagpipe later in