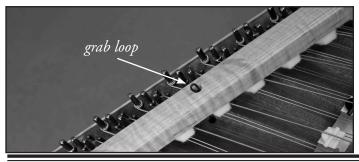
# Onth Managers Using Dampers

Congratulations on the purchase of your new Dusty Strings dampers. Here are some notes regarding the set-up, application and adjustment of the damper system. Please take the time to read completely through these instructions before using your dampers.

# Set-up

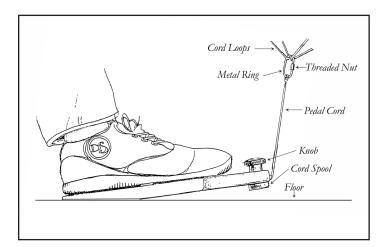
First, set up your dulcimer at your preferred playing height. If Dusty Strings installed the dampers, the two black damper cords will likely be tied together like shoelaces on top of the strings. We've found this to be the easiest way to keep the cords safely out of the way while moving the dulcimer, and you may want to do this yourself when you're preparing to put the instrument back in its case. There are small "grab loops" tied in the ends of the cords, which will make it easy to pull them up again. For now, simply untie the bow, find the cords on the back of the dulcimer, and pull them straight down until the grab loops on the ends drop into the holes on the top of the bars. Try to keep the two cord loops that come out the back from rubbing against your stand when the pedal is attached.





Now you're ready to attach the pedal. A nifty feature of the pedal is that the cord is totally adjustable without the need to cut or tie it. Simply grasp the black knob with one hand and the cord spool with the other and unscrew the knob. A quarter turn is all that's needed. Pull out the metal ring with the cord attached.

Note: The direction the pedal cord is wrapped around the spool causes the knob to clamp down tighter as you exert pull on the cord. This "braking action" is the key to keeping the cord from slipping while you're stepping down hard on the pedal. If you inadvertently wind the cord around the spool in the reverse direction, the cord will release as you step on your pedal. You can remedy that by re-spooling the cord in the other direction.



Next, open the metal ring and loop the cords through as shown; then close with the threaded nut. To set the length of the pedal cord, rest your knee on the heel end of the pedal so that the beveled bottom facet is flat on the floor. Wind up any slack cord by reaching under the pedal and turning the cord spool (in the right direction, remember!). Now, while still holding the spool from turning, tighten the knob. Having the cord taut while the pedal is in the up position gives you the fastest action on your dampers and minimizes the "slap" noise that can result when a slack cord suddenly tightens up under a fast pedal activation.

Now you're ready to give the dampers a try.

### **Applications**

Dampers are sustain control devices. Beyond that basic function, dampers can also create a remarkable range of tonal effects, from the rich and complex natural voice of the undamped strings to a wonderful, wholly muted marimba-like tone with zero sustain. The harder you press the pedal, the greater the damping effect.

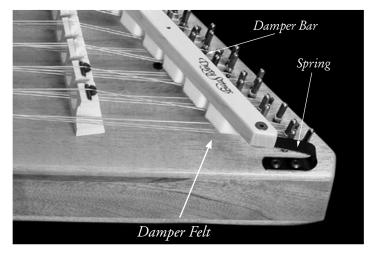
Here are some technique ideas:

- a light, periodic tap when playing fast passages cleans up excessive sustain that can sometimes make a tune sound muddy.
- a half pressure gives a moderate damping effect with a bright string sound.
- a sharp tap as you strike the strings and then a quick release as your hammers rebound gives a great harmonic effect.
- a firm damping after a few seconds of ring at the end of a piece makes a dramatic close.
- a continuous firm damping gives the marimba-like sound.

# Adjusting the Action

The damper springs have been designed to accommodate adjustment of the action. "Action" simply refers to the height of the damper felts above the strings. You can adjust the action to your liking by manually bending the steel springs a bit. Carefully grasp the damper bar where it is screwed to the spring and pull up or push down. The springs will give a little and stay where you put them.

You will most likely want to have the action the same at both ends of the bars. It has been set at what we have found to be a good height, but feel free to experiment until it feels right to you. You may need to adjust the action in the future to accommodate wear and compacting of the felt.



# Adjusting the Pedal Position

The default position of the damper pedal is centered, but it is relatively easy to position it further to the left or right if that feels more comfortable to you. To move it to the right, find the grab loop on the right-hand damper bar and pull up. This will shorten the cord on the right side and move the pedal attachment point off-center. Once you have it positioned where you want it, tie a new knot in the cord above the damper bar.

## Removing the Bars

A 1/8" hex key can be used to remove the damper bars from the springs. This can be handy for changing strings or cleaning your instrument.

# **Additional Notes**

There is enough cord on the pedal cord spool to provide some extra should the cord ever break while in use. Simply feed it out of the hole in the pedal tip and tie the broken ends together. The 300 pound test cord, though, should last through years of normal use.

As a final note, the sturdier your playing stand is, the better the dampers will work. Ideally, your dulcimer should not move when you press on the pedal. Keeping the pedal cord vertical will help prevent sideways movement. We have found that the Dusty Strings TriStander adjustable stand system is an excellent choice for use with dampers. Its wide stance, firmly attached legs and high degree of adjustability make it ideal for all playing situations. Also, the legs collapse down to fit nicely in our cases along with the damper pedal. Another good choice are our fold-





ing stands. They come in sit-down and stand-up heights and fold up very compactly.

Please give us a call if you have any questions about your dampers