
Subject: Re: Portable Metal Resonator for Musical Instrument
Posted by [Wayne Parham](#) on Thu, 04 Aug 2011 21:32:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

I think I get what you're going for. Sometimes, working with sheet metal, you'll get a piece that is fun to shake and get those "wocky-wocky" sounds from. Or twist it back and forth to get a sort of slide guitar sound.

Seems to me the thing that sets the sound is the thickness and material, and then of course, it's length. That sets the main body of the sound, it's natural resonant frequency. The bends modify the stiffness somewhat, making its frequency shift.

As for acoustic filters - a chamber you might put in front of the vibrating sheet - there are a lot of things you can do, if you want to modify the sound. A Helmholtz resonator will tend to have an impact at one frequency only, whereas a pipe will have multiple resonances. A flared pipe will sound different too.