

Autoharp Miking

A Nice Solution using a Countryman B3

For many years, my preferred solution to amplifying my autoharps in a performance situation, or miking them for recording has been to use a lapel (“lavalier”) microphone attached to my strap, picking up the sound from the *back* of the instrument. The construction of a good autoharp is such that the sound from the back of the instrument is surprisingly full and rich, and relatively free from the mechanical noise produced by chord bars and picks. I credit Bryan Bowers with showing me this miking technique, although he no longer uses it, and has forgotten that he taught it to me 40 years ago. On stage, I use a front mic in addition to my back mic, which picks up enough of the “picky” sound of the instrument to make it sound realistically like an autoharp without being obnoxious! This also gives me some control over my level since I can move toward or away from my front mic. The signals from the front and back microphones get mixed.

For years I've been using a venerable Shure SM84 microphone for a back mic, but this microphone is unidirectional and requires a clip to keep it in even a close approximation of the correct orientation. Keeping it in the right place at the right angle is a very fiddly process! On top of that, I did some tests recently which showed that the sound it was producing wasn't all I wanted, so I went searching for a decent, modern alternative.

The solution I came up with is a *very* small, omnidirectional microphone from Countryman – their model B3. I've been aware of Countryman's product line for many years. They offer a number of small, quality microphones with unique designs, and have been around a long time. We used one of their very small surface-mount, omnidirectional mics when we recorded my “Christmas on the Autoharp” album back in the 80s.

The Countryman B3 is *tiny* – about the size of a wooden match head. With its foam windscreen on, it's the size of a large marble. It fits nicely on the guitar strap I use to support my autoharps.

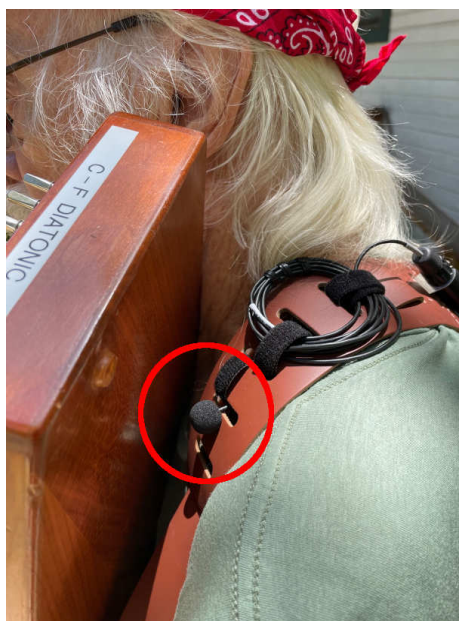
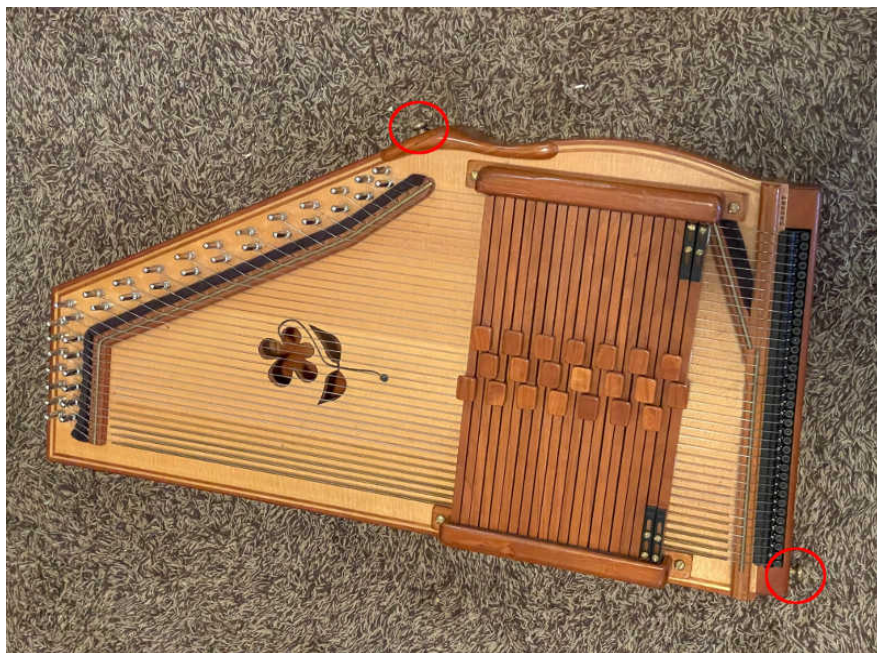


The microphone itself, shown by the red arrow in the photo above, fits through one of the adjustment slots on my strap. Small Velcro pieces hold the microphone and excess cord in place. The XLR output connector comes with an attache, flexible wire clip which fastens it neatly and securely through the last adjustment slot on the strap.

My strap goes over my left shoulder and attaches to two strap buttons on my autoharps, shown in the red circles in the photo below:

In this position, the microphone sits behind the top of the harp, and because it's omnidirectional, it picks up sound from all over the backs of my harps, which are generally held high and slightly away from my chest.

Note that the Countryman B3 is a proper microphone, not a pickup. It connects to a regular microphone cable via an XLR connector, and like many modern microphones, it's a *powered* microphone requiring "phantom power" from the sound system or mixer. Modern amps, sound boards and recording consoles provide phantom power.



The B3 comes in two sensitivities, normal and low. With a bit of measurement, I found that the maximum sound level at the back of a good autoharp is about 95 dB, and the normal sensitivity B3 seems to be quite adequate.

The B3 comes with a nice case and three different tips which attenuate the high frequencies to a greater or lesser degree. Its frequency response is rated at 20 to 20K Hz. It's also available with a variety of output connectors so that it can interface with different brands of wireless transmitters. The cost is reasonable, generally about \$200, and it gets high marks in reviews from professional sound folks.

I haven't used it on stage or for recording yet, but in my home studio it sounds quite good through a good amp.

Lindsay Haisley - June 18, 2022