

## Accordions & Didgeridoos

Mic techniques for "exotic" instruments

By John and Teri Hogan

Living in South Central Texas, we operate in a very diverse ethnic atmosphere and encounter every description of strange and unusual instrument. No matter how weird it may be, however, it still must be mic'd.

Over time, we (and our engineers) have discovered some techniques that work well for some of these applications. There may be other, possibly

better ways to accomplish the task. But the following represent tried and true methods that work for us, as well as the musicians we support.

**Accordion.** What do you call 100 accordions in the Rio Grande? A good start! The accordion is found in so many styles of music, it boggles the mind. Within those styles are different kinds of accordions, as well, and they need to be addressed separately.

In the traditional Mexican forms of Conjunto, Tejano, etc., the button accordion is most often found. The musician will either have a clip-on type mic and a wireless unit, which means you provide a DI and hope the musician doesn't bend over too close to the monitor or turn the wrong way.

Or, the musician will want a mic on a boom stand, which is positioned



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Micing for accordion (above) and even the hurdy-gurdy (what, you've never seen one before?) can be done simply to get the desired results.

to the musician's right, very close to the center of the instrument. For the stand, we prefer the short (low profile) boom.

For all accordions, we've found that the Electro-Voice (N/DYM) N/D468 (formerly 408) provides the preferred response. It's widely known by sound companies as a drum mic.

The N/D468 has a wide dynamic range, with the ability to handle shrill SPL that the accordion presents. Just take a 3 dB to 6 dB cut from the highs and you're pretty much home free.

This egg-shaped microphone swivels in its bracket, so it's very easy to position and stays out of the musician's way as well. As an option, the Shure Beta 57 also works well.

Cajun accordions are smaller and have a piano side (stage right) and a bass side (left). Most Cajun players will have a clip-on type mic on the piano side (again, provide a DI), or they will often take the XLR and plug it straight into the accordion. They will often ask you for a separate mic for the bass side. Again, the 468 works very well for this purpose. Just watch out for low-end rumble.

Celtic accordionists, as well as German polka, Klezmer, and other European styles use the larger piano accordion. They normally do not have any pick-ups or clip-ons and will usually ask for two mics, one for each side. Celtic artists may also play concertinas or other gypsy-inspired instruments. The mic'ing techniques are the same. Another mic that we like in this application is the Sennheiser 421.

The most important thing to remember about accordion is that any player over the age of 12 has probably suffered hearing loss and will most likely ask for a lot of accordion in the monitor. If you're experiencing feedback from the stage, the first suspect is always the accordion and the range will usually, but not always, be somewhere between 4 kHz and 6.3 kHz.

**Didgeridoo/Alp Horn.** The Didgeridoo is an Australian aborigine instrument. It's a long tube that rests on the floor and can be made of anything from wood to PVC pipe, producing a low, rumbling sound. Your

first instinct is to put a kick drum or bass mic on it. Don't do it!

Our experience is that a Shure SM58 is the best bet. Place a mic on the floor near the opening and monitor the low frequencies. This instrument is designed to cover long distances (miles, even), so the low frequency response is intense and needs absolutely no help from sound reinforcement.

The Alp horn, a Scandinavian instrument, is similar in construction and intent. It can be mic'd the same way, although the low end is not quite so intense, and it does produce melody.

**Celtic Harp.** The first few times we encountered a Celtic harp, which is a half-sized version of the concert harp, we attempted to mic it with a condenser, placed near the strings. Unfortunately, the harpist needs to move the harp backward into playing position, then forward to set it at rest.

Too often, the strings of the harp rub against the mic and create really ugly noise. Then when the harpist pulls the harp back into playing position, he or she rarely gets it back in the same place and the whole thing becomes an unsatisfying experience.

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# Microfiles

Polyphonic Spree, which boasts a full-size, concert harp. The harpist used a Barcus Berry harp pick-up, and it sounded fabulous! The Barcus Berry folks informed me that the very first Barcus Berry pick-up was invented for harp, and that their piano pick-up is exactly the same, just with a different name silk-screened on it. Oh, how happy we were to learn this.

The Barcus Berry piano pick-up is small (two inches long), designed to be stuck on the soundboard of the piano with two-sided tape. It plugs into a control box that acts like a DI, and works great for micing acoustic pianos.

It does the same on the harp. Just apply it to the soundboard of the harp and no more worries – beautiful harp music without all the annoying noise of an external microphone. Any sound company that works with acoustic pianos or harps should own one of these fabulous pick-ups.

**Stringed Instruments.** The diverse types of stringed instruments that come across our stages is staggering, from the balalaika to the bazouki to the oud, banjo, papoose, and on and on. If they have a pick-up, we're happy people. But often, they don't.

The micing technique is pretty much the same, no matter the name of the instrument. Most sound folks mic these instruments at the sound hole; however, the place to get the very best sound out of a stringed instrument is where the neck joins the body.

Unfortunately, getting the musician to trust you is another thing altogether. Unless there's a quiet soundcheck time, where they can be shown the difference, chances are that once you set up the mic and turn your back, they're going right back to the sound hole.

Interestingly, some of the bluegrass players we've worked with don't prefer the Shure SM57 (gasp!). The reason given is that the windscreen on the SM57 rotates, and when the mic touches strings (especially on banjos), it creates some really nasty vibrations. A fixed screen instrument mic is preferable in their minds.

**Mallet Percussion/Pan.** Mallet percussion includes xylophone, marimba and vibraphone. These instruments



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*Sometimes over/under micing works best with drums; other times, a well-placed single mic does the trick. (The drum above is called a bodhran, by the way.)*



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have resonator tubes under the bars and can be difficult to mic evenly.

Vibraphones sometimes have pick-ups (again, usually Barcus Berry strips), but not often. We've found that placing two condenser mics, evenly spaced between the high and low bars, about 12 inches under the resonator tubes, will offer the best coverage. Overhead micing doesn't work well with these instruments because the instruments are not loud and you can't pick up enough of the instrument without bleed from the rest of the stage overpowering it.

The pan, or steel drum, is in the same family and is mic'd the same way. As with the accordion, watch out for excessive low end on all these instruments.

**Jembe, Ethnic Drums.** Just about any good instrument mic can be used on hand drums. Typically, place the mic a couple of inches from the head on the side away from the musician. Some jembe players will want a second mic on the bottom.

**Cajon.** Also called a "box," the cajon is exactly that, a hollow box with a hole in the back, that the musician sits on and beats. The best way to address the cajon is just like a kick drum – a Shure Beta 52 in the hole.

**Step Dancers.** If providing sound for a Celtic event, chances are that it will have step dancers. If there's not a wood floor, they're on their own!

For one or two dancers, a piece of 1/2-inch-thick plywood of decent size can serve their purposes. On the front of the board, in the middle, place a boundary mic, which will help get the sound of the shoes into the mix with the music. (And often, these bands will bring their own board.)

**Bagpipes.** Oh, what a conundrum! But well-played bagpipes don't have to be a curse. Like accordions, bagpipes can be amplified with a pick-up or mics. The pick-up is always a nice surprise and usually, it only requires one line and a DI.

If going with a mic, then actually, two will be required – one for the drone and one for the chanter. The drone is the tall pipe that sticks up overhead. A SM58 or similar mic, positioned like a drum overhead, works nicely.

The chanter is the recorder-like piece that the musician plays with his hands. Another SM58 or SM57 on a short boom will do the trick. Note: Musicians rarely want any bagpipe in their monitors – they're plenty loud on stage!

There are myriads of other instruments, most of which can be handled by a standard mic complement. Without experience, common sense and trial and error are still the best approach to the challenge. The best part about these encounters is that we learn something new every time. ■

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