

# The “Direct” Path to Great Sound

By Jon Schafer

*There's no denying the power of live music during the worship service. But having the worship band playing live can present special challenges when it comes to getting sound from the platform to the mixing board — especially when you're dealing with a mix of acoustic and electric instruments. Luckily, Sweetwater has a whole host of affordable solutions that are perfect for simplifying your setup — and they're very easy to use!*

So, what is this wonder box? It's a direct box (often referred to as a “DI,” for direct insertion). Your basic direct box usually consists of a pair of 1/4" jacks and a single XLR mic output. You plug a guitar or bass (either electric or acoustic) into one of the 1/4" jacks on the DI box, and then you run the XLR out to the mixer. This puts sound directly from the instrument's output into a mic input on the mixer. The other 1/4" jack on the direct box can be used to feed the same instrument's signal to an onstage amplifier, if so desired.

You might be thinking, “If my mixer has 1/4" inputs, can't I use them to plug in these instruments, rather than using a direct box?” While some mixers do in fact have instrument-level inputs, the signal quality is greatly diminished on guitars and basses if the cable run exceeds about 30 feet. A direct box converts the signal from unbalanced (what an instrument-level signal is straight out of the instrument's output jack) to a balanced mic-level signal. A balanced signal lets you use very long cable runs, which is a real plus in situations where the mixer is a substantial distance from the platform. The act of balancing an unbalanced signal requires passing the signal through a small transformer or circuit, which is why a simple 1/4"-XLR cable isn't an acceptable substitute. Plus, this puts the person running sound at the board in complete control of the instrument's sound — which can be a very good thing if you have musicians on the platform with little concept of “balancing” their sound with the other performers.



**Whirlwind IMP 2**

An affordable and reliable DI solution!

**\$49<sup>97</sup>**

To Learn More, Go to Page 133.

With a multitude of electric and acoustic instruments on the performance platform, how do you determine which ones you should use a direct box for? Any guitar-style instrument can be used with a direct box, but the most common applications are acoustic-electric guitars and electric bass. It's common for acoustic-electric guitarists to play without an amplifier, so a direct box serves as a very simple way to make sure they get heard alongside the other instruments. And while bassists typically use amps, these amps are often very heavy and hard to move. A direct box is much easier to transport than a heavy amp, and the sound quality afforded by a good DI box is very favorable, especially in a live performance environment.

There are direct box solutions that fit any price point and nearly any I/O configuration. Call your Sweetwater Sales Engineer to find the perfect DI for your church's situation!

**Call us today at (800) 222-4700**

Direct Boxes

**whirwind** **IMP 2**

**Our Most Popular DI!**

Direct boxes are used to connect instruments ranging from acoustic-electric guitars to electric basses to the mixing board. The **IMP 2** provides you with a reliable and pain-free means to plug your worship band's electric instruments straight into your board. Call today to simplify your stage setup with this solid direct box.



**IMP2** Passive Mono DI ..... List \$69<sup>95</sup> **\$49<sup>97</sup>**

**SAMSON**  
**S•Direct  
plus**

**Affordable Quality**

The Samson **S•Direct plus** stereo direct box is like having two direct boxes in one affordable unit! It features 1/4" inputs and outputs, phantom power or 9-volt battery operation, switchable ground lift, and balanced outputs.



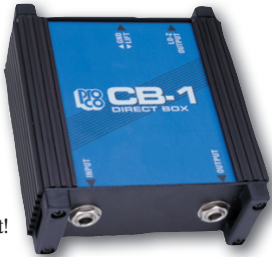
**SDirectPlus** Passive Stereo DI ..... List \$64<sup>99</sup> **\$39<sup>97</sup>**

**Want to know more about Direct Injections?**  
Go to the 101 Guide on page 132.

**pro** **CB1**

**A Wonderful Way to Go Direct!**

Here's a great live tool that's built for sound, at a price that's very agreeable to any budget! This passive direct box gives you switches for speaker/line-level attenuation, a high-cut filter, and ground lift. In addition, the sturdily constructed **CB1** gives you an XLR-type, balanced mic-level output.



**CB1** Passive Mono DI ..... List \$88<sup>99</sup> **\$65<sup>97</sup>**

**Radial**  
**ProAV2**

**The Perfect Bridge Between Your iPod and Your Mixer**

This DI handles several multimedia input options and offers stereo output. The **ProAV2** also features a ground-lift switch, 15dB pad switch, and custom-wound transformers.



**ProAV2** ProAV2 ..... List \$200<sup>00</sup> **ONLY \$10/mo. \$169<sup>99</sup>**

**EBTECH** **HE-2**

**Get Rid of Noise!**

The passive **HE-2** Hum Eliminator does away with system noise and ground loops quickly and safely! The 1/4" in and out jacks make it easy to connect.



**Hum** HE-2 ..... List \$99<sup>99</sup> **\$64<sup>99</sup>**

**Church  
Spotlight**

**Christian Fellowship Church**

"Due to the nature of church/non-profit financing, I have to always look for the best prices in addition to service, and am happy to say I've found both with Sweetwater. Sweetwater gives me the reasonable pricing and gives us the service. With great willing attitude and deep experience in professional and church sound, Sweetwater has become our default choice for ALL our AV needs."

Glenn Smith, Director, Information Technology  
Christian Fellowship Church  
Ashburn, VA

