

Grip® DL100 Audio Delay *Product Overview*

You're providing sound for a sales meeting with a ballroom, several breakout rooms, and an outdoor event. The client wants the sound to be great, but you're running out of time. You're using multiple speakers in each place to maintain comfortable levels for everyone. You need electronic delay to synchronize the rear speaker audio with the acoustic wave from the front speaker, but your expensive rack-mount unit is overkill. Then you remember you have a few Grip® DL100 Audio Delay boxes in your bag of tricks! A simple solution that takes only seconds to set up.



Problem

Sometimes multiple speakers are needed to fill a space with sound, but the physics causes an undesirable echo effect.

Multiple speakers are often needed in conference centers, hotels, and outdoor venues to cover the audience without overwhelming those in front.

Since sound travels much slower in air than electricity does in wire (like seeing lightning before you hear the thunder), using multiple speakers creates an annoying echo effect. This is caused by the difference in distance from each speaker to the listener, coupled with the speed difference mentioned above.

In order to alleviate the echo effect, it's necessary to synchronize the sound from the speakers by delaying the electrical signal for the rear speaker to wait for the sound from the front speaker to catch up.

Grip DL100 Audio Delay is the Solution!

Grip's DL100 Audio Delay makes it simple to deliver great sound by allowing the audio engineer to delay a mono audio signal up to 170 milliseconds (192 feet). Simply place a DL100 next to the rear speaker and set the delay to the estimated distance between the speakers, connected between the mixer console and the speaker amplifier.

Grip DL100 Differentiators

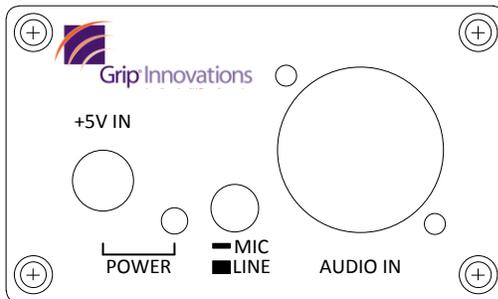
The Grip DL100 Audio Delay allows sound technicians to set the delay to the estimated distance between front and rear speakers. Other audio delays require calculating the delay in time. Of course the needed delay varies with altitude, temperature, and humidity, but setting the delay in distance quickly gets you close. Plus you're going to tweak it by ear anyway, right? The Grip DL100 provides the simplest delay ever seen in the industry.

The DL100 was designed with professionals in mind. Audio signals use professional balanced XLR connectors for input and output, making it easy to add on in-line after the initial sound is set up. The input may be switched to handle either mic-level or line-level inputs.

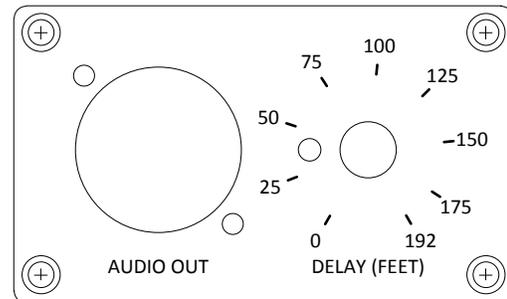
The Grip DL100 is a mono delay unit with professional XLR connectors. Some available delay products were designed to lip-sync audio for video broadcast. These units are stereo (which increases the cost and cabling) and use unbalanced connectors (which are noisy over distance).

Features

The XLR input on the DL100 accepts a balanced feed from a sound board (switchable between MIC and LINE levels), and the XLR output delivers a balanced line-level signal to a powered speaker (or an amplifier). Inside is a professional-quality 24-bit, 48kHz digital delay. Power is supplied by an external AC-to-5 volt converter (included) with a locking connector. The amount of delay is set using a knob that's conveniently calibrated in feet. The minimum delay through the Grip DL100 Audio Delay is one millisecond (just under a foot). Delay resolution is 166 microseconds (a distance of about two inches).



Input Side



Output Side

Specification

The Grip DL100 Audio Delay provides:

- Up to 170 msec delay
- Delay settable in feet (approximately 192 feet maximum)
- Input on balanced XLR connector
- Input switchable between mic-level and line-level
- Output on balanced XLR connector
- 24-bit, 48kHz audio
- Locking power connector
- Dimensions: 5.25" x 2.675" x 1.675"

How to Buy

Find Grip at www.gripav.com, or contact us at (623) 328-8233. You can purchase directly from us. If you'd like to distribute Grip® products, please let us know.