

Once in a great while, we encounter a product so advanced that it instantly outdates its competitors. Think of the Apple Macintosh. The jet engine. The piano. The light bulb. Would it be outrageous to place a subwoofer in this category? A week ago, I would have scoffed at that question. But the Velodyne DD-15 subwoofer has changed my mind.

Without Velodyne's Digital Drive circuitry, the DD-15 would be just another first-rate subwoofer. Digital Drive, however, elevates it into a new category.

It not only sounds good, it makes the home theater experience more enjoyable for the entire family. Usually, if you turn your subwoofer

A NEW LOW

VELODYNE'S DD-15 DIGITAL DRIVE SUBWOOFER

IMPROVES BASS REPRODUCTION AS MUCH AS
THE JET ENGINE IMPROVED AIR TRAVEL.

BY BRENT BUTTERWORTH PHOTOGRAPHY BY JOHN PHILLIP

up loud enough to convey the crash-bang-boom of action-movie soundtracks and the body-massaging deep bass notes of electronic music, family members who lack your enthusiasm for audio will run from the room. But the DD-15 reproduces all of these sound effects without the headache-inducing boom you hear when an SUV full of Em-

inem fans pulls up behind you. You play this subwoofer loud, but somehow it never *sounds* loud. And that's just the start.

Any aficionado can tell by looking at the DD-15's back panel that it is something special. Besides the usual array of input connectors, the DD-15 also sports a video output, an audio output and a microphone jack. These

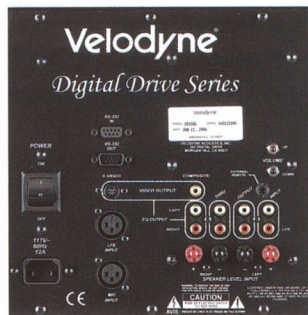
extra features are key to Digital Drive's functionality.

Digital Drive is, in essence, a way to evaluate the DD-15's performance in your home theater, and to optimize it to suit your room. Bass is the part of the audio spectrum that proves most troublesome. The shape and size of your room, the composition of your walls and floor, and the positions of the subwoofer and your listening chair all affect bass dramatically. Some frequencies shake your couch while others vanish. Your favorite jazz bassist becomes an amateur, overemphasizing some notes and nearly missing others.

The best custom installers correct these problems by using complicated



audio measurement instruments and professional sound processors designed to tame troublesome bass frequencies. Digital Drive incorporates these devices in the subwoofer itself. A microphone, which you place in your favorite chair, picks up the sound. The DD-15 provides a graphic readout of the sound on your TV screen; the graph shows you which frequencies your room is exaggerating and which it is attenuating. On-screen controls underneath the graph let you or your installer adjust the DD-15's sound to compensate. It's easy: If you see



The Digital Drive Series subs boast jacks (left) never before found on any subwoofer except Velodyne's Signature 1812. These include a video output, a microphone input and an RS-232 control input.

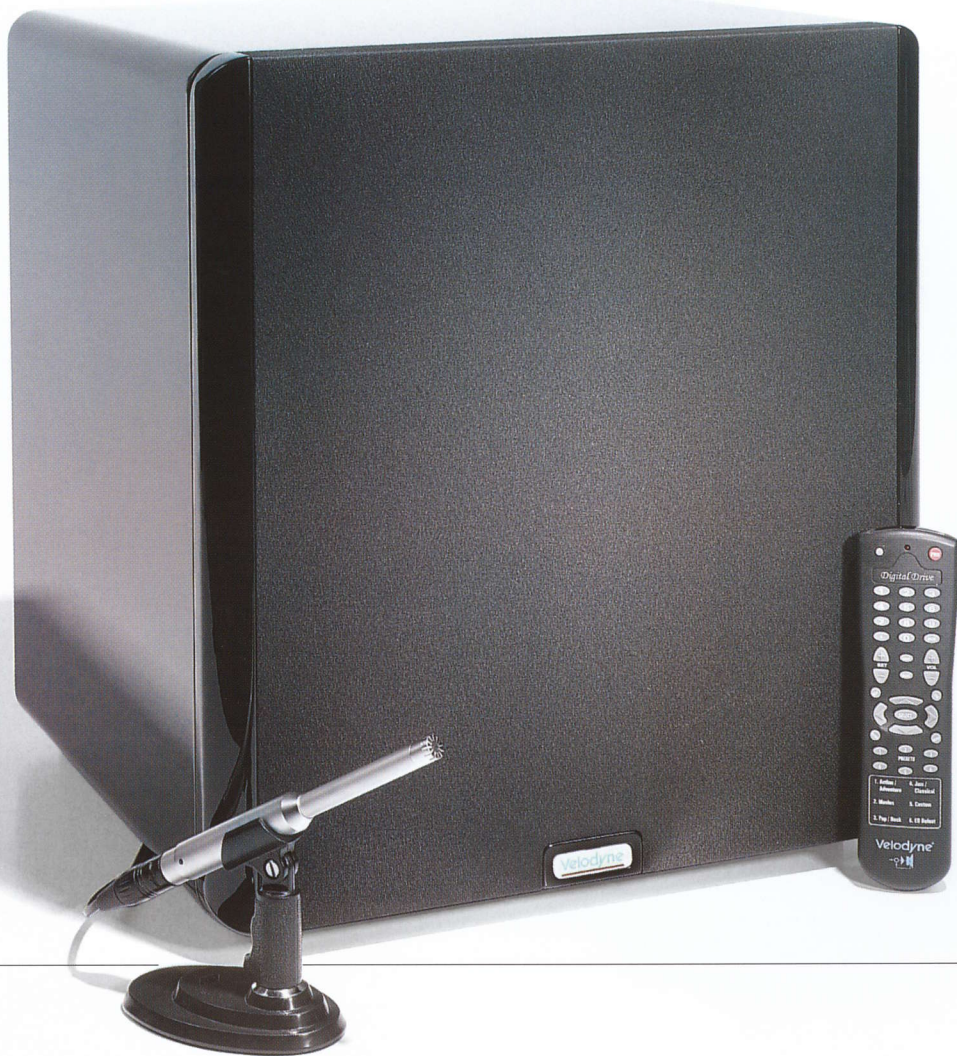
that one section of the bass spectrum is too loud, just select the control underneath that section and turn it down until the line on the graph is flat. Think of it as an audio version of whack-a-mole.

Many competing subwoofers offer primitive ver-

sions of this circuit, but they do not offer as many adjustment controls as the DD-15, and they require the use of special test CDs and sound meters. Thus, the process remains complicated. With the DD-15, though, fine-tuning is not only simple, it's fun. I place the DD-15

where subwoofers sound best in my room—between my center and front right speakers—and it takes me only five minutes to adjust Digital Drive.

To get a quick impression of Digital Drive's capabilities, I play the first few notes of Holly Cole's "Train Song," which opens with a deep, almost guttural acoustic bass line. Without Digital Drive, it sounds pretty good. I expect a subtle improvement when I activate Digital Drive, but instead enjoy the most perfect rendition of this bass line I have ever heard. The low bass rumbles authoritatively through the room, yet still I hear all the nuances—the performer's articulation, the scrape of his fingers across the strings and the growling tone that makes this recording so



DESCRIPTION

Powered subwoofer with integral digital equalizer and microphone. Adds extra bass to systems using small speakers

COMPONENTS

15-inch Kevlar-reinforced-cone woofer, internal 1,250-watt digital amplifier

CONNECTIONS

Audio: Five-way binding posts for speaker-level input, stereo analog line-level RCA inputs, balanced XLR input, two stereo analog line-level RCA outputs (unfiltered and high-pass-filtered at 80 hertz), stereo line-level RCA outputs for equalizer test tones

Video: Composite video and S-video outputs

Control: RS-232 input for touchscreen control system, RS-232 output for connecting additional Digital Drive subwoofers, 1/8-inch jack for external remote sensor

DIMENSIONS

20 x 18 x 17.8 inches (hwd)

PRICE/CONTACT

PRICE: \$3,999

CONTACT: 408.465.2800
www.velodyne.com

