



Bass Perfection

The Digital Drive Series Subwoofers

Digital Drive subwoofers are the universally acknowledged reference standard in bass reproduction. They embody all of Velodyne's industry-leading knowledge and experience in low frequency technology.





The Digital Drive Series consists of five subwoofers
- the DD-10, DD-12, DD-15, DD-18, and
DD-1812 Signature Edition.

"Velodyne's DD-15
Digital Drive Subwoofer
improves bass reproduction
as much as the jet engine improved air travel"

- Home Entertainment

A Legacy of Low Distortion

"Boomy." "Muddy." "Lacking in definition and clarity." These phrases often describe subwoofers. From its inception, Velodyne has emphasized sonic accuracy in subwoofer design. Numerous patented technologies, from servo control to high-powered amplifiers to dual-tandem voice coils, mean that Digital Drive subwoofers offer the lowest distortion on the market. Once you experience low-distortion bass, conventional subwoofers will never again suffice.

The DD-15 and DD-18 are THX® Ultra2 Certified.









"The DD-18 is loud, deep, scary, and above all, bloody lovely."

- Home Cinema Choice





Beauty Houses the Beast

The technology offered in DD subs is complimented by the furniture-grade digitally-designed cabinetry. Striking to look at in lustrous black lacquer, maple or cherry, the cabinets have extensive internal bracing to ensure stability and eliminate resonance. Milled aluminum acoustically-isolated feet are standard on the DD-15 and DD-18, and DD-1812 SE, and optional on the DD-10 and DD-12.







Cherry



Maple



"Velodyne's DD-12 has no equal. It's simply the best small subwoofer in the world"

Subwoofers That Play Nice

Digital Drive Series subwoofers adapt beautifully to their listening environment. Exclusive, patent pending software, an included mic, and an on-screen display allow the subwoofer to adapt to the main speakers and the room. Sound complicated? Simply use the Auto-EQ feature and all the work's done by the sub. A host of connectivity options allow DD subs to adapt to any listening material automatically via universal remote.



Digital Drive 1812 Signature Edition

It's easy to say that a subwoofer has no equal, but in the case of the Digital Drive 1812 Signature Edition it's true. With 6,000 watts of power, two drivers, and dual-DSP control, it holds the record for the most powerful subwoofer on Earth.





"In every conceivable way, this Velodyne is a masterpiece of sonic engineering... two of these and Tchaikovsky wouldn't have needed the artillery."

- Home Cinema Choice

Advanced Subwoofer Technology



Velodyne is the undisputed technology leader in subwoofers.

Digital Drive embodies all the best technology Velodyne has to offer. All of the technologies on this page were designed and deployed by Velodyne engineers and can only be found on Digital Drive subwoofers.

Nobody knows more about bass than Velodyne.

"Truth in Bass" Technology: Digital High Gain Servo[™] System

Velodyne invented and patented the first servo-controlled subwoofer in 1982. The accuracy achieved by the system was a quantum leap forward for subwoofers, and made them acceptable to even the most discerning audiophiles.

Today, DD subs use a digital servo technology that surpasses even Velodyne's original design. There is no other subwoofer in the world as accurate as a Digital Drive subwoofer.











DSP Controlled

Velodyne pioneered the use of Digital Signal Processing (DSP) for subwoofers. The benefits of DSP are too numerous to mention, but suffice to say it provides for the most accurate, reliable, and featureladen subwoofers on the market

The software that runs Digital Drive subwoofers was 100% custom written by Velodyne engineers. Updates providing new features are made available free of charge on Velodyne's website.

Amplifier Technology: Digital Energy Recovery System

Velodyne patented a new kind of amplifier design called the Energy Recovery System (ERS). A Class D design providing a staggering 1250 Watts RMS and 3000 watts peak power, ERS amplifiers run at 97% efficiency. That's because they recover the lost energy not used by the voice coil – a truly eco-friendly design

If that's not enough, the DD-1812 SE uses **two** 1250 watt ERS amps for a total of 2500 watts RMS (6,000 watts peak) power, thus delivering more usable power than any other subwoofer in history.

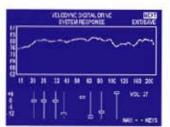
Driver Technology: Dual Tandem Voice Coils, Massive Magnets and Kevlar Reinforced Cones

The voice coil, magnet and cone make up the "drive train" of any subwoofer, and DD's are massive, uncompromising, and highly engineered. The "dual tandem" voice coil, which is 3" in diameter and over 6" in length, provides 1 3/4" maximum cone travel with very little distortion. The huge 20 lb+ magnet structure provides plenty of muscle to handle even the most demanding bass passages.

DD cones are incredibly light and stiff, and are reinforced by Kevlar. Special hole patterns eliminate resonance in the cones and keep the servo system stable. The DD-1812 SE cones are truly amazing – they are formed by sandwiching a ROHACELL® foam layer between two layers of carbon fiber. The result is the lightest and stiffest cone ever made.

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Before



After

Room Management Technology: Digital Drive

Digital Drive Series subwoofers feature Velodyne's revolutionary Digital Drive room management software that takes subwoofer room equalization to an unprecedented level. The built-in Real Time Analyzer (RTA) allows the subwoofer's frequency response to be measured using a calibrated microphone and viewed graphically on any standard TV. The on-board digital toolset, which includes a graphic equalizer, is used to optimize performance for any room position and to perfectly blend the subwoofer with the main speakers.

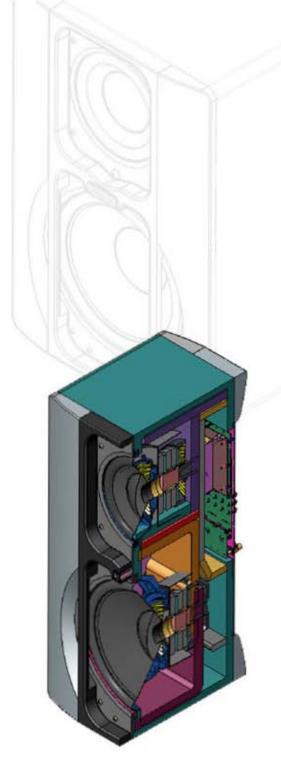






Presets: A Musical and a Theatrical Subwoofer All in One

All Digital Drive subwoofers come preprogrammed with six listening mode "presets" for Action Adventure, Movies, Rock/Pop. Jazz/Classical, a custom preset, and EQ defeat. Each preset also has a "theater/music" setting that allows the sub to play louder (e.g. for movies) or bighter [e.g. for music) depending on the source content. No more compromise between a "musical" sub and a "theatrical" sub.



Specifications



Like all DD subs,
options for
connection on
the DD-1812 SE
allow this
system to be
optimized for any
2-channel or
multi-channel system.

DD-10 DD-12 DD-15

Driver	10" forward firing (\$" piston diameter)	Driver	12" forward firing (9.7" piston diameter)	Driver	15" forward firing (12.7" piston diameter)
Amplifier: Class D	3000 watts Dynamic 1250 watts RMS Power	Amplifier: Class D	3000 watts Dynamic 1250 watts RMS Power	Amplifier: Class D	3000 watts Dynamic 1250 watts RMS Power
Frequency Response	18 Hz to 120 Hz +/-3 dB	Frequency Response	17 Hz to 120 Hz +/-3 dB	Frequency Response	15 Hz to 120 Hz +/-3 dB
THD	<1% (typical)	THD	<1% (typical)	THD	<1% (typical)
High Pass Crossover	80 Hz at 6 dB/octave	High Pass Crossover	80 Hz at 5 dB/octave	High Pass Crossover	80 Hz at 6 dB/octave
Low Pass Crossover	15 Hz to 199 Hz (variable in 1 Hz increments) selectable slope Default: 80 Hz @ 24 dB/octave	Low Pass Crossover	15 Hz to 199 Hz (variable in 1 Hz increments) selectable slope Default. 80 Hz @ 24 dB/octave	Low Pass Crossover	15 Hz to 199 Hz (variable in 1 Hz increments) selectable slope Default: 80 Hz @ 24 dB/octave
Subsonic Filter	15 Hz to 35 Hz (variable in 1 Hz increments) selectable stope Default: 15 Hz © 24 dB/octave	Subsonic Filter	15 Hz to 35 Hz (variable in 1 Hz increments) selectable slope Default: 15 Hz © 24 dB/octave	Subsonic Filter	15 Hz to 35 Hz (variable in 1 Hz increments) selectable slope Default: 15 Hz @ 24 dB/octave
Phase	0 to 180 degrees (variable in 15 degree increments)	Phase	8 to 188 degrees (variable in 15 degree increments)	Phase	0 to 190 degrees (variable in 15 degree increments)
Polarity	Adjustable (+/-)	Polarity	Adjustable (+/-)	Polarity	Adjustable (+/-)
Magnet Structure	310 ounces (19.3 lbs)	Magnet Structure	310 ounces (19.3 lbs)	Magnet Structure	380 ounces (24 lbs)
Voice Coil	Tandem 3-inch push-pull	Voice Coil	Tandem 3-inch push-pull	Voice Coil	Tandem 3-inch push-pull
Cone	Kevlar-reinforced resin	Cone	Keylar-reinforced resin	Cone	Keylar-reinforce diresin
INPUTS		INPUTS		INPUTS	
LFE (Mono)	Line Level (RCA), Nominal Impedance 47 K Balanced (XLR), Nominal Impedance 10 K	LFE (Mono)	Line Level (RCA), Nominal Impedance 47K Balanced (XLR), Nominal Impedance 18K	LFE (Mono)	Line Level (RCA), Nominal Impedance 478 Balanced (XLB), Nominal Impedance 18K
Input (L&R)	Line Level (RCA)	Input (L&R)	Line Level (RCA)	Input (L&R)	Line Level (RCA)
Microphone	Balanced (XLR, cable included)	Microphone	Balanced (XLR, cable included)	Microphone	Balanced (XLR, cable included)
Speaker Level (L&R)	Bare wire, banana plugs, or spade lugs.	Speaker Level (L&R)	Bare wire, banana plugs, or spade lugs.	Speaker Level (L&R)	Bare wire, banana plugs, or spade lugs.
OUTPUTS		OUTPUTS		OUTPUTS	
Thru (L&R)	Line Level (RCA)	Thru (L&R)	Line Level (RCA)	Thru (L&R)	Line Level (RCA)
Output (L&R)	Line Level (RCA)	Output (L&R)	Line Level (RCA)	Output (L&R)	Line Level (RCA)
EQ Output	Line Level (RCA) for Test Signal L/R and Video (cables included)	EQ Output	Line Level (RCA) for Test Signal L/R and Video (cables included)	EQ Output	Line Level (RCA) for Test Signal L/R and Video (cables included)
Shipping Weight (approx)	57 lbs (26 kg)	Shipping Weight (approx)	67 lbs (30 kg)	Shipping Weight (approx)	100 lbs (45 kg)
Cabinet (H/W/D) (including feet)	11.75" x 11.75" x 13.5" (30 x 30 x 34 cm)	Cabinet (H/W/D) (including feet)	14.5" x 14" x 15.5" (37 x 36 x 39 cm)	Cabinet (H/W/D) (including feet)	28" x 18" x 17.75" (51 x 45 x 45 cm)
Included Accessories	Full feature remote control, Digital Drive Accessory Kit	Included Accessories	Full feature remote control, Digital Drive Accessory Kit	Included Accessories	Full feature remote control, Digital Drive Accessory Kit
Warranty	Two Years	Warranty	Two Years	Warranty	Two Years
Finishes	Black Gloss, Cherry or Maple	Finishes	Black Gloss, Cherry or Maple	Finishes	Black Gloss, Cherry or Maple

DD-18

DD-1812 SE

Driver	11 forward firing (15.7 piston diameter)		
Amplifier: Class D	3008 watts Dynamic 1250 watts RMS Power		
Frequency Response	14 Hz to 128 Hz +/-3 dB		
THD	c0.5% (typical)		
High Pass Crossover	80 Hz at 6 dB/octave		
Low Pass Crossover	15 Hz to 199 Hz (variable in 1 Hz increments) selectable slope Default: 88 Hz @ 24 dB/octave		
Subsonic Filter	15 Hz to 35 Hz (variable in 1 Hz increments) selectable slope Default 15 Hz ⊚ 24 dB/octave		
Phase	0 to 100 degrees (variable in 15 degree increments)		
Polarity	Adjustable (+/-)		
Magnet Structure	300 ounces (241bs)		
Vaice Cail	Tandem 3-inch push-pull		
Cone	Keylar-reinforced resin		
INPUTS LFE (Mano)	Line Level (RCA), Nominal Impedance 47 Balanced (XLR), Nominal Impedance 101		
Input (L&R)	Line Level (RCA)		
Microphone	Balanced (XLR, cable included)		
Speaker Level (L&R)	Bare wire, banana plugs, or spade lugs		
OUTPUTS Thru (L&R)	Line Level (RCA)		
Output (L&R)	Line Level (RCA)		
EQ Output	Line Level (RCA) for Test Signal Lift and Video (cables included)		
Shipping Weight (approx)	120 lbs (54 kg)		
Cabinet (H/W/D) (including feet)	27" x 21.25" x 19.25" (50 x 54 x 49 cm)		
	Full feature remote control, Digital Drive Accessory Kit		
Included Accessories	Digital Drive Accessory Kit		
	Two Years		
Accessories			

Driver	18" forward firing (15.2" piston diameter) 12" forward firing (3.7" piston diameter)		
Amplifier Class D	6800 watts Dynamic 2500 watts RMS Power		
Frequency Response	15-120 Hz, +/- 3dB		
THD	<0.5% (typical)		
High Pass Crossover	80 Hz at 6 dB/octave		
Low Pass Crossover	15 Hz to 199 Hz (variable in 1 Hz increments) selectable slope Default: 80 Hz @ 24 dB/octave		
Subsonic Filter	Digitally controlled, infinitely variable		
Phase	Digitally controlled, infinitely variable		
Polarity	Adjustable (+/-)		
Magnet Structure	698 oz (57.5 lbs) total		
Vaice Coil	3" Dual Tanders push-pull		
Cone	Carbon-liber laminate with ROCHACELL® center layer		
INPUTS			
LFE (Mono)	Line Level (RCA), Nominal Impedance 47K Balanced (XLR), Nominal Impedance 10K		
Input (L&R)	Line Level (RCA)		
Microphone	Balanced (XLR, cable included)		
Speaker Level (L&R)	Bare wire, banana plugs, or spade lugs.		
OUTPUTS			
Thru (L&R)	Line Level (RCA)		
Output (L&R)	Line Level (RCA)		
EG Output	Line Level (RCA) for Test Signal L/R and Video (cables included)		
Shipping Weight (approx)	450 lbs (204 kg)		
Cabinet (H/W/D) (including feet)	48° x 25.5° x 18.5° (182 x 65 x 47 cm)		
Included Accessories	Full feature remote control, Digital Drive Accessory Kit		
Warranty	Two years		
Finishes	Black Gloss, Cherry or Maple		

Digital Orive Series









Velodyne

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November 2006, Rev A.