

## **Velodyne Acoustics**

### **Deep Waves Series High Performance Subwoofer**



# We are the subwoofer specialists

Velodyne Acoustics was founded under this guiding principle in 1983. And until today we have remained true to this credo: Velodyne Acoustics delivers a unique lowfrequency foundation that really brings music, games and movies to life.

As a subwoofer specialist, we have dedicated our entire research and development efforts to this goal. As a result, we are one of the subwoofer manufacturers that hold the most patents in this segment today

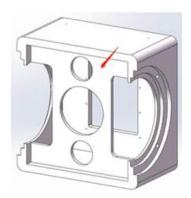


#### Introduction:

Velodyne Acoustics, builders of the world's number one rated subwoofers for more than 40 years, proudly introduces a new APP controlled, affordable, ultra-high output, low distortion subwoofer - the all-new Deep Waves Series. Deep Waves 10 and Deep Waves 12 boast attractive cabinets in a high-quality matte black paint that easily fits any home for stereo or home cinema applications with deep, defined, accurate bass. A highly efficient front firing driver in 10" or 12"diameter with two side firing passive radiators produces amazing bass output that brings your favorite movies and music to life. This new Deep Waves series subwoofers set a new standard in high performance, high value bass performance at its price and beyond

#### New Acoustic Design with state-of-the-Art Acoustic driver configuration

Like the MicroVee subwoofer, which has been very popular for years, the Deep Waves subwoofer works on the same acoustic principle, a front-firing active driver, with 2 sidefiring passive radiators. The high-quality housing made of MDF with additional bracings inside is designed to eliminate any disturbing resonances are expected from the housing itself.





#### APP Controlled DSP Room Correction

Velodyne Acoustics, as a pioneer in automatic room correction since more than 10 years brings the user interface to the next level. Complicated and professional room tuning is now made possible right at your fingertips through a mobile app allowing the user to customize the Deep Waves subwoofer exactly to the room that it is placed in.

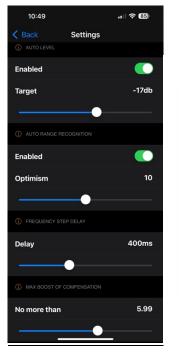


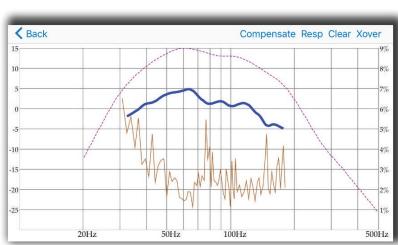






In order to optimize sound and clarity of a home theater or two channel system subwoofer, it must be tuned properly to its environment. Through an automated room correction process that the iWoofer<sup>™</sup> Pro app offers, you will receive optimal performance that you deserve and achieve the maximum amount of SPL with a more linear response that is tailored to your listening preferences. Included within the application is a 12/24/48dB/octave crossover allowing the user to apply an even steeper frequency cutoff if needed.





Response & Compensation window after response.



#### 800 W advanced Class D Amplification

This low bass Deep Waves series combines patented core technologies from the subwoofer experts at Velodyne Acoustics. Complete new designed DSP controlled effective Class D amp board with dual high output 880 W MOSFET power stage. Like all Velodyne Acoustics subwoofers, the Deep Waves series incorporates anti-clipping and overheat circuitry to limit amplifier clipping distortion.



#### Driver technology:



Premium high-purity 2,5" copper voice coil with a 4-layer winding design minimizes distortion and power compression with maximum heat dissipation, linearity, and tuned magnetics for precise high excursion, with its 6" spider, this driver can do a 28 mm Xmax for maximum SPL



Velodyne Acoustics GmbH - Alsterkrugchaussee 435 - 22335 Hamburg - Phone: +49-(0)40-2383 078 80 - Fax: +49-(0)40-533 204 59 Mail: info@velodyneacoustics.com - www.velodyneacoustics.com - CEO / Owner: Mansour Mamaghani



#### Subwoofer Specs:

- Protective non-resonant extra-thick wooden (MDF) frame mesh grille
- Iso-elastomer feet included
- Extra heavy-duty, high current 2m power cord
- Quick Start Guide
- Adjustable 50 to 200 Hz low-pass crossover with a 12 dB/octave slope
- Unbalanced stereo/LFE RCA input
- Unbalanced stereo/LFE RCA output for easy daisy chain
- Speaker Level Stereo Input
- Signal sensing auto turn on/off
- Auto power/on switch
- Subwoofer Volume adjustable on back panel
- Phase control (0° / 180°) on back panel
- Green (power on) / Red (power standby) mode indicator LED
- RoHS compliant, lead-free construction, world-wide safety certifications
- Green 0.5-watt low standby power consumption
- Dimensions (w/ grille):
  - 10": 36 cm x 32 cm x 40 cm height
  - 12": 42 cm x 36 cm x 51 cm height
- Shipping Dimensions:
  - 10": 49 cm x 49 cm x 54 cm height
  - 12": 52 cm x 52 cm x 57cm height
- Weight (unboxed):
  - 10": 22 kg with Grille
  - 12": 25 kg with Grille
- Shipping Weight:
  - 10": 25 kg
  - 12": 28 kg

#### **Driver Specs:**

- All-new proprietary 10"/12" long-throw driver with high-precision tuned overhung motor configuration
- 25 mm/ 28 mm Xmax mech precision aligned excursion
- 2,5" diameter Voice Coil with high current 4-layer high-purity copper wire windings
- High grade oversized Ferrite magnet motor
- 6" composite cotton-poly extreme excursion linear spider
- Heavy Duty stamped steel basket, double vented
- Nitrile rubber extreme-excursion surround
- Lightweight reinforced paper Composite cone for enhanced sensitivity and transient response



#### **Amplifier Specs:**

- High resolution Analog Devices Audio ADAU 1761 DSP,
- 350/400W RMS class D power output, 600 W/800 W max output
- Wide input voltage bandwidth compliant for consumer and pro audio up to 4V line level input.
- High efficiency Switching power supply with 2 x 18 A / 650 V MOSFET, for high efficiency.
- Cool-running Class D amplifier switching topology with four massive 40 A / 220 V MOSFET's
- Input impedance 16kohm (unbalance RCA)
- Input impedance 20kohm (speaker level)

#### **APP control:**

- Automatic room correction using iPhone microphone
- Group of functions for a minimum phase FIR frequency/impulse response correction
- X-over control with real-time graphics UI on phone display 12/24/48 dB Butterworth 20-500 Hz
- 25 band parametric EQ, 20-500 Hz, Gain +15 dB/-40 dB, Q factor .1:10
- Gain control.
- Delay control 2,5 67,5 mS (latency 2,5 mS)
- SHS control, Subharmonic synthesizer
- Phase control 1<sup>st</sup> order allpass filter F10:10000 Hz
- Limiter/Compressor control
- Dynamic bass extension control
- Preset controls
- SPL Meter
- Auto on threshold control 1-50 mV RMS. Hold on time 1-30 min

#### Accessories:

- Protective non-resonant extra-thick MDF fabric mesh grille
- Iso-elastomer feet included
- Extra heavy-duty, high current 2 m power cord
- Quick Start Guide



Tech specs:	D	
Driver	<b>Deep Waves 10"</b> 10 <sup>77</sup> front firing driver 10" side radiating passive radiators	<b>Deep Waves 12"</b> 12" front firing driver 12" side radiating passive radiators
Amplifier Class D	600 watt dynamic 350 watt RMS	800 watt dynamic 400 watt RMS
Frequency Response: Over- all Frequency Response: (± 3 dB)	28 Hz – 200 Hz	25 Hz – 180 Hz
Frequency Response: Over- all Frequency Response: (± 10 dB)	25 Hz – 280 Hz	22 Hz – 220 Hz
Low Pass Crossover	50 Hz to 180 Hz (12 dB/Octave)	50 Hz to 180 Hz (12 dB/Octave)
Phase	0 / 180 degrees	0 / 180 degrees
Cabinet Design	22 mm MDF	22 mm MDF
Magnet Structure	Dual ferrite magnet motor	Dual ferrite magnet motor
Woofer	10" high excursion double vented basket driver with reinforced paper cone	12" high excursion double vented basket driver with reinforced paper cone
Voice Coil	Four Layer 2,5 <sup>77</sup> / 63 mm voice coil	Four Layer 2,5 $''$ / 63 mm voice coil
Input	Gold plated Stereo/LFE RCA, Nickel plated High level in	Gold plated Stereo/LFE RCA, Nickel plated High level in
Output	Gold plated Stereo/ LFE RCA	Gold plated Stereo/ LFE RCA
Power Selector	Off / Auto / On	Off / Auto /On
Finishes	Flat matte black paint	Flat matte black paint
Dimensions (W/H/D) (includes feet and connec- tors)	38 cm x 40 cm x 32 cm	41 cm x 48 cm x 41 cm
Weight (approx.)	21 kg	25 kg
Shipping Weight (approx.)	24 kg	28 kg

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