

## Velodyne Acoustics

### VI-Q 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 low-frequency 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, ultra-high output, low distortion subwoofer - the all-new VI-Q. Available in 10", 12" and a 15" this completely new designed series combines 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 Carbon Fiber front firing driver produces amazing bass output, that brings your favorite movies and music to life. This new VI-Q 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**

As always preferred by Velodyne Acoustics, the VI-Q subwoofer also operates in a closed cabinet design, thus achieving an unparalleled precision in bass reproduction. The acoustically optimized housing made of HDF with additional bracings inside is designed to eliminate any disturbing resonances are expected from the housing itself. The completely redesigned driver is built into a 50mm/2" thick, 21-layer plywood, thus very stable front baffle to ensure perfect working conditions. Complete housing is painted in a high-quality scratch resistant black flat matte paint. For home cinema operation, this ensures that no disturbing light reflections reverberate from the subwoofer. Full bass dynamics and tightening of bass response is ensured by 4 aluminum feet milled from solid aluminum, mounted with threaded screws in threaded bolts.

## **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 VI-Q subwoofer exactly to the room that it is placed in.



Android

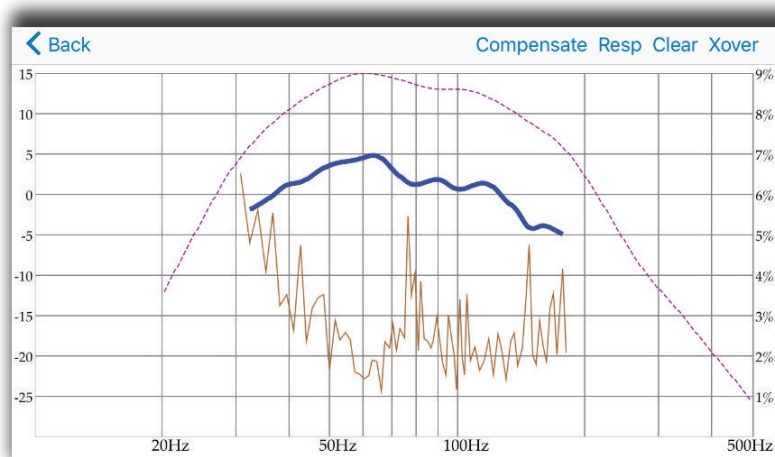
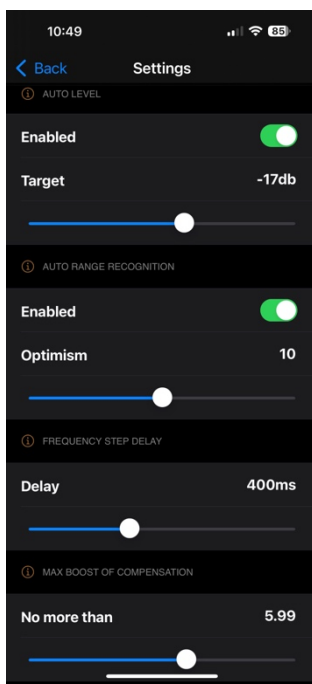


iOS



iOS Pro

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 iWoofers™ 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.



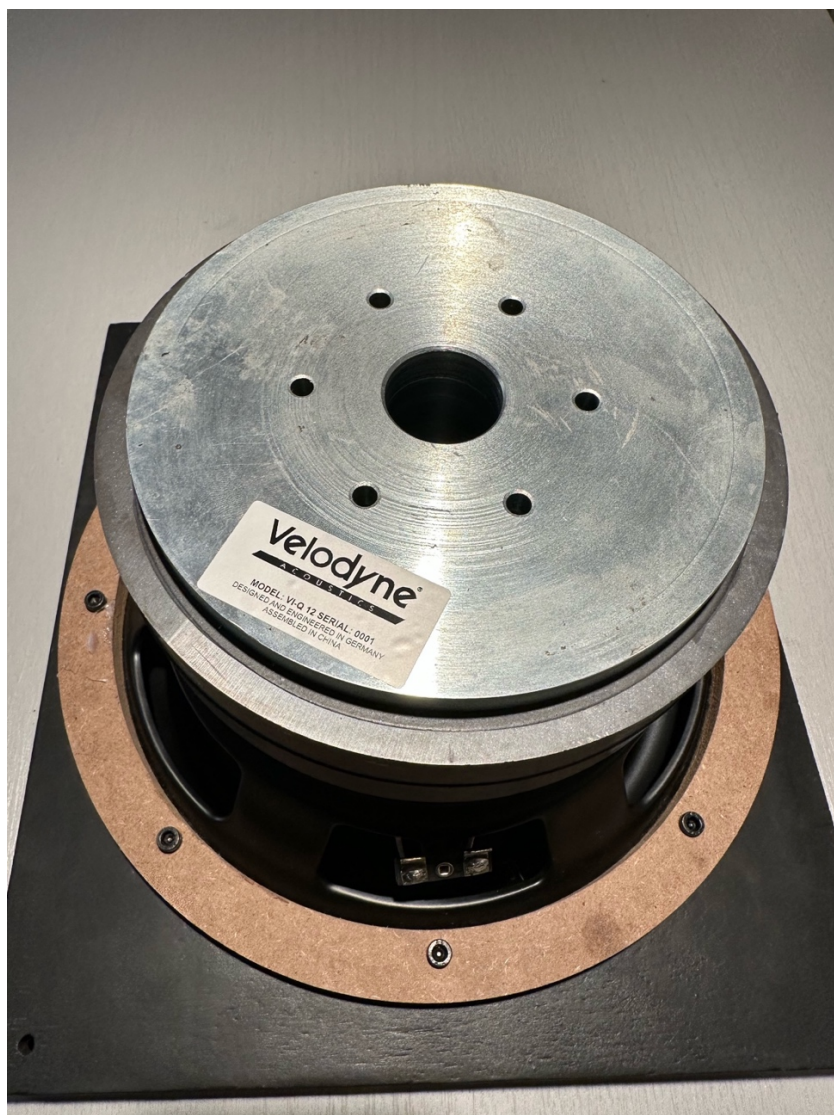
Response & Compensation window after response.

## 1200 W advanced Class D Amplification

VI-Q Series subwoofers combine patented core technologies from the subwoofer experts at Velodyne Acoustics. High level connectors and RCA and XLR inputs and outputs complete newly developed DSP-controlled, effective and cool running Class D amplifier board with up to 1200 W MOSFET power amplifier. Like all Velodyne Acoustics subwoofers, the VI-Q series features anti-clipping and overheating circuitry to prevent distortion due to amplifier clipping.

## Driver technology:

High purity 3" copper voice coil with special 4-layer winding to minimize distortion and power compression with maximum heat dissipation, linearity and tuned magnetics for precise high excursion. The double-coated carbon fiber voice coil former provides excellent stiffness with a high thermal load capacity. To ensure optimal heat dissipation at the high power output, the motor is ventilated 3 times, below spider, in the pole plate and the voice coil directly through 6 holes in the rear pole plate. With its 6" spider, this speaker can achieve an Xmax of 28 mm for maximum SPL.



## Connectivity

As with all Velodyne Acoustics subwoofers, the VI-Q series has a stereo high level input for direct connection to the loudspeaker output of the amplifier, this is the preferred connection method for many high-end customers, as it ensures that the Velodyne Acoustics subwoofer receives the exact same stereo signal as the main loudspeakers, thus ensuring that the bass is transmitted exactly the same way. The most common way to connect the subwoofer to a stereo or home theater system is the stereo or LFE connection with the RCA jacks, for easy daisy chain of the signal to another subwoofer is the VI-Q series also equipped with a Stereo / LFE RCA output. In high-end applications or even in the studio often to meet XLR connectors are also found here, so all common audio connections are available.

Since today many home theater receivers and processors have a trigger output for automatic switching on and off, of accessories components, we have also donated a suitable 3.5mm minijack input. To operate the optional Velodyne Acoustics Wi Connect System II for wireless signal transmission directly through the subwoofer, we also have a 5V / 1A USB power output.





### Subwoofer Specs:

- Protective non-resonant extra-thick wooden (MDF) frame mesh grille
- Aluminum 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
- Balanced Stereo XLR Input
- Balanced Stereo XLR output for easy daisy chain
- Speaker Level Stereo Input
- Signal sensing auto turn on/off
- Auto power/on/off switch
- Subwoofer Volume adjustable on back panel
- Phase control (0° / 180°) on back panel
- 3,5mm mini jack 12V trigger input
- 5V / 1A Power USB socket
- Blue (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": 38cm x 32cm x 40cm height
  - 12": 41cm x 41cm x 48cm height
  - 15": 48cm x 48cm x 56cm height
  -
- Shipping Dimensions:
  - 10": 42cm x 46cm x 48cm height
  - 12": 52cm x 52cm x 57cm height
  - 15": 62cm x 59cm x 65cm height
  -
- Weight (unboxed):
  - 10": 22 kg with Grille
  - 12": 25 kg with Grille
  - 15": 35 kg with Grille
- Shipping Weight:
  - 10": 25 kg
  - 12": 30 kg
  - 15": 40 kg

### **Driver Specs:**

- All-new proprietary 10"/12" /15" long-throw driver with high-precision tuned overhung motor configuration
- 32 mm Xmax mech precision aligned excursion
- 3" 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 carbon fiber cone with inverse dust cap for enhanced sensitivity and transient response

### **Amplifier Specs:**

- High resolution Analog Devices Audio ADAU 1761 DSP,
- Up to 650 W RMS class D power output, 1200 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 25 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 2,5mS)
- SHS control, Subharmonic synthesizer
- Phase control 1<sup>st</sup> order allpass filter F 10:10000 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
- Extra heavy-duty, high current 2 m power cord
- Quick Start Guide

	<b>VI-Q 10</b>	<b>VI-Q 12</b>	<b>VI-Q 15</b>
Driver	10" front firing driver	12" front firing driver	15" front firing driver
Amplifier Class D	850 watt dynamic 450 watt RMS	900 watt dynamic 500 watt RMS	1200 watt dynamic 650 watt RMS
Frequency Re- sponse: Overall Frequency Re- sponse: ( $\pm 3$ dB)	28 – 200 Hz	25Hz – 180 Hz	23Hz – 180 Hz
Frequency Re- sponse: Overall Frequency Re- sponse: ( $\pm 10$ dB)	25 – 280 Hz	22Hz – 250 Hz	18Hz – 220 Hz
Low Pass Crossover	50 Hz to 180 Hz (12 dB/Octave)	50 Hz to 180 Hz (12 dB/Octave)	50 Hz to 180 Hz (12 dB/Octave)
Phase	0 / 180 degrees	0 / 180 degrees	0 / 180 degrees
Cabinet Design	22mm HDF 50mm front	22mm HDF 50mm front	22mm HDF 50mm front
Magnet Struc- ture	Dual ferrite magnet mo- tor	Dual ferrite magnet mo- tor	Dual ferrite magnet mo- tor
Woofers	10" high excursion triple vented basket driver with carbon fiber Mem- brane and convex cone	12" high excursion triple vented basket driver with carbon fiber Mem- brane and convex cone	15" high excursion triple vented basket driver with carbon fiber Mem- brane and convex cone



Voice Coil	Four Layer 3" / 76mm voice coil	Four Layer 3" / 76mm voice coil	Four Layer 3" / 76mm voice coil
Input	Gold plated Stereo/LFE RCA, Nickel plated XLR and High level in	Gold plated Stereo/LFE RCA, Nickel plated XLR and High level in	Gold plated Stereo/LFE RCA, Nickel plated XLR and High level in
Output	Gold plated Stereo/LFE RCA, Nickel plated XLR	Gold plated Stereo/LFE RCA, Nickel plated XLR	Gold plated Stereo/LFE RCA, Nickel plated XLR
Power Selector	Off / Auto / On	Off / Auto /On	Off / Auto /On
Finishes	Flat matte black paint	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	41cm x 48 cm x 41 cm	48 cm x 48 cm x 56 cm
Weight (ap- prox.)	21 kg	25 kg	25 kg
Shipping Weight (ap- prox.)	24 kg	28 kg	28 kg