

# AUDIO TEST

STEREO | STREAMING

HIGH END

## HIFI-KRONJUWEL

Bowers & Wilkins  
801 D4 im Test



### TEST PDF

VELODYNE ACOUSTICS IMPACT X 10

### TESTS IM HEFT

u. a. FiiO M11 Plus LTD  
Mission QX-3 MKII  
Nubert nuBoxx B-60  
Philips Fidelio L3  
Pure Evoke Play



**NUBERT NUBOXX**  
AS-425 max Soundbar



**VELODYNE ACOUSTICS**  
Impact X Subwoofer



**DALI OBERON 7 C**  
7.1 Surround-Set



Velodyne Acoustics Impact X 10

# Cometary

If you want to experience powerful, voluminous bass, you cannot avoid a subwoofer. In this review, we look at the brand new Impact X 10 from Velodyne Acoustics, an active front-firing subwoofer with a down-firing bass reflex port.

Simon Mendel



<b>AUDIO TEST</b>
2.2022
<b>Excellent</b>
(94%)
Velodyne Acoustics Impact X 10
<a href="http://www.likehifi.de">www.likehifi.de</a>



*The Impact X 10 offers versatile connection options that leave nothing to be desired.*



*The front membrane made of reinforced paper is very stiff and light-weight. In this way, partial oscillations are minimized and transients are reproduced with impulse fidelity.*

The ladies and gentlemen from Velodyne Acoustics are real bass experts. With their subwoofers, they have been providing the basic sound foundation for music, films and video games since 1983. Founded in Silicon Valley, USA, the company moved to Germany in 2019 to enchant listeners worldwide with their basses. For this test, we delved into tonal depths with the latest Velodyne Impact X 10 subwoofer. We would like to thank Velodyne Managing Director Mansour Mamaghani and his team for the brand new test sample, which we are one of the first test magazines in Germany to test extensively. A real exclusive test! The Velodyne Acoustics Impact X subwoofer comes in two sizes. It is available with either a 10" or a 12" cone. We were allowed to put the smaller 10-inch version to the test for this review. The larger one is able to reach even lower frequencies due to its larger diaphragm and also brings with it more power. Apart

from that, it is identical to our test candidate in terms of control and features.

### Design

The Velodyne Impact X is a cuboid, active subwoofer made of 20 mm thick MDF with a front driver and a down-firing bass reflex port. In this way, it combines the two radiation directions that are usual for subwoofers and thus finds a good compromise between crisp transients through the front-firing membrane and a powerful basic tone through the bass reflex opening on the bottom. It has a combat weight of 15 kg and, with dimensions of 32 x 35 x 40 cm, fits well in the living room or home cinema. A front grille is included to cover the driver, through which the membrane is visible as a hexagon. This is attached with a simple plug-in system and can be removed again without any problems. There is also a small blue LED display on the front. This provides information about various status indications

such as volume and preset number. But more on that later. The one-digit seven-segment display is even easier to see through the front grille than without. The subwoofer stands on four black elastomer feet, which decouple it well. Otherwise, the design of the Impact X is simple and elegant, as is typical for Velodyne Acoustics.

All switches and connections are hidden on the back of the subwoofer. On the input side, the Velodyne Acoustics Impact X offers many possibilities. It can be connected via gold-plated cinch sockets or integrated as a second pair of speakers via the speaker terminals using a high-level signal. In addition, two gold-plated cinch sockets are available as outputs. The connections all make a solid impression, but it's a pity that only simple terminals for speaker wire are installed and none that are also suitable for banana plugs. There are two rotary controls on the back of the subwoofer for volume and frequency adjustment. Both are



*Elegant and simple. The only thing on the front of the Impact X is the driver and display.*



*The Impact X 10 is equipped with four DSP presets. These allow easy sound adjustments with just a few button presses.*

continuous controls, so you have to trust your ears when adjusting the subwoofer. This is probably not a problem with the volume control, but careful listening is required when setting the crossover frequency. Also because the display shows the volume in 10 levels, but not the frequency.

There is also a phase shifter on the back of the Velodyne Sub. If you press this button, it rotates the phase by 180°. This is helpful, since phase cancellations lead to wide bass holes, especially in the low-frequency range - where the wavelength of the tones is very large. If you reverse the phase, the frequencies no longer cancel each other out, but complement each other. Below the phase shifter is an unlabeled button. If this is set to „Auto“, it puts the subwoofer into standby after a while without a signal. When set to „On“, the Impact X is always on. Volume, frequency and phase can also be adjusted via remote control, which is small and handy. In addition, the

required battery is already included. You can also use the remote control to adjust the brightness of the display and switch through the four DSP modes. Because the Impact X has four DSP presets, that adapt the playback of the subwoofer to specific situations. The first preset „Flat“ is a universally usable setting that brings with it a large amount of bass. The „Movie“ preset is designed for a bombastic film experience and enables maximum output power. „Rock/Pop“ is optimized for this kind of music by adapting the frequency response. The „Night Mode“, on the other hand, throttles the bass reproduction a bit so that you don't spoil the peaceful coexistence with the neighbours. All in all, the operation of the Impact X is very intuitive. The remote control is self-explanatory and makes adjustments very convenient.

#### **Powerful and efficient**

The subwoofer is equipped with a highly efficient Class D ampli-

fier, which contains four 180 volt MOSFET transistors with a current delivery capacity of 34 ampere. It has an impulse output of 500 watts and a continuous output of 250 watts. The power amp combined with core Velodyne Acoustics technologies not only enables amazing bass performance, but also minimizes distortion. The frequency range of the Velodyne Impact X 10 is specified with a tolerance of 3 dB with 32 - 180 Hz, or with 10 dB with 25 - 250 Hz. The Impact X 10 can play really deep and is therefore able to support profound speakers. The crossover frequency is selectable from 50 Hz to 180 Hz and filters at 12 dB per octave. Accurate transient reproduction and minimal partial oscillations are made possible by the double-ventilated, reinforced 10-inch paper membrane. It has a high deflection and is both stiff and light at the same time. The four-layer, two-inch, high-purity copper voice coil is also highly efficient. The nitrile rubber surround enables a stroke



The front grille is slightly translucent. It makes it easy to identify the driver and display.

of up to 25 millimeters. The driver is driven by a dual ferrite magnet motor. As a result, the driver of the Impact X is very energy efficient and able to move a lot of air, which means a powerful, voluminous performance when it comes to the bass reproduction.

### Pertinent performance

As is well known, the English word "impact" has several meanings in German. On the one hand, it can stand for outcome, in the sense of consequence or effect. However, another - and in relation to the Impact X - more appropriate translation would be collision. The Impact X is capable of vibrating through space like a meteorite. Thanks to the combination of the front-firing membrane and the bass reflex opening on the bottom, the Velodyne Impact X is not only very responsive to impulses and delivers crisp transients, but also shakes the room, as befits home cinema use. The subwoofer has a very rich, clean basic tone that nestles well

with the low-end of the satellite speakers. Regardless of whether music or film sound, the Impact X plays powerfully, energetically and always tastefully. In addition, the subwoofer enables almost limitless volumes. In our test, the Velodyne Acoustics Impact X 10 was already sufficiently present at a third of the maximum volume. Although it's the smaller version of the Impact X, the 10-inch version packs a lot of punch. The DSP presets are also a welcome addition. They make the subwoofer even more versatile and allow uncomplicated sound adjustment. The modes are all well chosen and optimize the playback for the respective situations. Above all, the bass-throttling „Night Mode“ makes sense, since it doesn't make the walls shake too much. Nevertheless, it should be noted, that the Impact X 10 is suitable for any application even without presets. Whether it's a Hollywood blockbuster or pop music, Velodyne's Impact X 10 makes an - well - "impact"! ■

## SUMMARY

The Impact X 10 from the subwoofer experts at Velodyne Acoustics stays true to its name. He leaves an impression and his bass can resemble a meteorite impact. It is equipped with four DSP presets, which allow the low-frequency reproduction to be easily adapted to the situation. But even without a preset, it delivers rich, clean bass that is suitable for music as well as films and video games.

## FEATURES

- four DSP presets

**Advantages** + voluminous, clean rendition

**Disadvantages** - none

## FEATURES

### General

<b>Device class</b>	<b>Subwoofer</b>
<b>Price band</b>	<b>Entry class</b>
<b>Manufacturer</b>	<b>Velodyne Acoustics</b>
<b>Modell</b>	<b>Impact X 10</b>
Price (EIA)	799 Euro
Dimensions (H/W/D)	32 × 36 × 40 cm
Weight	15 kg
Information	www.velodyneacousticssubwoofer.com

### Technical Information (manufacturer)

Method of operating	Active
Construction type	Bass reflex
Frequency response	265–250 Hz
Power	250 W
Connection to source	Analog
Power consumption	Not specified
Room recommendation	10–25 m <sup>2</sup>
Individual sound adjustment	Internal DSP, transition frequency
Inputs	2 × cinch, speaker terminal

## BEWERTUNG

Bass reproduction		68/70
Reproduction quality		68/70
Equipment/workmanship		9/10
User-friendliness		7/10
Appreciation/Depreciation		None
Interim result		84 von 90 points
Price-performance	Very good	9/10
<b>Result</b>		<b>Excellent 94%</b>