

Quadral Signo Avantgarde

Test report



The team of players

► The Hanover based speakers manufacturer Quadral has released a new Signo Avantgarde range of top quality sound transducers, which are equally suitable for stereo or multi-channel working. AV Magazine has thoroughly tested these trim boxes.

Quadral produces a mature range of products, which includes products that are suitable for any application and any wallet. The new range of Signo Avantgarde speakers presented here all combine top quality sound technology to-

gether with a superb visual appearance. There are actually four passive speakers in the programme. The set includes compact boxes and a center in addition to the two upright speakers. Quadral recommends adding a subwoofer from their Qube range for home cinema applications. They are available in four different sizes and include, depending on the model, a woofer that varies in diameter size from 22 to 32 cm. The surround sound set used in this test consisted of the two large Signo Avantgarde 70 upright speakers for use at the front

Key Facts

Quadral Signo Avantgarde

- Home cinema speaker set
- 5.1 configuration
- High-gloss black or white finish
- 280 Watt digital amplifier
- 260 mm subwoofer
- 170 mm woofer
- 135 mm mid-range unit
- 28 mm radial tweeter



of the room, two Signo Avantgarde 20 compact speakers, the Signo Avantgarde 10 Base center and the Qube 10 Active subwoofer for the deep bass.

The Signo Avantgarde 20 compact speaker was placed at the back of the room. This six unit speaker set costs about 2,750 euros. In the following report AV Magazine tested the material and acoustic values were offer to the customers.

Design and workmanship

The graceful appearance of the Signo Avantgarde range of speakers impresses right from the very first glance. The curved and tapered to the rear case shows that a very high level of workmanship was involved. The finish has been cleanly applied and this gives the speakers superb brilliance and depth. The surface is extremely smooth and even and this gives them a reflective appearance. The edges of the case and the recesses in the chassis have been shaped accurately. The speakers always retained this top class visual appearance dur-



The Signo Avantgarde 20 is used as the effects speaker

ing the in-depth testing. Our test set was finished in black. Quadral also offers a version finished in white as an alternative. Both colour versions are fitted with black front grilles. They are made from a finely meshed material. As a magnetic attachment system is now used, the customary fastening sockets in the baffle are no longer needed and this heightens the appearance of the components in this Signo Avantgarde set. The tweeter, mid-range unit and woofer all have silver-grey chassis cradles, which skilfully offsets them against the dark finish of the case. A dominant visual design feature of the new range is the rounded, V-shaped guards fitted on the outside of the tweeter's sensitive radiating surface.



The top quality cable connections have been designed to guarantee optimum signal transfers



The curved sidewalls give the Quadral Signo Avantgarde speakers an elegant and powerful appearance

Configuration

- + Powerful subwoofer
- + Composite cone membrane
- + Radial tweeter

Technology

The Signo Avantgarde 10 Base center speaker sits proverbially in the centre of the sound image. The centre box can be placed underneath a TV or a wall screen. Voices and music always come from the centre of the stereo panorama, regardless of whether you are sitting on the left or the right of your couch. The designers have fitted two mid-bass units in the Center so that this sound relevant speaker can convert the sound as optimally as possible. The identical chassis is also used in the Signo Avantgarde 20 effect speakers behind and both measure 135 mm. This effective acoustic pressure generation uses a top quality cone membrane. Quadral has chosen to use a composite material made from titanium and polypropylene in order to minimise any unwanted material resonances coming from the sound radiation surfaces. This symbiosis produces a perfect compromise from the low weight, increased stability and good damping. The two Signo Avantgarde 70 upright speakers were positioned to provide the front left and right room sound and these full-range speakers are effectively constitute a 2.5-way system. This consists of two 17 cm mid-bass units that also use the previously mentioned titanium/plastic membrane. The two cones convert frequencies up to 300 Hertz. The hub-intensive bass range profits from the special effects produced by the double surface area of the membranes. The lower tone range is decoupled from 300 Hertz upwards and the conversion loads the mid-tone frequencies up to 2,600 Hertz onto the upper



The Qube 10 active subwoofer is responsible for producing the necessary bass punch.

cone chassis. The housing has been designed using the reflex principle in order to optimise the low frequency performance capabilities. The sound produced by the subwoofer is fed out to the rear through a precisely calculated tunnel area. The bass range of the speaker is extended by the deep tuning frequency of the reflex channel. A 28 mm tweeter is used for the upper frequency ranges. This has a radia-

tion surface with a radial design. Two silvery guards are fitted to protect the sensitive membrane against mechanical damage. These are bonded onto the plastic front-plate and they cannot be removed. The subwoofer is responsible for the dramatic deep bass reproduction in a home cinema set. A Qube 10 Active subwoofer was responsible for the long-wave conversion in the Quadral set sent to



The Signo Avantgarde 10 Base Center sits inside a shell. This enables the vertical radiation angle to be adjusted.



The tweeter has two metal guards fitted to it to protect the sensitive radiation surface

us. As you can tell from the name, the cube-shaped bass speaker uses a ten inch cone. This is integrated in a bass reflex case and radiates downwards against the surface it is sat on. The Qube 10 is enthroned on thick, angular feet so that the gap between it and the floor can be set correctly. At the back of this active model you will find a 280 Watts digital power amplifier as well as all of the important controls and connections. In addition to the obligatory volume and separating frequency controls there is also a phase switch for correcting the runtime. There are two pairs of cable terminals available for connecting up a stereo amplifier without low-level outputs. A power-saving stand-by circuit rounds off the configuration.

Sound quality

The 5.1 speaker set with its decent bass and high pressure capacities excelled with the science-fiction horror film "Doom". The sub-woofer reproduced the frequent deep bass effects smoothly and superbly in the listening studio. The surround sound was atmospheric and sublime thanks to the DVD's exceptional DTS multi-channel coding and the unique tweeter configuration. The dusky background sounds from this Quadral set were very authentic and reproduced differently from one another.

You will be delighted with the musical reproduction of the Signo Avantgarde speakers with their perfectly balanced tonality. With the film music from the "Gladiator" the speakers demonstrated their excellent reproduction, which was positively remarkable thanks to the fine differentiation between the indi-

Specifications

Manufacturer:	Quadral
Range:	Signo Avantgarde
Price:	About 2,750 euros / 5.1 set
Type:	Home cinema speaker set
Styling:	High-gloss black or white finish
Signo Avantgarde 70 front speaker:	
Bass:	1 x 170 mm cones
Mid-bass:	1 x 170 mm cones
Tweeter:	1 x 28 mm radial dome
Design principle	Bass reflex
Network:	2.5-way, passive
Separating frequencies:	300/2,600 Hertz
Sensitivity:	88 Decibels (1 Watt/1 Metre)
Dimensions (W x H x D):	20.3 x 95.6 x 31.5 cm
Weight:	16.7 kg
Signo Avantgarde 10 Base center speaker:	
Mid-bass unit:	2 x 135 mm cone
Tweeter:	1 x 28 mm radial dome
Design principle	Sealed
System:	3-way, passive
Separating frequency:	350/2,700 Hertz
Sensitivity:	88 Decibels (1 Watt/1 Metre)
Dimensions (W x H x D):	55.0 x 18.8 x 27.0 cm
Weight:	8.3 kg
Signo Avantgarde 20 effect speaker:	
Mid-bass unit:	1 x 135 mm cone
Tweeter:	1 x 28 mm radial dome
Design principle	Bass reflex
System:	2-way
Separating frequency:	2,700 Hertz
Sensitivity:	86 Decibels (1 Watt/1 Metre)
Dimensions (W x H x D):	17.7 x 30.9 x 27.0 cm
Weight:	5.3 kg
Qube 10 active subwoofer:	
Nominal power:	200 Watts
Music power:	280 Watts
Woofer:	1 x 260 mm cone
Design principle	Bass reflex
Peaks:	Controller
Separating frequency low-pass filter:	Controller (50 - 200 Hertz)
Phase correction:	Switch (0°/180°)
High level input / output:	yes/no
Low level input / output:	yes/no
Dimensions (W x H x D):	32.0 x 42.0 x 39.0 cm
Weight:	16.5 kg



Film music: **Gladiator**

vidual instruments. The tonal tuning is typical Quadral as it is pleasantly rounded and harmonic. None of the frequency ranges became prominent, so that this set of speakers can also be recommended without exceptions for use in modern lounges without excessive furniture and a lot of noise reflecting surfaces.

Configuration

- + Warm sound tuning
- + Good detail reproduction
- + Sublime surround sound

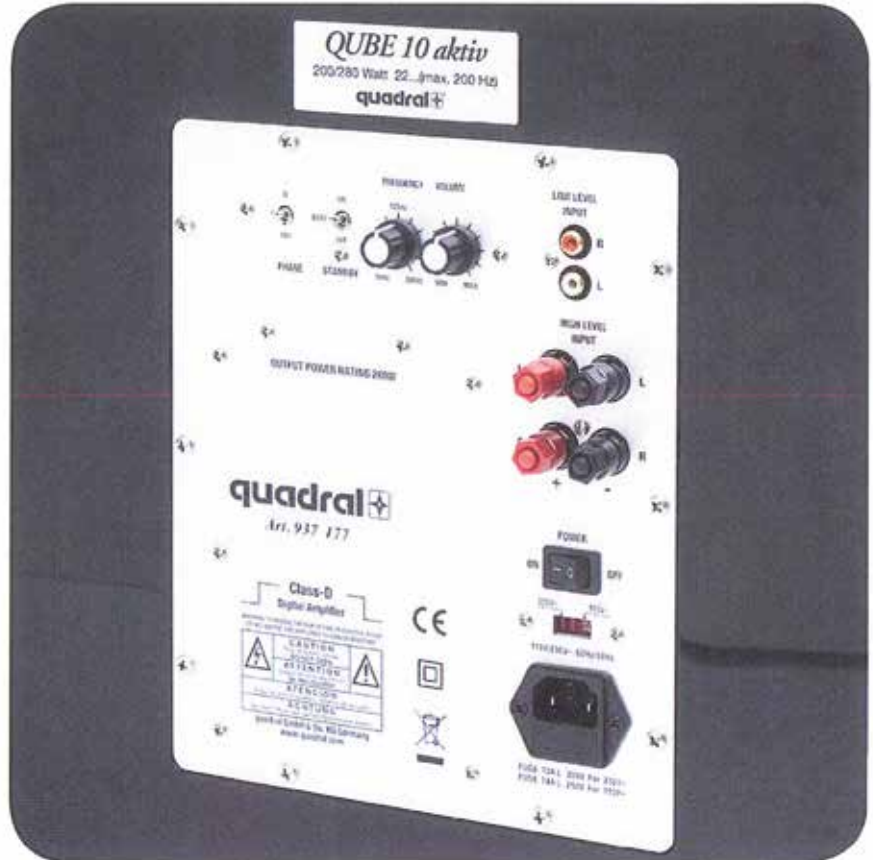
Features

Home cinema speaker set, 5.1 configuration, black or white high-gloss finish, 280 Watts digital power amplifier, 260 mm bass/ mid-range unit, 170 mm woofer, 135 mm mid-range unit, 28 mm radial tweeter

Plain speaking

The new speakers in the *Signo Avantgarde* range made an excellent impression during our AV Magazine tests. The modern design, top quality technology and powerful sound are all highly recommended for both sophisticated music lovers and home cinema fans. The superb price/performance ratio ensures that the customer gets real tonal and material value. You can literally take the Quadral set as seen and heard. ◀

Author: Philipp Schäfer
Photos: Jürgen Immes



The volume, separating frequency, phase and operating mode can all be set up from the subwoofer's connecting and control panel.

Quadral Signo Avantgarde

Quadral GmbH & Co. KG, Hanover, Germany

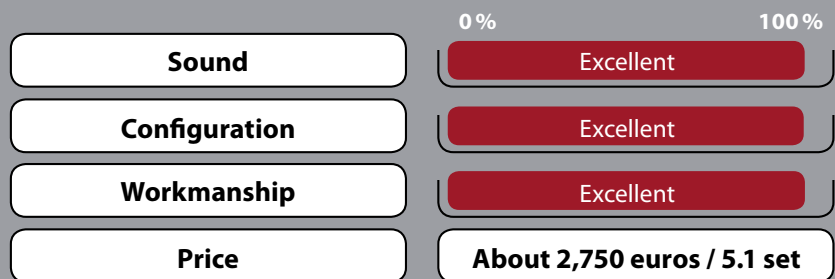
Tel: +49 (0)5 11 / 7 90 40, www.quadral.com

Category: Home cinema speaker set

Sound 60%, configuration 20%, workmanship 20%

Tested speakers:

Quadral Signo Avantgarde -70/-20/-10 Base/Qube 10 active



Class

Top class

Price/performance ratio

Excellent



Quadral Signo Avantgarde

Excellent