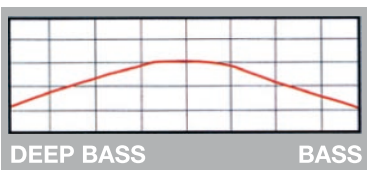




► ROMAIN BUTHIGIEG

The special feature of the subwoofer from quadral can be derived from the fact that it can in theory be integrated into the SIGNO loudspeaker system. Accordingly, it was developed as an optimal complement to the SIGNO 400 or 200 set. In spite of its relatively low weight, the unit is sufficiently firm and

stable. The listening room's floor covering could take on a significant role; this is because the bass reflex orifice under the woofer unit could make for acoustic interference, especially at higher volume levels. In any case, its compact cabinet dimensions don't necessarily make the SIGNO 250 DV destined for large home cinema rooms but rather developed as a gentle accompanist as part of a living room sound system. Its extensive range of connection options enables the unit's use for both stereo as well as multi-channel applications with cinch and high-level inputs. What one should know is that this loudspeaker was designed for connection in a frequency range of around 75/80 Hz (upper limit of the SIGNO 400 loudspeaker's frequency range). In the interests of simplifying its integration, we advise against using it with higher frequencies, even if it can take them. In short, in stereo mode the SIGNO subwoofer makes for an effective and interesting sound experience, but I would have wished for a slightly more dynamic version of this bass reflex unit. Fortunately, quadral's catalogue offers a wealth of choice!



► PHILIPPE VIBOUD

Having tested this unit, one can say that its design is certainly ideally suited for use in conjunction with a flat panel TV set and harmoniously combined with a SIGNO set. The subwoofer is available in four different finishes, namely beech, cherry, silver and black. Its well thought-out concept also has the advantage of being able to handle the high loading without any weight gain of significance. Moreover, the combination of various different materials has always been of advantage in that it enables better distribution of the modes inside a wood-finished cabinet. Although its cohesion with a SIGNO set is assured and thus recommended, the SUB 250 DV is quite capable of "standing on its own two feet" and working together with a wide variety of audio and video systems. The only limiting factor where this subwoofer is concerned seems to be room size, since the room volumes of a living room in an average 4-room flat on the edge of town ought not to be exceeded... When setting up this unit, care should be taken where the positioning of the bass reflex orifice is concerned. The docking station is relatively open, though quadral could have gone a bit further and integrated an unfiltered LFE channel as well as - why not - a high-pass filter output in the interests of multiplying the unit's range of integration options. Fine-tuning this subwoofer calls for a bit of instinct and, especially where volume-setting is concerned, a gentle hand. A likeable bass speaker unit.

RATINGS (Points of 5)

	R.B.	P.V.	1	2	3	4	5
Bass range	■	■	■	■	■	■	■
Sub. perc. dynamics	■	■	■	■	■	■	■
High load	■	■	■	■	■	■	■
Integration-Nuances	■	■	■	■	■	■	■
Value für money	■	■	■	■	■	■	■

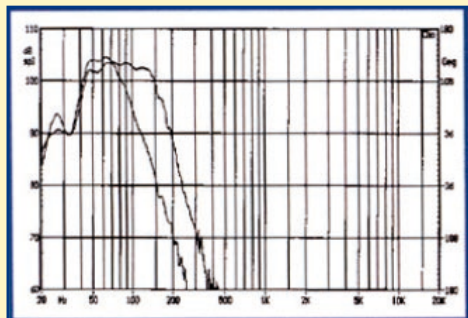
WHAT WE LIKE

- The cabinet's distinctive design.
- The well-structured bass spectrum.

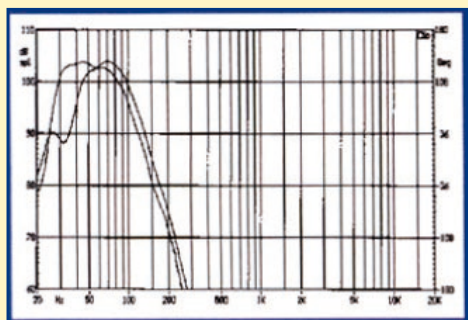
WHAT WE MISS

- An unfiltered LFE input and a filtered output.
- More nuances.
- Better distribution of the dynamics.
- A bass reflex system that remains neutral even at higher volume levels.

MEASUREMENTS



Frequency response curve of the SUB 250 DV
Cut-off frequency 50 Hz and 150 Hz. Remarkably good linear frequency response curve, but likewise a fast but logical energy drop below 45 Hz.



Frequency response curve of the SUB 250 DV
Cut-off frequency 80 Hz in conjunction with the frequency response of the bass reflex orifice located below. The latter plays its role towards linearising the curve up to around 30 Hz perfectly.

CRITICAL LISTENING TEST

■ SCOPE OF THE BASS RANGE Percussion, organs, etc

R.B.: The bass reflex speaker unit from quadral is a member of the family of "small" subwoofers, but nevertheless does well in terms of its bass frequency range since it is audible from 30 Hz and even just below that level, if only at a reduced volume level. However, it doesn't become fully utilizable until frequencies of 35/40 Hz. Its presence during the listening test was clearly discernible, and volume has to be precisely set in order to make optimal use of this bass reflex speaker's potential without allowing interference to become apparent.

P.V.: It takes a bit of time to set up and properly adjust this subwoofer. Having achieved that, the unit offers a good compromise for the frequency range it covers; it tends to cheat a bit below the 45 Hz level but nevertheless does well in subjective terms. Especially when setting it up, it is advisable to try retaining an impression of linearity and not fall victim to the simplicity of the "demonstrative".

■ SUBJECTIVELY PERCEIVED DYNAMICS

Film music, percussion instruments, etc.

R.B.: The subwoofer from quadral tends to maintain a relatively consistent level of performance without emphasising the recording's modulations. When it came to generating sound in our large listening room the SIGNO displayed several weak points with film music, especially where the well-known shellfire in the film "U-571". The room volume must be line with the speaker's capabilities, and this was not the case with our listening room... However, this is something for which the subwoofer cannot be held responsible.

P.V.: When listening to the smallest of the models in this test we took account of the limitations imposed on them by our listening room in terms of their dynamics. This was because it is more the powerful units that benefit from the conditions in there... However, the dynamic response factor not only embraces dynamics at high

volumes but also at very low volume levels... As regards dynamic range, the quadral bass reflex loudspeaker is of merely average standard.

■ RESPONSE AT HIGH LOAD LEVELS

Organs, percussion, etc.

R.B.: The subwoofer from quadral handled the initial modulations with the organ tones without any problems. This is where it comes up against the limits imposed by its size, but the unit nevertheless proved cooperative in this test. Remember to reduce the volume using the volume control. The percussion instruments come over well, and we were able to experience a relatively distinct sonority when listening to the drums in the film music from "Himalaya".

P.V.: The quadral subwoofer quickly came up against its limits in our tests under heavy load. We once again reduced the volume level and adjusted the resonant frequency. Taking account of its natural limits, especially where the bass reflex system's neutrality is concerned, the quadral has a 20-to-25 m2 room effortlessly under control. To each his own area of operation...

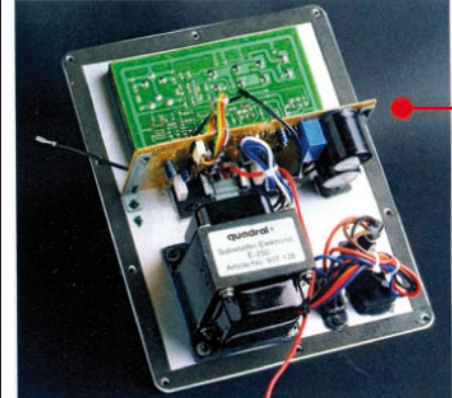
■ INTEGRATION, NUANCES

Double bass, synthesizer, etc.

R.B.: Successfully integrating the subwoofer calls for precise positioning so that it can develop its capabilities to the full. As regards nuances, one could wish for a few more modulations since the quadral bass reflex loudspeaker tends to give a somewhat monotonous reading of the score.

P.V.: The quadral subwoofer's sound reproduction tends to be rather distinct, hence our urgent recommendation to make very thorough and precise settings. In actual fact the SIGNO subwoofer seems better suited for listening to film music, where its subjective bass frequency range counts more than its ability to nuance the first two octaves of a symphony orchestra. This is something that needs to be known in order to make optimum use of the SIGNO Sub.

A good look at...



Amplifier module

The quadral is equipped with an analogue amp module with two Toshiba transistors. This unit delivers a continuous output of 150 W and a peak level of 220 W.