



# PLAYING, HIDE AND SEEK

The growing range of built-in loudspeakers for custom-installed audio systems has long been a trend at the Amsterdam ISE trade fair. STEREO has been investigating Dali's range-topping in-wall model, the Phantom S-280 – here's our field report.

The Dali Phantom S-280 sits proudly in its frame, which the Danish manufacturer has developed to demonstrate its flagship wall-mounted loudspeaker. The company did so for good reason: some dealers don't have a plaster-board wall into which the 150 cm tall loudspeakers could be installed, so this unit makes it possible to listen to a sound sample without building a drywall. It's a clever idea, and a practical one for us here at STEREO.

But why are there such loudspeakers at all, and what makes the S-280 a serious design worth around 6000 euros a pair? What can it do better than smaller and cheaper in-wall solutions or classic floorstanding loudspeakers?

Well, the manufacturer's claim is a bold one: this, the top model of three in its range, is said to be a high-end built-in loudspeaker with a full-bodied sound, able to reproduce the entire frequency range in excellent quality.

Take a closer look at what makes a Phantom, and despite the name it seems pretty substantial, with obvious similarities to its manufacturer's classic loudspeakers, such as the characteristic wood fiber membrane – a DALI trademark – and the magnet system with its pole piece made of SMC magnetic powder. The Phantom uses of these 20cm mid/bass drivers, underpinned in their lower registers with a pair of 25cm passive diaphragms.

Yes, such a design is considerably more expensive than the use of conventional bass reflex ports, but, especially under the sometimes somewhat difficult to define working conditions in a wall, it provides for proper bass punch, rather than just boom or drone.

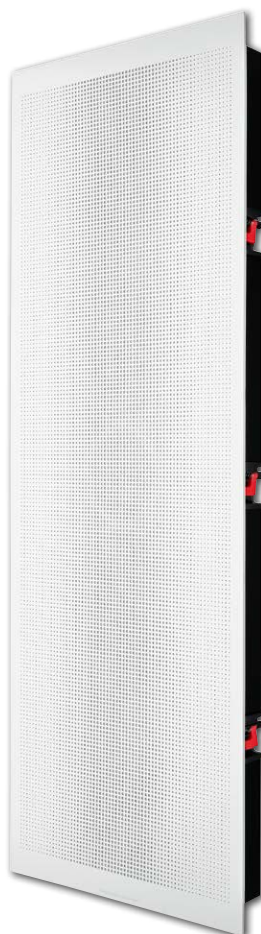
The budget for the reproduction of higher frequencies was also generous, allowing the use of Dali's hybrid

tweeter module, combining dome and ribbon drivers on a common mounting plate, which has been highly praised worldwide for many years. Another advantage of this module is that it can be rotated, making the Dali speakers suitable for vertical or horizontal installation without any loss of quality.

But why go to all this trouble when similarly equipped loudspeakers have long been available in fine and elegantly crafted in floorstanding cabinets? The answer is simple: too often high-quality, space-hungry loudspeakers can't be set up in every living environment in a way that suits the sound and/or their family. Instead of leaving the music lover frustrated by being restricted to small, inexpensive alternatives, built-in loudspeakers are the solution.

Until a few years ago, there was a solid counter-argument against installation speakers here in Germany, as in other European countries: unlike in the USA, where drywall building methods, and thus in-wall speakers, are popular, the great effort involved in setting such models in rather more substantial solid walls made such thinking something of a non-starter.

◀ Flat as a flounder: Dali's S-280 is just ten centimeters deep. The speakers are connected at the side.



◀ With the perforated, magnetically-attached grille, the S-280 becomes virtually invisible.

However, there is a solution, as it's as fast and simple as it is obvious: build a plasterboard 'false wall' in front of the solid one – about a day's work. Many successful dealers in the so-called 'custom install' business have now recognized this solution, and have joined forces with architects, construction companies, painters and electricians. That enables them to offer demanding customers an "all-in-one" solution - often in conjunction with a complete network of sound and vision in several rooms, the Internet and home control. Anyone who invests in such a complete home control system

will also appreciate the advantages of a loudspeaker solution installed almost invisibly, and that's exactly what these projects are about – problem-solving.

**DALI PHANTOM S-280**

€ 6000/pr  
 (incl. white grilles)  
 Dimensions: 53 x153 x10 cm (WxHxD)  
 Warranty: 5 years  
 Contact: DALI  
 Phone: +49 6251 9448077  
[www.dali-speakers.com/de/](http://www.dali-speakers.com/de/)

A wall-mounted loudspeaker with the high-quality drivers and technology of a conventional floorstanding design, the Phantom S-280 delivers high quality sound while remaining virtually invisible.

When the first dealers began to develop multiroom solutions 20 years ago, the cabling effort was high and the main focus was on sound reinforcement. But over time there has appeared a large number of astonishingly high-quality solutions – even if not necessarily high-end in the view of some purists – of which the latest representative is the DALI Phantom series.

In this solution-oriented approach, one can feel a little reminiscent of the famous word “Neuland”, in that previous rules are only valid to a limited extent or have been completely overridden. Those once cynical about the high price of such speakers seem to have been won over; the loss of room depth from the installation of a partition wall is limited to a maximum of 15cm; and the speakers come with all the ‘baggage’ needed for a problem-free installation, a sign of the Danish designers’ extensive experimentation and consultation with practitioners to get all the details right.

And the sound is right, too: there is a mix of resolution and attention to detail with natural voice reproduction, even if the lowest octave is not reproduced as powerfully as with a fixed wall installation. Voices and piano sound accentuated (Lyn Stanley’s “How Long Has This Been Going On”), and there is no ambiguity about the quality of the recording. The same applies to “Magico” by the three virtuosos Garbarek, Gismonti and Haden – their instruments are clearly outlined, and the reproduction of the finest details is to a standard only apparent in from truly above-average systems.

It quickly became clear why the number of customers for such speakers is growing, so well do these speakers combine visual and audible appeal. We’ve come a long way from the lackluster installation speakers of the past: this is serious Hi-Fi, probably otherwise impossible with such invisibility without committing the sacrilege of painting over luxurious wood or a high-quality lacquer on those conventional speakers. Yes, the idea made us shudder too – this way you can enjoy a lot of great music every day, from speakers ‘heard but not seen.’

And the Dali speakers go easy on your amplifier, too, so that even modestly-powered electronics will be able to drive them. I’m sure you will be just as happy when you’ve heard this Phantom, not recoiling like you’d just seen a ghost.

*Michael Lang*



Top-class drivers and a stiffened cabinet are basic prerequisites for the good sound of these built-in loudspeakers.

## PURE SPECIALIST BUSINESS

For smart specialists such as Tim Bornhorst from Tonart-Studio in Osnabrück or Heiko Neundörfer from the HiFi-Forum in Baiersdorf, Franconia, the job starts with the customer’s desire to make a loudspeaker disappear: “We often discover the best places to integrate loudspeakers or even the control electronics in a sensible and almost invisible way when we walk through the shell of the building,” Bornhorst reveals. Like Neundörfer, he attaches great importance to an open electronic architecture: „In the case of off-the-shelf products, the customer will at some point probably find he or she wants to expand from the initial installation. So we have to plan from the outset in such a way that a customer who is looking for just a few ceiling loudspeakers for sound reinforcement in the kitchen and bathroom or in the dining room, for example, can still become someone who can fulfill their hi-fi dreams. That’s why we are looking for systems that go far beyond Sonos and similar concepts.” In this profession, experience is an invaluable asset.



▲ Loudspeakers can be installed in seemingly impossible places



▲ Music from above, picture below - inconspicuous, but effectively integrated loudspeakers



◀ Good sound can also be achieved in angled architecture.