

Happy Birthday!

Audio Physic is turning 25 and to celebrate this occasion the loudspeaker expert is producing a special edition of its successful Tempo model, which contains several special enhancements such as a tweeter that's a cut above the rest

by Matthias Böde

Audio Physic has always been driven by the aim of offering special products, standing out from the mainstream and further developing the loudspeaker domain. The company, which is based in Brilon, Germany, has triggered the discussion concerning time-correct sound reproduction like never before, with the exception of Jim Thiel, and can now boast a history that spans 25 years and contains a number of highlights. The company history has also seen some bizarre and extreme products, but has never failed to create innovative loudspeakers that produce sounds based on an audible philosophy, giving them a distinct profile.

An excellent all-round loudspeaker

The Audio Physic commitment to creating focused developments to enhance audiophile virtues has earned the company a perfect reputation, not only among music fans in Germany, but also, and in particular, further afield. In the USA, for example, Audio Physic is considered to be the pinnacle of German loudspeaker construction. This is certainly due to the fact that the manufacturer understands how to integrate its individual concepts into products that are suitable for everyday use.

A perfect example of this ability is the Tempo loudspeaker, which costs just under 3000 Euro per pair and is currently in its sixth generation, having developed, since its introduction in 1986, from a specialised two-way bookshelf loudspeaker to a standing model that can be used in practically every room. The Tempo

enables listeners to enjoy almost all kinds of music, whatever the genre. Indeed, the current Tempo model was tested in the 11/08 edition of STEREO and proved to be an extremely capable musical all-rounder with a lightly rounded timbre. It sets itself apart from

KEYWORD

steep slope:
The filter that blends the tweeter with the mids is 18 decibels per octave, thus producing a rather steep slope.

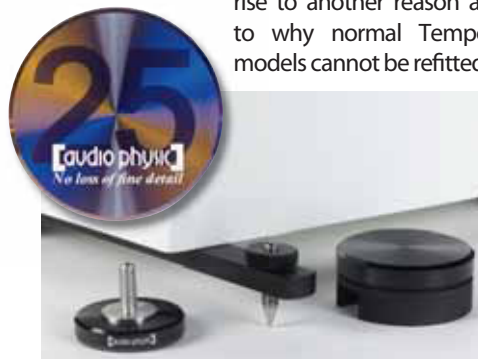
The most important Birthday feature included in the special edition Tempo is the new cone tweeter with an intricate double basket. This enhancement cannot be seen, but certainly draws attention to itself with the sound it produces



the Virgo, the extremely precise "acoustic magnifying glass", which shows no mercy in exposing mistakes and, so to speak, purely personifies the sound principle behind Audio Physic products. The gap between the Tempo and the larger model at exactly twice the price is now being closed thanks to the arrival of the revamped special Birthday edition, the Tempo 25, on the market, which by no means replaces the normal Tempo, but does indeed complement it. The most striking and almost the only externally noticeable difference is the inclusion of the new cone tweeter which is crossed over at 2800 Hertz with a sharp octave slope and has an aluminium membrane edged with a thin layer of foam, which dampens first reflections.

Like the Tempo midrange driver, which is also used in the Virgo loudspeaker, the tweeter is produced by Wavecor, a dedicated driver manufacturer founded by Allan Isaksen, formerly one of the top dogs at Vifa. Wavecor was able to produce the complex driver exactly according to the requirements produced by Manfred Diestertich, the chief designer at Audio Physic, who had taken his plans from pillar to post to no avail before finding success with Wavecor.

The Brilon-based company has named this driver the HHCT 2, more precisely the "Hyper Holographic Cone Tweeter". Just like the HHCM (in which the M stands for 'midrange'), the tweeter's basket is made up of two frames: an inner basket made of a special plastic and an outer metal basket. This basket design aims to guarantee the ideal levels of rigidity, resonance damping and cooling. The system is ventilated at the back and is now mounted in its own chamber. Needless to say, adjustments also needed to be made to the newly symmetrically designed crossover network. This gives rise to another reason as to why normal Tempo models cannot be refitted:



You can considerably increase the sound quality by using Audio Physic's "VCF" feet (l.) instead of spikes



A cross-sectional view of the "HHCT": The double basket effectively blocks resonances from the membrane

involve far too much time and effort.

Another important alteration can be found in the single-wire connection terminal, which is dampened by Neoprene. In the "25", Audio Physic has replaced the more simple jack made by the specialist company WBT, based in Essen, Germany, with the higher quality "nextgen" version.

This feature is no minor adjustment, but an essential improvement that is purely consistent with the top quality driver. At a workshop with a specially prepared Virgo model, in which these exact WBT contacts could simply be swapped over, we were shown that the "nextgen" version most definitely provides increased homogeneity and resolution and, in particular, better spatial imaging.

HHCT brings clarity

It could even be said that the Tempo's fantastic midrange driver only reaches

The connection terminal including hand-written information and the WBT's high quality "nextgen" jacks are located under the bass port



KEYWORD

ventilated system:

The tweeter, open at the back in order to prevent back pressure and reflections, needs to be mounted in its own chamber.

its full potential in the "25" model. At any rate, this is the conclusion drawn when it is compared to the Virgo fitted with the same "nextgen" components. In terms of midrange projection, the normal Tempo model clearly does not reach the advanced level of the Virgo in terms of resolution and three-dimensionality, despite the Tempo's "Holographic Midrange", as was indicated in its more compact and flatter delivery of Christy Baron's "Over-joyed" from the STEREO Review CD V.

Nevertheless, the Tempo 25 almost turns the tables on the other loudspeaker. Not only does it reproduce the bass range with more spatial depth than is the case in the standard model, thus delivering more realistic front-and-back localisation, it also removes the light haze covering the entire sound. It is almost as if a slight noise disappears all of a sudden, indicating that the HHCT is able to achieve extremely low distortion. At any rate, the musical performance of the special edition Tempo features a considerably smoother and more

TEST LOUDSPEAKER

stable sound basis, which facilitates a better overview and clarity against a less disturbed 'black' background that produces a more distinct portrayal of the fine sound details.

In this case, even the Virgo, which previously kept the Tempo 25 at bay due to its slightly more radiant and relaxed musicality, falls slightly behind. Although it is a master of definition and explosive displays of sound, the revamped Tempo seems to be more airy, more detailed and simultaneously smoother where the higher frequencies are concerned, 'letting the sound flow'. This effect is well known to Audio Physic, hence why upgrades to both the Virgo and the more expensive Avanti involves equipping them with the HHCT.

The bass precision also benefits

The bass range of the "25" also profits from the increased resolution, accuracy and richness in



Compared to nowadays, the earlier Tempo models were puristic and reduced concepts. Until 2000, they had to make do with a single woofer, but then along came the double woofer configuration. A constant characteristic of the Tempo has been its backward-tilting cabinet. The photographs show Tempo models from 1992 (1), 1998 (2) and 2000 (3).

detail to a certain extent. In comparison to the standard Tempo model it has more punch and edge, although the depth is the same. In terms of the bass-related construction, however, nothing has changed. The speakers are still fired by 7" woofers that cover frequencies below 150 Hertz, have an aluminium diaphragm, are supported by a rear bass reflex port and can be found in the side walls of the cabinet, which tilts backwards at an angle of exactly 7°, in order to produce a level offset between the midrange driver and tweeter, thus equalising **phase differences** in their response characteristics.

At a price of around 3750 Euro per pair, the Tempo 25 moves significantly closer to the level of its bigger and more prominent sibling, the Virgo. When purchasing the Tempo 25, it is well worth spending an extra 240 Euro or so on two sets of four of Audio Physic's "Vibration Control Feet",

KEYWORD

phase differences:

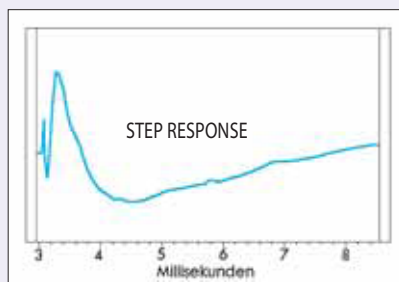
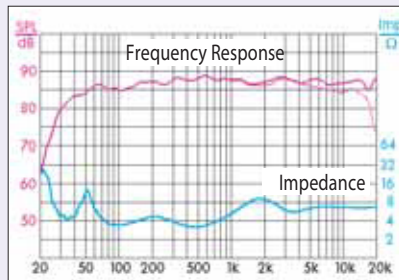
In order to compensate for the tweeter's inherent time difference, the tweeter is positioned slightly further away from the listener.

AU. PHYSICTEMPO 25

€ 3750 per pair (four veneers)
Dim.: 19x100x32 cm (WxHxD)
Warranty: 10 years
Distribution: Audio Physic
Telephone: +49(0)2961/96170
www.audiophysic.de

There is little room for improvement in the well-developed Tempo. Nevertheless, Audio Physic has hit the nail on the head with the special features of the "25", finally pairing the excellent midrange driver with its equivalent tweeter. WBT's high quality "nextgen" jacks also contribute to the special edition's clear superiority over the standard Tempo model.

MEASUREMENT RESULTS*



Nominal Impedance	4 Ω
Minimum Impedance	3,3Ω to 508 Hertz
Maximum Impedance	27,6Ω at 21 Hertz
Average Sensitivity (2,83 V/m)	87,6 dB SPL
Efficiency at 94 dB(1 m)	6,7 Watt
Lower Crossover Frequency (-3 dB)	52 Hertz

LABORATORY

An extremely linear frequency response. The very slight dip that occurred in the bass traces back to the woofers, which are mounted in the sides of the cabinet and were slightly further away from the measurement microphone than the upper drivers. When measured at a 30 degree angle (see dotted line), high frequencies decrease as frequency increases, which can be controlled slightly by changing the angle of the speaker towards the listening position. The speaker has an uncritical impedance response and an excellent step response, with the woofer and midrange driver merging seamlessly.

STEREO TEST

SOUND PERFORMANCE 78%

PRICE/PERFORMANCE RATIO



EXCELLENT

* STEREO Club subscribers can access data and diagrams at www.stereo.de



which facilitate the production of more natural midrange tones and more lively rhythmic compared to the spikes delivered with the speakers, which tend to lead to a slightly harsh and brittle reproduction of the light and delicate sound.

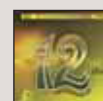
These feet simply need to be screwed into the metal stands that give the slim loudspeaker its high stability and then, and this step is essential, tightened with a bolt from above and finally concealed by the plastic cover.



Audio Physic's chief designer Manfred Diestertich and his Tempo loudspeakers with the standard model on the right

Even on soft floor coverings, these feet ensure that your Tempo 25, which is additionally very easy to set up, will perform perfectly. Of course, the normal model can also benefit from these "VCF" but if it's true 'controlled speed' that you're looking for, you should turn to the special edition model. After all, it is only with the Tempo 25 that you can fully join in with and benefit from the Audio Physic Birthday celebrations.

TEST CDs



TOP 12 IN GOLD (SAMPLER)

This Gold CD contains top quality sound produced using high technology. The twelve first-rate tracks were recorded in the complex "DXD" format (with 24-bit resolution and a 352.8 sampling frequency), meaning that they produce sound of the highest quality.



A. TAYLOR: LEAVING AT DAWN

When Allan Taylor starts telling stories using his sonorous voice and guitar music, he's bound to attract listeners' attention, especially when he sings to them directly in the outstanding recording of this hybrid SACD.

ASSOCIATED EQUIPMENT

TURNTABLE: Pro-Ject Perspex Anniversary

CD PLAYER: Einstein The Source, Trigon Recall II

AMPLIFIER: Arcam A38, Trigon Energy

PREAMPLIFIER: MBL 5011/Solution 710

LOUDSPEAKER: Audio Physic Virgo, B&W N804S

CABLE: Mudra Akustik Silvercom, Silent Wire