

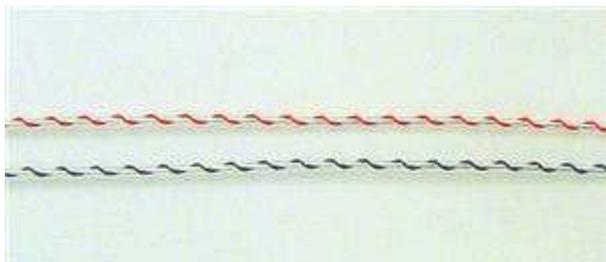


spoil yourself

Some people use musical experiences for inspiration and entertainment. They appreciate the roaring sound of a symphony orchestra. They know the real Chicago blues and how it is supposed to swing. They recognise the sound of a Stratocaster: the guitar that has expressed the sound of rock culture for decades. They feel at home with the experimenting sounds of jazz. They would never miss a rock band at full volume. Or ever stop enjoying the fine sound of classical music. They know singers and their engaging voices. SA has developed the SA7K master for these privileged people.

SA7K master uses the best cable in the world

The best cable in the world – Nordost monofilament – is used for all the internal wiring in the SA7K master. The crossovers have also been customized to make the most of this special cable and optimise the sound balance.



this is SA7K master

SA7K master is a breakthrough within loudspeaker technology. It sets new standards for sound quality with a construction that dares to break the traditions.

SA7K master is for people demanding a sound quality that is way above the daily standard – for high-end audio or home theatre. SA7K master is a source of musical inspiration that will make you rediscover music you thought you knew – and awaken your curiosity against artists that you don't know, yet. It is furthermore ideal as front speaker in a top class home theatre set-up.



how it sounds

SA7K master gives you the impressive experience of sitting right in front of a live orchestra. Only very few people will ever get this experience in their own living room. The sound emerges in front of you: rich in details and nuances. Precise rhythmic timing. Big sonic panorama. And a daily invitation to hear more.



how to use it

SA7K master demands to be combined with a system of high quality but the amplifier doesn't have to be very powerful. From 80 to 200 Watts will do. The SA7K master is a so-called easy load to the amplifier. It doesn't require much power. The quality of the performance is more important. The SA7K master will function at its best in rooms from 15 to 40 square metres. The distance between the speakers and the preferred listening position should be from 2.5 to 3 metres. The mutual distance between the speakers should be from 2.5 to 3 metres. The distances between the back of the speakers and the wall behind them should be between 15 to 40 centimetres. You can toe-in the speakers directly towards the listening position if you want the sound to be as precise as possible. If the speakers are placed more in parallel with the back wall the sound stage is wider. Expect at least 150 hours of burn-in before the sound quality is correct.

better sound starts with a better cabinet

new materials

SA7K master applies a new and patented principle of assembling and designing loudspeaker cabinets. The technology is called Hornflex.

- The curved shape of the cabinet is stronger and more vibration damping than a traditional cabinet. The Hornflex technology is based on MDF that is integrated with a composite material. The MDF board is slit and the slots are filled with a plastic-containing vibration damping glue that hardens for 24 hours while the shape of the cabinet is spanned into position.
- The composition of various materials and vibration damping glue makes the cabinet considerably stronger and more resonance-free than any other technology based on wood
- The drive units are bolted on to the front plate of the cabinet
- The cut out for the woofers has a big bevelling inside the cabinet in order to avoid compression of the air that is moved by the membranes
- Inside the cabinet, a vertical wing-shaped panel supports the cabinet from top to bottom and back to front. There are no horizontal supports inside the cabinet.
- The geometry of the cabinet (width, height, and placement of the drive units) on the front plate is



adapted to the frequency response of the drive units.

- The front grille serves to protect the drive units. SA7K master sounds best without the front grille.

what does the cabinet mean to the sound?

The cabinet is the foundation of the loudspeaker. A stronger and freer cabinet gives the drive units better working conditions and thus a purer and more natural sound.

extreme technology – and craftsmanship

It takes 16 weeks to build a pair of SA7K master when you include the time where some of the materials have to rest before further manufacturing. The drive units are built by hand and control measured three times. Staff with special training assembles each cabinet ensuring all details from mechanical stability to the matching of finish are properly taken care of.

There are 23 factories – all with individual competences - involved in manufacturing parts for the SA7K master.

One person carries out the final assembly, testing and inspection of each pair of SA7K master – writing his signature to guarantee that each speaker lives up to the standards that makes the SA7K master one of the most sophisticated speakers in the world.

a completely different woofer

are the SA7K master woofers identical with the one in SA2K master?

SA7K master uses an advanced version of the SA2K master woofer: W7K. The free air resonance is 10 Hz lower, the acoustical specifications are improved, and the power handling is higher compared to the SA2K master woofer. Physically, the two woofers look very much alike, but they only have the chassis, the magnet, and the wood fibre membrane in common.



a small woofer with an astonishing big sound

The woofer W7K has been developed in co-operation between Tymphany A/S and System Audio A/S. The objective was to create a woofer, which could be part of a compact cabinet and give increased dynamics, less distortion, higher power handling and a deeper bass than any other woofer of similar size.

- The design of W7K has nothing in common with a conventional woofer apart from the fact that it has been build based on the dynamic principle (magnet, voice coil and membrane)
- W7K reduces distortion and modulation 10 times compared to a traditional woofer and can stand almost twice the power handling
- Free air resonance: 27 Hz (1½ octave lower than a normal woofer)
- Total development time: 8½ years

a huge motor

the magnet for a W7K (patented)

- The diameter of the magnet is 110mm. The most normal is 72mm
- Three copper rings (patented principle) keep the inductance of the voice coil homogeneous, no matter if the membrane moves in or out
- Ventilation through the middle of the magnet (the pole piece)



what does this magnet mean to the sound?

The magnet is the “motor” of the loudspeaker and its strength determines its ability to control the movements of the membrane. Its size also serves as efficient cooling. The copper rings (Symmetric Drive) give the loudspeaker less dynamic distortion and the ventilation in the pole piece prevents the air from being compressed behind the dust cap of the membrane

suspension that does not slow down the membrane

suspension for W7K

- Shaped so that the material is not stretched, but “bends” around a large number of points

what does this suspension mean to the sound?

The suspension keeps the voice coil in position in the gap of the magnet. The suspension in W7K is not wavy. Therefore it is not stretched and does not slow down the membrane when increasing the volume. Neither does it change the bass reproduction of the loudspeaker when changing the volume. It means that the sound character is more homogeneous no matter how loud you play – and the sound becomes more dynamic



made of five kinds of wood fibre

the membrane for W7K

- Wood fibre membrane consisting of five kinds of wood fibre and a binder
- Ten through-going slots filled with two different kinds of vibration damping glue
- Dust cap with two through-going slots filled with a third type of vibration damping glue
- Very strong and stiff membrane

what does this membrane mean to the sound?

This kind of loudspeaker membrane is quite new. The strong and lightweight wood fibre material makes the sound precise. The special slots in the membranes work as “resonance traps”, where vibrations get “caught”. The materials have been selected based on comprehensive listening and measuring tests.



deep bass and high power handling are made possible

the voice coil for W7K

- The height of the voice coil is 18mm (Diameter: 38mm)
- It makes the membrane able to move 22mm!
- The coil is wound on an aluminium former

what does this voice coil mean to the sound?

Membrane movements up to 22mm have not been seen before on a small woofer before. This makes W7K able to reproduce deep bass that is incredibly precise. The aluminium former serves as efficient cooling of the coil, but also works self-centering on the coil when it travels through the magnet at loud volumes. Both give a higher power handling than normal.



does not remove energy

rubber surround for W7K

- Larger than a normal suspension
- Material with low mechanical loss

what does this surround mean to the sound?

The unusually big suspension allows the woofer to perform big membrane movements. It is made of a material that does not “absorb” the sound. Therefore it does not hold back sonic details.



cast and aerodynamic

chassis for W7K

- Made of cast aluminium, which is non-magnetic
- Aerodynamic shape
- Mechanical grounding through five points at the screw holes

what does this chassis mean to the sound?

The chassis solidly keeps the woofer parts together because it has been cast in aluminium. The material is non-magnetic so that the forces of the magnet are not led to the wrong place. The aerodynamic shape allows the air to freely flow into the cabinet without compression.



one of the world's best tweeters

the tweeter TKWG

A precision mechanical masterpiece. The tweeter TKWG, developed for SA7K master by Tymphany A/S, reproduces the details of the music with an incredible purity. If you want to get acquainted with the function of a tweeter, then listen: An uncoloured reproduction of the highest tones the human beings can hear requires that you can control the mechanical movements of membranes down to 0.0005mm!!!

The work with the development of TKWG has been about creating a tweeter that does not hold back the small and important sonic details. At the same time it has been quite central that the sound qualities of the tweeter and the musicality should be united with the sound from the woofer, W7K.

- TKWG is handcrafted by Tymphany A/S
- It can stand at least twice as much power as a conventional tweeter
- It has far less compression than any other tweeter
- It has a built-in wave guide



unusually big magnet for a tweeter

magnet for TKWG

- Patented magnet system with copper caps giving a homogeneous magnetic field
- Shape of pole piece designed so that air flows efficiently into the chamber behind the membrane
- Star-shaped milling in the front plate of the magnet works as chamber for the membrane suspension

what does this magnet mean to the sound?

The magnet is the "motor" of the loudspeaker. The sophisticated construction, that both leads the magnetism efficiently to the voice coil and at the same time ensures that the air can flow freely and uncompressed, gives possibilities of new world class sound



the tweeter cabinet inside the cabinet

rear chamber for TKWG

- The tweeter has its own cabinet behind the small dome-shaped membrane
- "Floating" felt block under the membrane
- "Spears" guide the air from the rear of the membrane down into the chamber
- The chamber is dampened with 100% pure cotton

what does the rear chamber mean to the sound?

It is pure luxury for a tweeter to have its own cabinet. The small felt blocks, the special size of the chamber, the special shape where the air is "guided" down into the chamber tells that special efforts are made in order that the microscopic movements of the membranes are not disturbed.



this is where the sound details come from

membrane for TKWG

- Incredibly lightweight membrane
- Produced from woven textile fibres
- Coated five times with a very thin damping glue

what does the membrane mean to the sound?

The extremely lightness of the membranes makes it possible to reproduce the highest tones of the sound. SA thinks that the woven textile fibres give by far the best sound quality. The five coatings, which the membrane gets, and their importance to the sound have been decided based on extensive measuring and listening tests.



technical specifications

speaker dimensions (WxHxD) 17,5 x 136 x 25
cm

power handling 300 Watt

frequency range 30-35.000 Hz (+/- 1.5
dB)

impedance 4-8 Ohm (easy load)

more specifications

Finish:

real wood veneer:



cherry



enamel paint available on special order.

