



*LIMITED EDITION*



THE ART OF EMOTIONAL  
CONNECTION AND DISCOVERY  
**THROUGH PERCEPTUAL LISTENING®**



(S)7t

LIMITED EDITION





# INNOVATIVE EVOLUTION

**NOW, JUST 2 YEARS REMOVED FROM THE LAUNCH OF THE S7†** AND ALL THE DERIVATIVE S-SERIES MODELS, THE ENGINEERING TEAM OF PERLISTEN™ HAS TAKEN ANOTHER STEP FORWARD IN SONIC PERFORMANCE

We've revisited all of what makes the S7 great, applied what we have learned, and have pushed the state of the art just that much further forward. We have updated the woofers to increase linear excursion, lowered inductance and increased low frequency capability. The DPC array, while maintaining the existing drive units and pattern control, we've coupled all 3 transducers to a massive aluminum heatsink that takes power handling and reduced thermal compression to all new levels.

Even the crossover has been updated. Now all of the components are hand sorted to 1% tolerances. Final part values and pair matching to 0.5dB will be performed at our USA headquarters by our CEO, Dan Roemer. Each speaker will be measured using our Klippel near-field scanner. The measurement data of each unit will be provided to the proud owner. The final step will be signing, certifying, and serializing each speaker. Truly a work of art like none other.

# OVERVIEW





# TEXTREME

## THIN PLY CARBON DIAPHRAGM

The (TPCD) TexTreme carbon fiber used in our midrange drive units is also the key to the performance of our woofers, resulting in lighter-than-air dynamics and the impact you expect in a flagship Speaker that can play down to 20Hz in-room. This technology is 30% lighter than

standard carbon fiber of the same thickness, with increased strength from using the unique process of stacking multiple layers. The unique weave is unmistakable and distributes break-up modes without sharp response peaks, while extending bandwidth. Simply perfect.





# CNC MILLED DPC

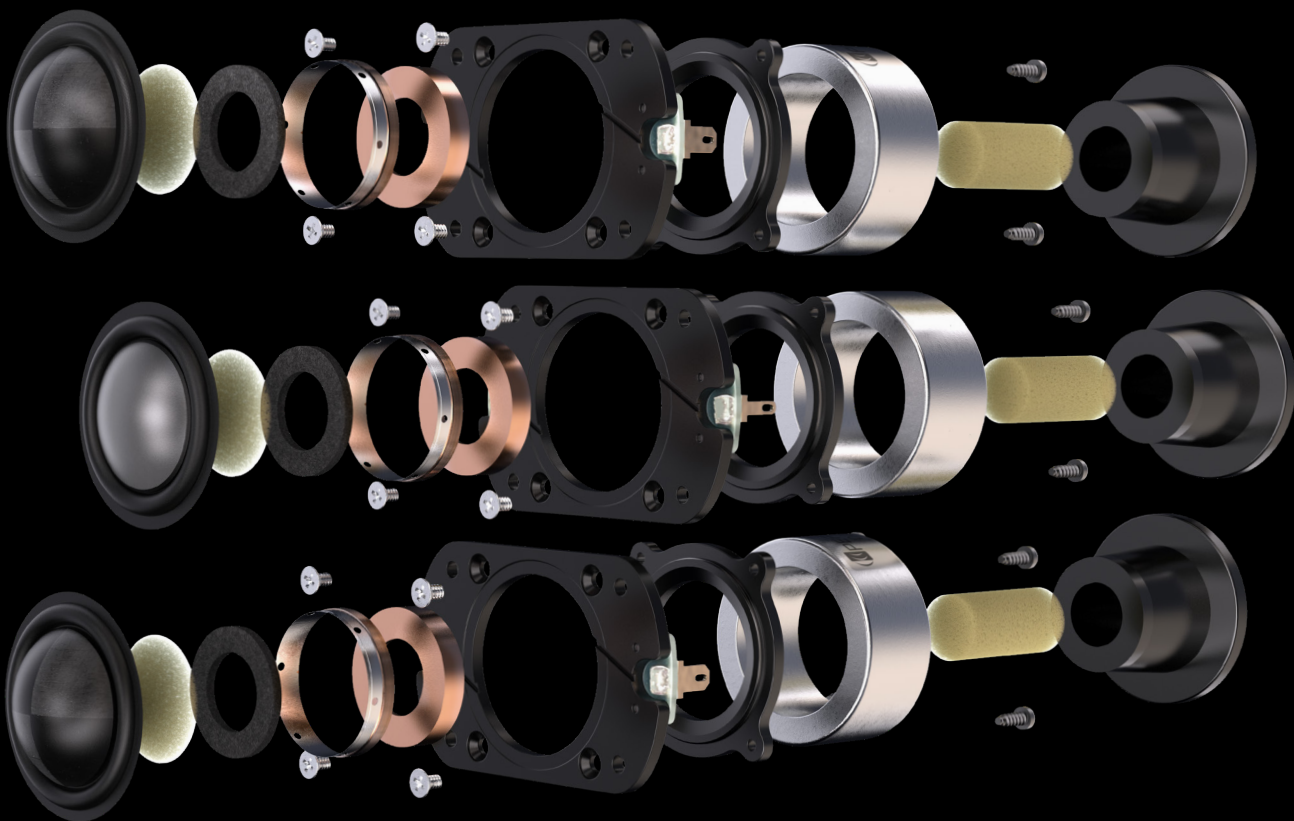
THE HEART OF EVERY PERLISTEN™ SPEAKER  
**IS OUR PATENT PENDING DPC ARRAY**

For the S7t-Limited, we've taken the technology to another level by manufacturing the array using Aluminum 6061-T6 alloy. Starting with a 40mm thick billet, the array is milled using a 5-axis CNC. Each part is precisely cut to 0.1mm tolerances, heat treated and then ultimately anodized to the final cosmetic. The real benefit is not just cosmetic and mechanical. Here, the aluminum DPC doubles as a massive thermal heatsink for all three dome tweeters in the array conjoining the existing aluminum heatsinks that each tweeter assembly already employs. Unique to the

S7t Limited, they are now thermally coupled to the aluminum DPC. This not only increases power handling and reduces thermal compression of the individual units, but also maintains the same temperature across all drive units. This ensures the complete DPC array tracks as a single unit, effectively avoiding thermal runaway of any one tweeter or any non-linear compression from one unit to the next. This technique is often applied in audio amplifier design, this is a first for multiple loudspeaker transducers.

Aluminum 6061-T6





# IMPROVED WOOFER

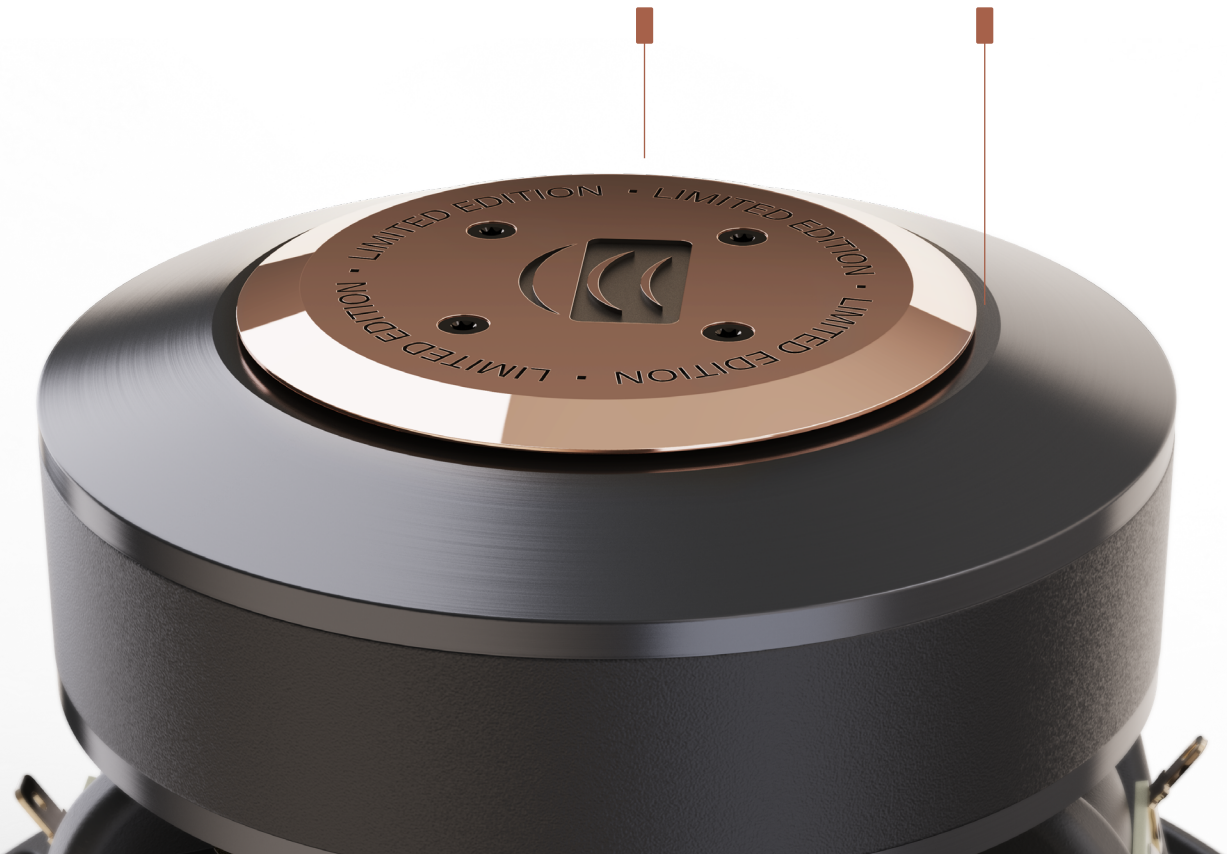
## THE S7t ALREADY SET THE STANDARD FOR PERLISTEN™ BASS PERFORMANCE

With accurate transient response, low distortion, and excellent low frequency extension. Is it possible to improve upon this? Drawing on the existing Textreme thin ply carbon diaphragm (TPCD) and suspension components, we set out to improve low frequency capability and thermal management. The re-designed voice coil and magnetic circuit now enable 20% more linear excursion, yet further reduced the overall inductance. This was achieved by utilizing a secondary shorting ring and re-designed voice coil windings. The secondary shorting ring doubles as a

large heatsink inside the motor structure, coupled to the external copper heatsink using a unique mounting system of aluminum fasteners. The external heatsink is floated above the rear of the t-yoke assembly allowing for convection cooling of the voice coil and heatsinks as the air flow created by the voice coil's excursion quietly flows past. All of these refinements yield improvements in all key performance categories: Linear excursion, distortion, thermal compression, transient performance, and midrange clarity.

External Copper Heatsink

Convection cooling



TPCD

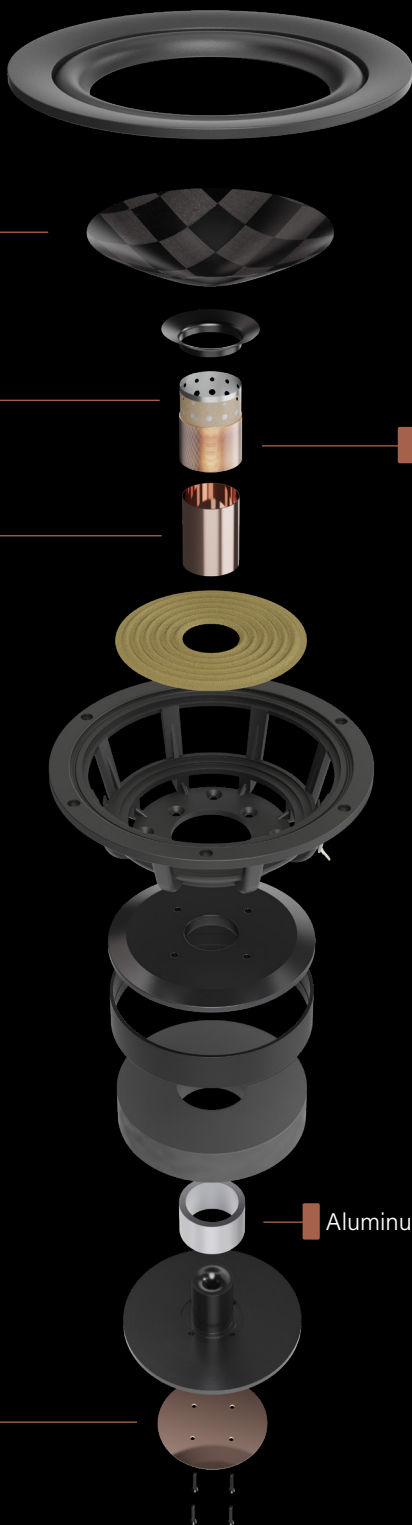
Convection cooling

Copper shorting ring

Longer windings, lower inductance

Aluminum heatsink, secondary shorting ring

External Copper Heatsink



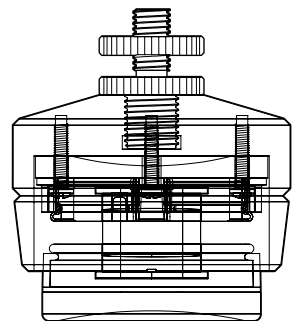


# ISOACOUSTICS ISOLATION

WITH THE ADDED PERFORMANCE OF THE  
REFINED WOOFER DESIGN, THE NEED FOR  
BETTER STABILITY AND VIBRATION ISOLATION  
**IS NOW MORE IMPORTANT THAN EVER**

Working with the Engineers at IsoAcoustics, leveraged from their patented technology, we have developed a custom PERLISTEN™ isolation/damping system only available on the S7t-Limited. This provides a high degree of isolation while resisting lateral movement and oscilla-

tions to maintain alignment with the listening position. Internal reflections from the hard-supporting surface are attenuated resulting in greater sound clarity and openness. Furthermore, the massive 18 kg machined steel base keeps the speaker cabinet grounded.



*IsoAcoustics patented  
technology*





Stainless Steel,  
CNC machined

Silicon Rubber

CNC machined Steel base  
20mm thick, 18kg (39.6lbs)

“MUSIC IS  
THE DIVINE  
WAY TO TELL  
BEAUTIFUL,  
POETIC THINGS  
TO THE HEART”

– PABLO CASALS, CELLIST







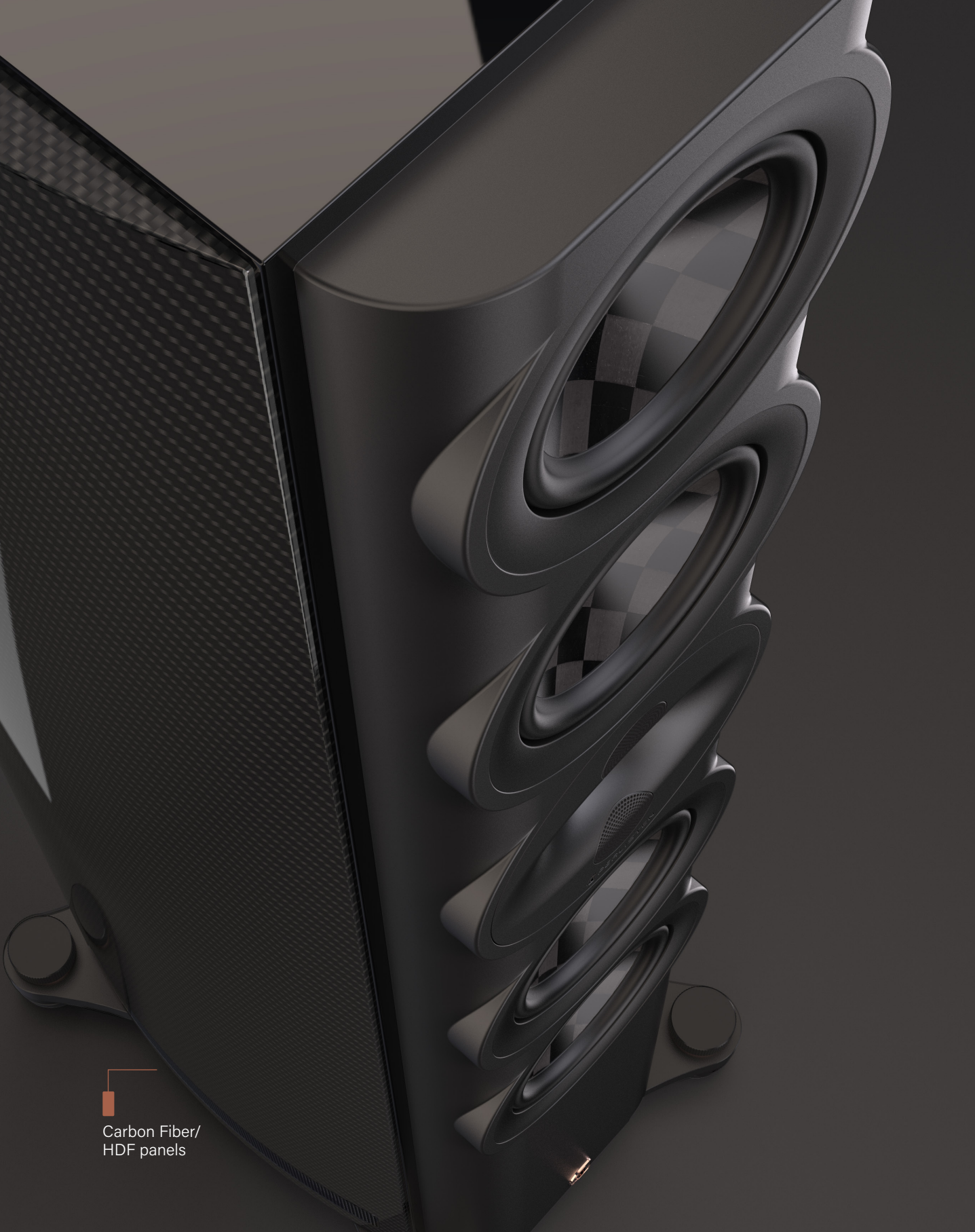
# UPDATED CABINET WITH CARBON FIBER

THE CABINET STRUCTURE OF THE ORIGINAL  
S7t HAS BEEN UPGRADED WITH RADIUSED  
**CARBON FIBER OVER HDF SIDE PANELS**

Initially intended for its stunning beauty and increased stiffness, the radiused panels also create a moderate 8% increase in cabinet volume without increasing the speaker's

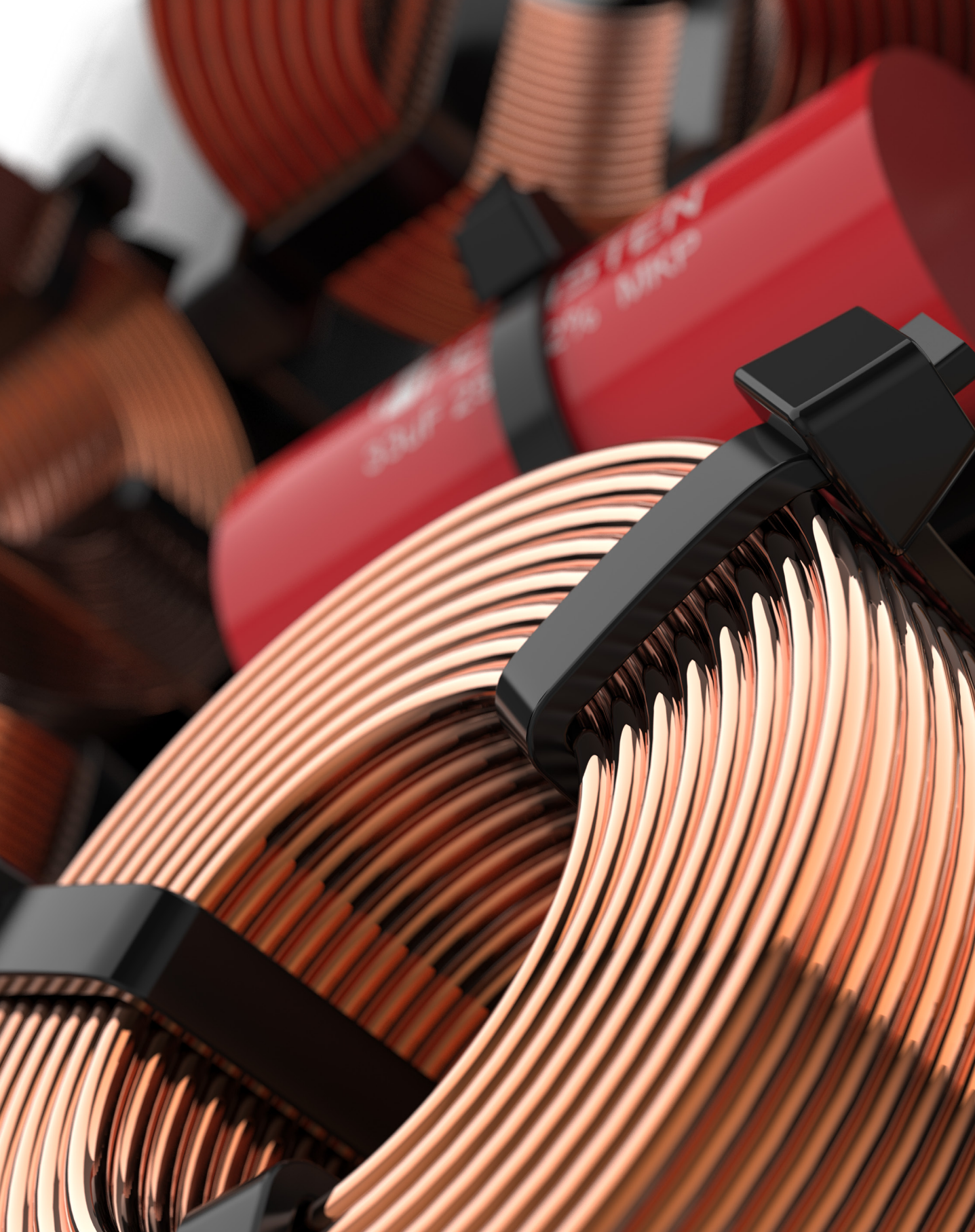
footprint. The increased volume allows for full advantage to be taken of newly designed woofer's excursion capabilities.





Carbon Fiber/  
HDF panels

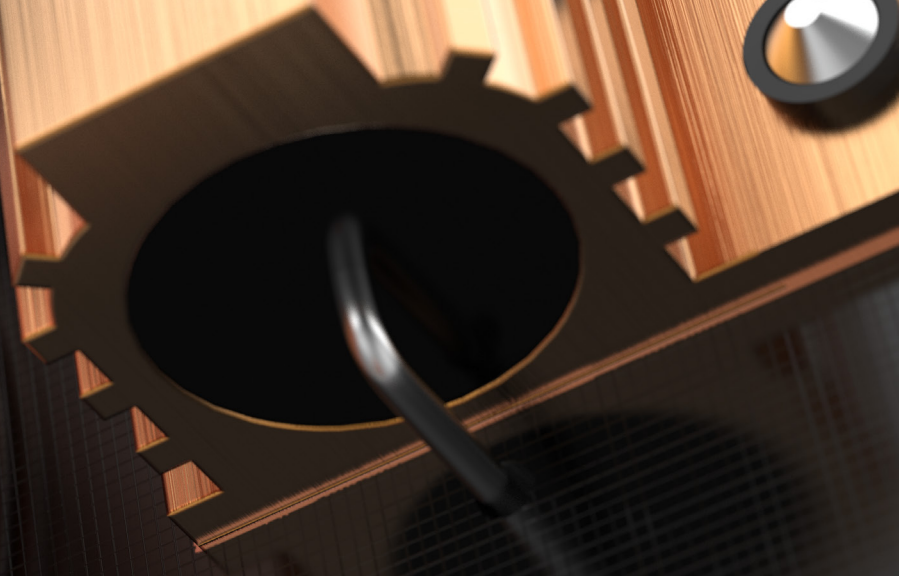
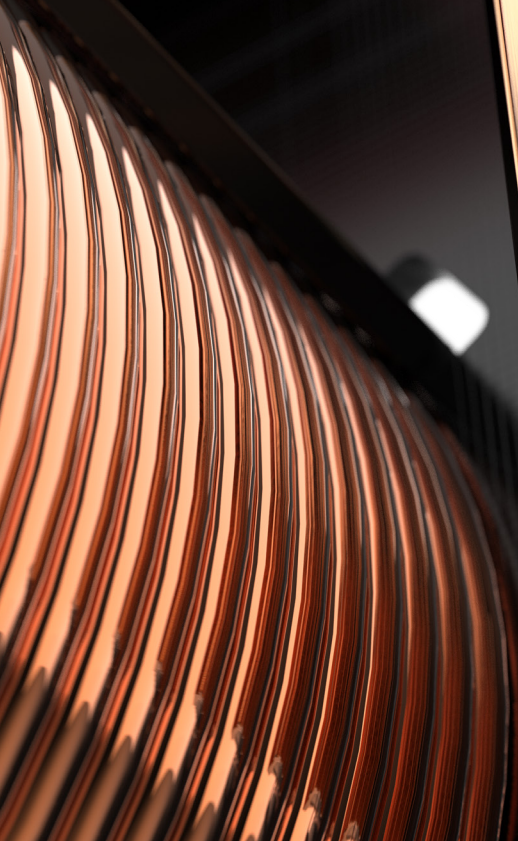


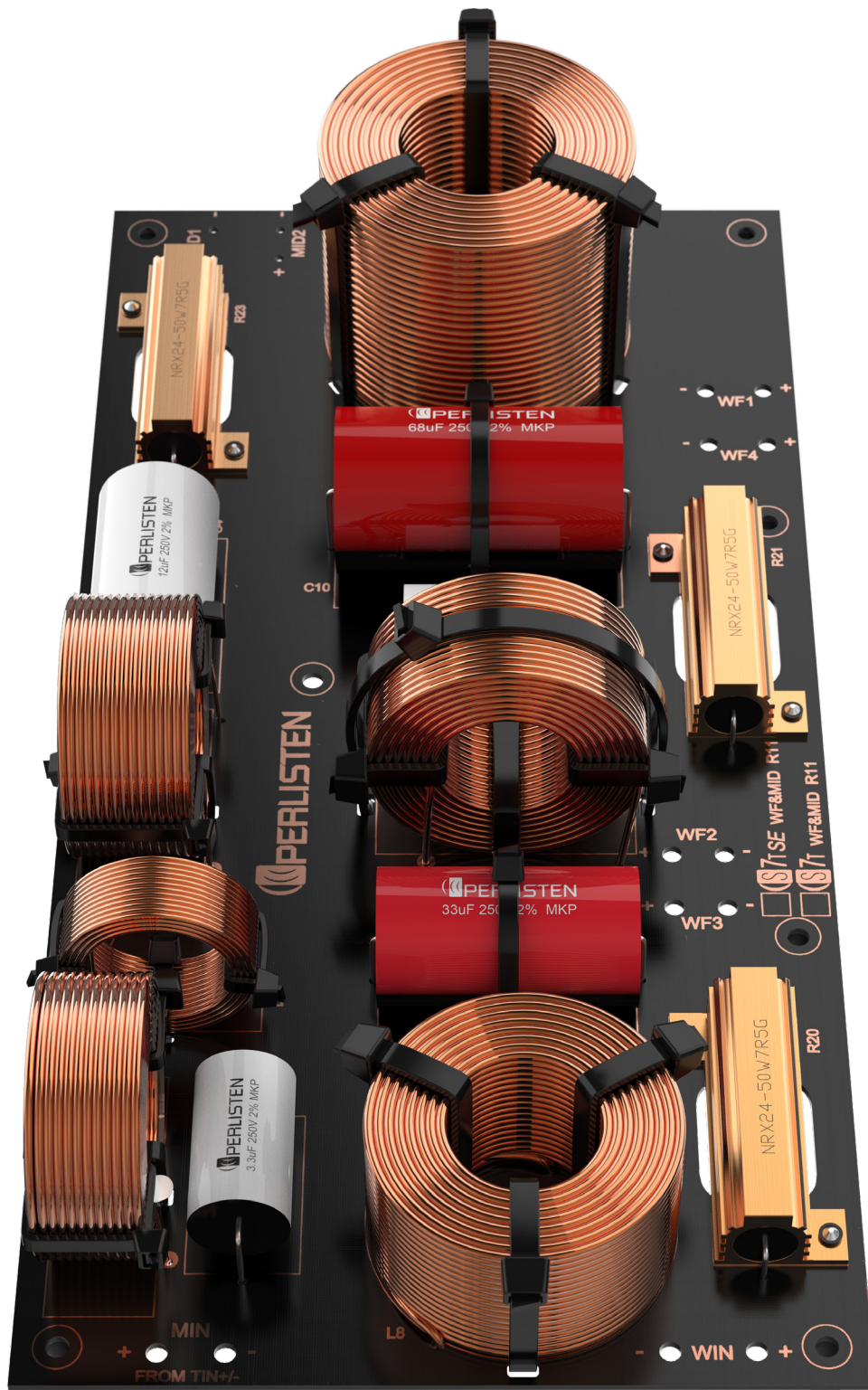




NRX24-50WTR5G

200







# RE-DESIGNED CROSSOVER

## OUR MOST AMBITIOUS ENDEAVOR YET

In order to take the S7t-Limited to new heights of performance we've not only revised the crossover design for the new cabinet and woofer, but for the Limited Edition we now are sorting all components to 1% tolerances. Furthermore, for the limited edition, each speaker pair and crossover are hand matched to within

0.5dB at our USA Research and Development headquarters located in Madison, WI. Here at our headquarters, we will perform Klippel nearfield scans of each speaker, pair match, certify and provide each customer with spinorama measurements of their actual speakers.







# ENGINEERED & PERCEPTUALIZED IN USA

**EACH PAIR OF SPEAKERS WILL BE HAND  
MATCHED AND CERTIFIED AT OUR**  
HEADQUARTERS LOCATED IN MADISON,  
WISCONSIN

Here we have the ability to perform  
a full battery of measurements. And  
for a very limited and exclusive run  
of S7t's, we will provide these mea-

surements to the owner certifying  
the results. Each speaker will be in-  
dividually signed and serialized by  
our CEO, Dan Roemer.









 PERLISTEN

YOU WERE ONCE SONICALLY LOST  
**NOW YOU HAVE BEEN FOUND®**

