

2017/2018

GROUND ZERO®  
GERMAN ENGINEERING



### **The Rise of the GROUND ZERO Company**

GROUND ZERO has been founded back in 1995 by Karl Felix Lautner distributing car audio products "Made in USA" and introduced the revolutionary subwoofers of GZ Engineering USA to the European market in 1997. The following years, the German Company took over the European trademark rights of "GROUND ZERO" and started developing market specific products. Finally, 2003 the GROUND ZERO GmbH took over all global trademarks from the discontinued US company and expanded the distribution to customers worldwide. Today, more than 300 sophisticated audio products developed and designed at the GROUND ZERO in-house engineering department are available in more than 60 countries globally.

### **Ensuring Superior Quality of GROUND ZERO Products**

The GROUND ZERO product range includes speakers, subwoofers, amplifiers and further digital audio equipment for enthusiastic customers. Satisfying high demands and quality, Ground Zero carefully monitors every step of the production starting at the development using top-notch tools and highly accurate measurement equipment such as the laser controlled KLIPPEL® system to optimize every detail. Precise amplifier measurement equipment by Audio Precision® results in power ratings corresponding to the acknowledged CEA 2006-A standard. Without exceptions, every single product is evaluated by extensive testing and quality control prior to its final production release and market launch.

### **On the Winner's Side with GROUND ZERO**

Many international car audio journals confirm the highest product quality impressing even sophisticated customers. However, the most convincing evidence is provided by the huge amount of GROUND ZERO equipped cars worldwide. With an outstanding audio performance, they succeed to be part of the winner's circle of European and World SQ and SPL Championships every season.

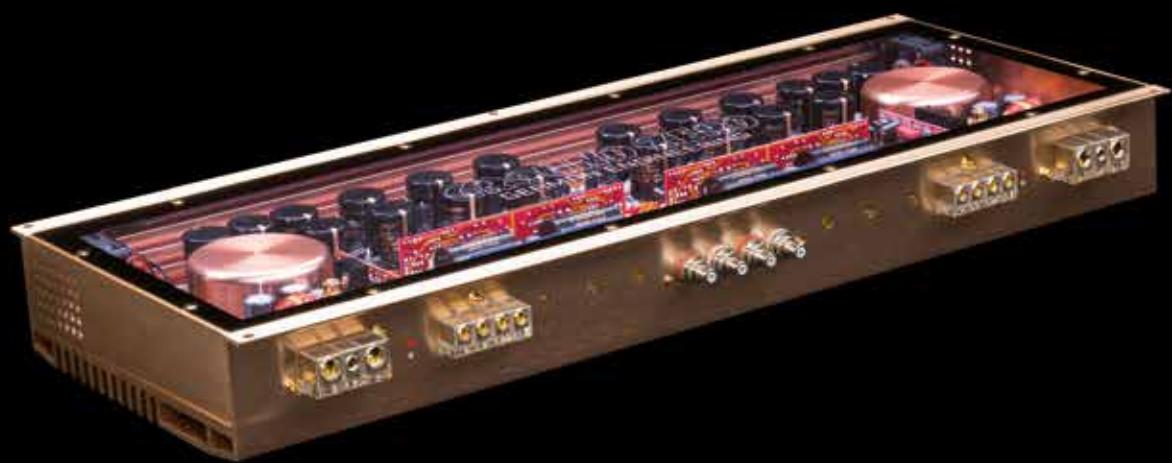


Listening to music can be emotional, impressive, relaxing or enjoyable. At that, it doesn't matter what kind of music is the personal favorite, whether it's Instrumental, Jazz, Electro, Latin, Classic, Rock or any other music direction. Nor is it very important if the music is played loud or gently. GROUND ZERO understands and considers the different wishes of all customers while developing new products. Apart from that, the target is to create the most realistic sound, to transfer the soul of music and the intention of the performer.

Summarized to one phrase, GROUND ZERO respects the musical

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The EISA awarded REFERENCE components obtain the highest attention and care during a long lasting development. Without any compromise, each component is selected from the best ones available on the market. Highest production quality and the most accurate supervision of every single part ensure not less than perfect performance, ultimate sound quality and workmanship for the highest demanding customer. Emphasizing the high-end status of the REFERENCE products, each amplifier, speaker and subwoofer is finally certified by GROUND ZERO's in-house quality department and delivered in a classy, logo-branded wooden box handmade in Germany.



## REFERENCE Pure High End Amplifiers

The designation of the REFERENCE 2PURE and REFERENCE 4PURE amplifiers reveal the essential idea behind: Pure Sound Quality

These two models waive all kind of filters and unnecessary controllers influencing the signal. Removing these parts during the development process leads to a completely new circuit layout with short and direct signal flow from the input sockets to the speaker terminals.

The components used for these master pieces of analog amplification technology have been selected with highest care opposing any compromises and have even been engineered exclusively for the REFERENCE PURE models.

The power supply has been separated electrically as well as physically leading to an absolute symmetrical layout of the circuit that is the basis for these real dual mono and dual stereo amplifiers.

The amazing output power of up to 1150 Watts per channel provides another contribution to the unbelievable precise and detailed REFERENCE sound, punchy and dynamic as well as warm and enjoyable.

With highest imaginable quality, these amplifiers are setting benchmarks in each category.

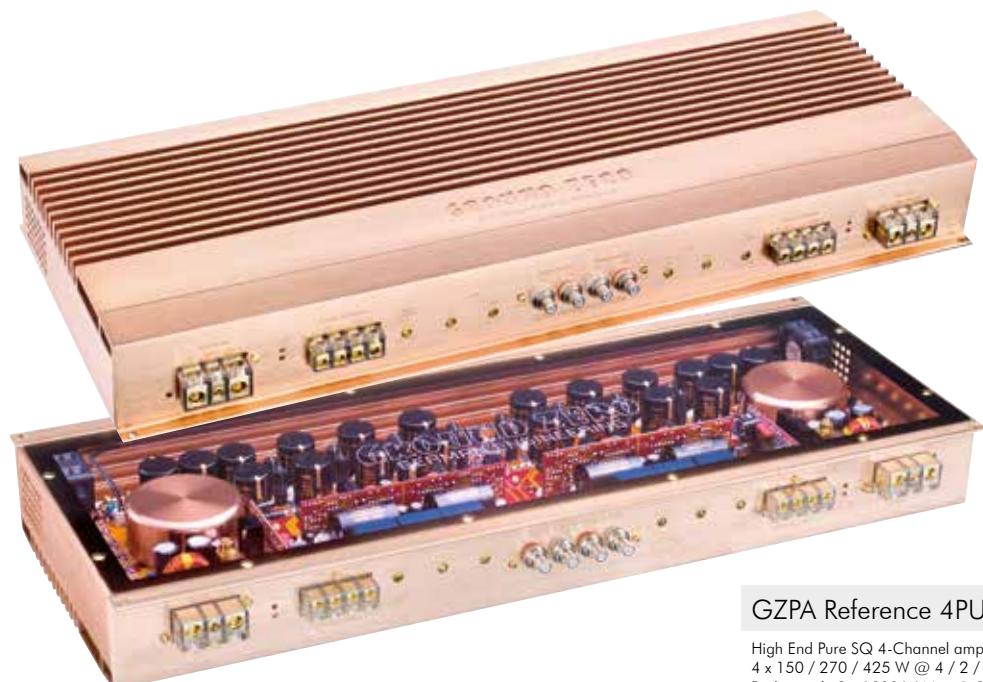
- High End Sound quality amplifiers
- Variable Bias setting
- Symmetrical design
- Separated L & R Gain control
- No filters – PURE and direct sound
- Rhodium RCA sockets
- Audio optimized ALPS potentiometers
- High End Sanken transistors
- GZ exclusive Mundorf capacitors
- White LED illuminated PCB
- Plexi glas bottom plate





GZPA Reference 2PURE

High End Pure SQ 2-Channel amplifier  
2 x 420 / 750 / 1150 W @ 4 / 2 / 1 Ω  
Bridgemode 1 x 2700 W Max @ 2 Ω  
Symmetrical dual mono design



GZPA Reference 4PURE

High End Pure SQ 4-Channel amplifier  
4 x 150 / 270 / 425 W @ 4 / 2 / 1 Ω  
Bridgemode 2 x 1000 W Max @ 2 Ω  
Symmetrical dual 2 channel design

## REFERENCE High End Amplifiers

Only the best components ever have been considered good enough to find their way to the GROUND ZERO REFERENCE amplifier line-up. Each model offers adjustable BIAS control, setting the operating mode from class A/B very close to pure class A. Apart from that, all models feature wide-band filters with bypass function additionally. Massive and encapsulated terminals turn the REFERENCE amplifiers into unique, ultimate sound quality artworks.

- High End Sound quality amplifiers
- Variable Bias setting
- Wide band crossover filters up to 4 kHz
- Gold plated RCA sockets
- High End Sanken transistors
- White LED illuminated PCB
- Plexi glas bottom plate



GZPA Reference 4SYM

High End SQ 4-Channel amplifier  
4 x 150 / 270 / 425 W @ 4 / 2 / 1 Ω  
Bridgemode 2 x 1000 W Max @ 2 Ω  
Highpass / Lowpass / Bandpass / Bypass  
Symmetrical dual 2 channel design  
GZ exclusive Mundorf capacitors

## GZPA Reference 2SYM

High End SQ 2-Channel amplifier  
2 x 420 / 750 / 1150 W @ 4 / 2 / 1 Ω  
Bridgemode 1 x 2700 W Max @ 2 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bypass / Phaseshift  
Symmetrical dual mono design  
GZ exclusive Mundorf capacitors  
Bass remote control included



## GZPA Reference 2XS

High End SQ 2-Channel amplifier  
2 x 200 / 380 W @ 4 / 2 Ω  
Bridgemode 1 x 900 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bypass / Phaseshift  
Selected high quality parts  
Bass remote control included

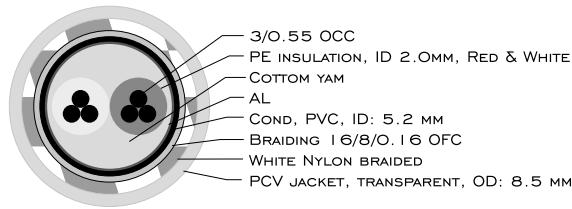


## GZPA Reference 4XS

High End SQ 4-Channel amplifier  
4 x 120 / 220 W @ 4 / 2 Ω  
Bridgemode 2 x 500 W Max @ 4 Ω  
Highpass / Lowpass / Bandpass / Bypass  
Selected high quality parts

## REFERENCE RCA Cables

- High End directional RCA cable
- OCC signal wire with highest purity
- Rhodium plated connectors
- Silver soldering for loss free wire connection
- Real carbon shell for optimized shielding
- OFC and additional AL shielding
- Superior high resolution sound quality
- Enormous 3 dimensional sound stage
- High temperature stable car specific transparent PVC jacket
- Optimized for car, home and cinema applications



**GZCC Reference**

<u>GZCC Reference 105RH</u>
1.05 m / 3.44 ft
<u>GZCC Reference 157RH</u>
1.57 m / 5.15 ft
<u>GZCC Reference 314RH</u>
3.14 m / 10.3 ft
<u>GZCC Reference 549RH</u>
5.49 m / 18.01 ft

### Definition of Rhodium

One of the most costly and rare metals

As a member of the exclusive platinum group, Rhodium is one of the most costly and rare materials used for making highest quality plug's plating. It's extremely hard and doesn't corrode even under toughest conditions as in car audio use beside the reliability, Rhodium plated connectors provide fast, powerful, controlled bass, an open and extremely palpable midrange with detailed and transparent mid- to upper frequencies performance, which gives a smooth, nuanced wideband tonal balance.

### Definition of OCC

Continuous casted pure crystalline copper wire

In 1986 the continuous casting (OCC) process was introduced to the world. High pure crystalline copper casting was developed by professor Ohno of the Chiba Institute of Technology in Japan.

OCC is a single, long grain copper crystalline structure build by using a heated mould and relevant moulding speed, that solved the annealing process problems and created a better uniform crystalline structure which leads to an enormous high resolution sound performance.

## REFERENCE Speaker Cables

- High End directional speaker cable
- Silver plated OFC wire combined with pure OFC wire
- Superior high resolution sound quality
- Detailed and highly precise mid and high frequency performance
- High affecting surface because of ultra thin strands which leads to enormous controlled bass performance
- High temperature stable car specific PVC sheath
- Available on high quality ABS plastic spools
- Optimized for Car, Home and cinema applications



**GZSC REF 1.5S-OFC**

2 x 1.50 mm<sup>2</sup>/ 15 AWG  
Strands:  
2\*(4\*21/0.115 OFC+3\*28/0.10 SPC+PVC)  
OD 3.8 + 3.8 / 0.15" + 0.15"  
Cable length: 48 m / 157.48 ft



**GZSC REF 2.5S-OFC**

2 x 2.50 mm<sup>2</sup>/ 13 AWG  
Strands:  
2\*(4\*34/0.115 OFC+3\*45/0.10 SPC+PVC)  
OD 4.2 + 4.2 / 0.17" + 0.17"  
Cable length: 39 m / 127.95 ft



**GZSC REF 4.0S-OFC**

2 x 4.00 mm<sup>2</sup>/ 11 AWG  
Strands:  
2\*(4\*55/0.115 OFC+3\*72/0.10 SPC+PVC)  
OD 5 + 5 / 0.2" + 0.2"  
Cable length: 30 m / 98.43 ft

## REFERENCE High End Speakers

REFERENCE speakers are designed for sophisticated High End music lovers. Accurately hand built in Europe, selected in corresponding pairs and delivered in classy wooden boxes. Midrange and mid bass drivers are composed of hand coated pressed paper cones and copper voice coils spooled carefully, while baskets, assembled manually using machined aluminum parts form the basis for outstanding High End sound quality.

The REFERENCE silk dome tweeter provides outstanding low resonance frequency and offers particular spatial and precise audio reproduction.

- Noble EISA awarded High End speakers
- Handmade in Europe and selected in pairs
- Customized hand-build baskets
- Coated high tech pressed paper cones
- Linearized, Klippen optimized motors
- Including stable hexagon-hole protection grills
- Packed in noble German made wooden boxes
- Superior sound performance
- Harmonic and natural atmosphere
- THE Reference in sound quality



### GZPT Reference 28



High End 28 mm / 1.1" tweeter  
100 WRMS / 150 WMAX  
1.5 – 30 kHz / FS: 600 Hz  
2 layer hand coated silk dome  
Damped coupled chamber  
Chromed aluminum housing  
Linearized dual neo magnet  
Handmade in Germany



Optional  
speaker housing  
GZSP 28TW



### GZPM Reference 80

High End 80 mm / 3.15" midrange  
80 WRMS / 120 WMAX  
150 – 6000 Hz / FS: 107.5 Hz  
High flexible Conex spider  
Low loss flat rubber surround  
Hand assembled aluminum basket  
Handmade in Europe



### GZMW Reference 180

High End 180 mm / 7.09" midwoofer  
100 WRMS / 150 WMAX  
40 – 3500 Hz / FS: 56.8 Hz  
High flexible Conex spider  
Low loss flat rubber surround  
Hand assembled aluminum basket  
Handmade in Europe



## REFERENCE High End Subwoofer

For most accurate bass performance, the unique REFERENCE subwoofer comes with a lot of particular solutions, such as a number of linearization parts added to the magnet system optimizing the impedance and eliminating distortion. This exceptional subwoofer has been optimized to perform in very small enclosures.

- High End EISA-awarded SQ subwoofer
- Handmade in Germany
- Torsion-free 3-Layer sandwich cone
- 50 mm / 2" high excursion copper voice coil
- Hightech, lightweight rubber surround
- Double Layer BIMAX® spider
- Impedance linearizing shorting rings
- CNC machined aluminum magnet cover
- Resonance free aluminum cast basket
- For music enthusiasts looking for the ultimate SQ



GZPW Reference 250



250 mm / 10" subwoofer  
500 WRMS / 2 x 2 Ω  
31.3 Hz / Qts 0.40  
VAS 36.5 L / 1.29 ft<sup>3</sup>



The products of the PLUTONIUM line are suitable for either ultimate SPL level or high-end sound quality. To achieve one of these targets, exceptional materials and technologies are applied during the development. The technical, electrical and mechanical skills of the resulting products convince not only during worldwide SPL competitions but also High End enthusiasts with outstanding audio reproduction ability. Starting from the market release, the subwoofers have set benchmarks in all SPL competitions around the world and have been awarded for best performance by numerous test magazines.



## PLUTONIUM Amplifiers

The PLUTONIUM series contains a range of extremely powerful class D amplifiers developed to ensure best subwoofer performance for highest demands such as serious SPL competitions.

- Class D mono subwoofer amplifiers
- Optimized for serious SPL setups
- Stabilized power supplies
- 1 Ohm stable high current circuits
- Linkable up to 23000 Watts
- Variable filters (Subsonic / Lowpass)
- Variable phaseshift, bass boost
- Bass remote control



GZPA 1.10K-HCX

High power mono amplifier  
3200 / 5900 / 10500 W @ 4 / 2 / 1 Ω  
Linkmode 23000 W Max @ 2 Ω  
Stabilized eightfold power supply



GZPA 1.8K-HCX

High power mono amplifier  
2600 / 4800 / 8400 W @ 4 / 2 / 1 Ω  
Linkmode 18600 W Max @ 2 Ω  
Stabilized sixfold power supply

GZPA 1.6K-HCX

High power mono amplifier  
1700 / 3200 / 5800 W @ 4 / 2 / 1 Ω  
Linkmode 13600 W Max @ 2 Ω  
Stabilized sixfold power supply

GZPA 1.4K-HCX

High power mono amplifier  
1200 / 2400 / 4000 W @ 4 / 2 / 1 Ω  
Linkmode 10000 W Max @ 2 Ω  
Stabilized dual power supply

# THE GERMANATOR

ÜBERWOOFER BY **GROUND ZERO**®

## The GERMANATOR

Admittedly, there are some really impressing subwoofers in the car audio market. However, none of them compares even in approach to this monster of subwoofer technology.

With a huge diameter of 33" / 84 cm this model called "The GERMANATOR" delivers an unimaginable kind of low and lowest frequency response ...in other words, prepare for earth-shaking bass never heard or felt like this before!

- The ULTIMATE XXXL Subwoofer
- 84 cm / 33" PURE POWER
- Fiber reinforced paper cone
- Multilayer foam U-Shape high roll surround
- High power 160 mm / 6" flat wire voice coil
- Progressive 5-Layer spider
- Massive aluminum cast basket
- High efficient 4x ferrite magnet
- Designed for REAL LOW BASS



The GERMANATOR

840 mm / 33" subwoofer  
15000 WRMS / 2 x 1 Ω  
24.42 Hz / Qts 0.51  
VAS 534 L / 18.86 ft³

## PLUTONIUM EXTREME Subwoofers

To reach highest SPL levels under competition conditions requires components with extreme performance ability. The PLUTONIUM series EXTREME SPL subwoofers are therefore capable of handling a huge amount of amplifier power providing the necessary basis for winners.

- High power SPL EXTREME subwoofers
- Handmade carbon sandwich cone
- Multilayer foam V-Shape SPL surround
- High temperature flat wire Japan-made voice coils
- Multilayer Conex spiders
- Impedance linearizing shorting copper rings
- Massive aluminum cast basket
- Designed for extreme SPL competition



### GZPW 12SPL-EXTREME

300 mm / 12" subwoofer  
8000 WSPL / 2 x 1 Ω  
47.7 Hz / Qts 0.45  
VAS 14.9 L / 0.53 ft<sup>3</sup>  
4-Layer Conex spider  
75 mm / 3" aluminum voice coil



### GZPW 15SPL-EXTREME

380 mm / 15" subwoofer  
15000 WSPL / 2 x 1 Ω  
46.7 Hz / Qts 0.31  
VAS 22.9 L / 0.81 ft<sup>3</sup>  
5-Layer Conex spider  
100 mm / 4" CCA voice coil

### GZPW 18SPL-EXTREME (no image)

460 mm / 18" subwoofer  
15000 WSPL / 2 x 1 Ω  
45.1 Hz / Qts 0.31  
VAS 43.5 L / 1.54 ft<sup>3</sup>  
5-Layer Conex spider  
100 mm / 4" CCA voice coil

## PLUTONIUM SPL Subwoofers

The PLUTONIUM subwoofers are probably the most famous GROUND ZERO products. Starting from the market release, the subwoofers have set benchmarks in all SPL competitions around the world and have been awarded for best performance by numerous test magazines.

- High power SPL subwoofers
- Fiber reinforced paper cone
- Multilayer foam V-Shape SPL surround
- High temperature flat wire Japan-made voice coils
- 4-Layer Conex spiders
- Impedance linearizing shorting copper rings
- Massive aluminum cast basket
- Designed for advanced SPL competition

GZPW 10SPL

250 mm / 10" subwoofer  
6500 WSPL / 2 x 1.6 Ω  
51.7 Hz / Qts 0.40  
VAS 6.9 L / 0.24 ft<sup>3</sup>  
75 mm / 3" voice coil



GZPW 12SPL

300 mm / 12" subwoofer  
6500 WSPL / 2 x 1 Ω  
47.7 Hz / Qts 0.45  
VAS 14.9 L / 0.53 ft<sup>3</sup>  
75 mm / 3" flat wire voice coil

GZPW 15SPL

380 mm / 15" subwoofer  
10000 WSPL / 2 x 1 Ω  
39.1 Hz / Qts 0.23  
VAS 36.8 L / 1.3 ft<sup>3</sup>  
100 mm / 4" flat wire voice coil



GZPW 18SPL

460 mm / 18" subwoofer  
10000 WSPL / 2 x 1 Ω  
34 Hz / Qts 0.26  
VAS 87 L / 3.07 ft<sup>3</sup>  
100 mm / 4" flat wire voice coil



GZPW 21SPL

540 mm / 21" subwoofer  
10000 WSPL / 2 x 1 Ω  
34.5 Hz / Qts 0.55  
VAS 111.9 L / 3.95 ft<sup>3</sup>  
130 mm / 5" flat wire voice coil

## PLUTONIUM Xmax Subwoofer

Long awaited, now the brand new GZ PLUTONIUM Xmax subwoofer follows in the footsteps of the legendary GZPW 15XQ setting a new benchmark for cone excursions. To realize this, GROUND ZERO uses only components with extremely high power handling and a construction that has never been used before.

- The ultimate low bass subwoofer
- Massive aluminum cone
- GZ Xmax 3-layer foam „open U-shape“ surround
- Long stroke 100 mm / 4" CCA US-Made voice coil
- High flexible 4-Layer Nomex spiders
- Massive aluminum cast basket
- Designed for extreme low bass



## GZPW 15Xmax

High power 380 mm / 15" subwoofer  
6000 WRMS/ 2 x 1 Ω  
33.3 Hz / Qts 0.44  
VAS 22.81 L / 0.81 ft³  
80 mm / 3.15" Xmax



## PLUTONIUM Speakers

Developed for highly sophisticated sound quality requests. The drivers are available in various combinations as well as separately for individual 2 and 3-way active or passive applications.

- High End speakers for SQ enthusiasts
- Made in Germany and selected in pairs
- Resonance free aluminum cast baskets
- High tech aluminum and magnesium cones
- Impedance linearizing copper caps
- Powerful Klippel optimized motors
- Packed in noble German made wooden boxes
- Powerful and dynamic sound reproduction



GZPC 16.3SQ

High End 3 Way passive system  
200 WRMS / 300 WMAX  
30 – 30000 Hz  
Cutoff 200/3000 Hz  
Midwoofer: GZPK 16SQ  
Midrange: GZPM 80SQX  
Tweeter: GZPT 28SX  
Crossover: GZPX 16.3SQ  
Speaker grill included  
Handmade in Germany



GZPC 165SQ

High End 2 Way passive system  
150 WRMS / 250 WMAX  
30 – 30000 Hz / Cutoff 2800 Hz  
Midwoofer: GZPK 16SQ  
Tweeter: GZPT 28SX  
Crossover: GZPX 165SQ  
Speaker grill included  
Handmade in Germany



GZPC 165SQ-ACT

High End 2 Way active system  
Midwoofer: GZPK 16SQ  
Tweeter: GZPT 28SX  
Speaker grill included  
Handmade in Germany



GZPC 16.3SQ-ACT

High End 3 Way active system  
Midwoofer: GZPK 16SQ  
Midrange: GZPM 80SQX  
Tweeter: GZPT 28SX  
Speaker grill included  
Handmade in Germany



GZPT 28SX

High End 28 mm / 1.1" tweeter  
100 WRMS / 150 WMAX  
2 – 30 kHz / FS: 750 Hz  
2 layer coated silk dome  
Damped coupled chamber  
Anodized aluminum housing  
Linearized dual neo magnet  
Handmade in Germany



Optional speaker housing  
GZSP 28TW

Also available as  
GZPT 28SX CHROME EDITION



GZPM 80SQX

High End 80 mm / 3.15" midrange  
70 WRMS / 110 WMAX  
150 – 4000 Hz / FS: 109.4 Hz  
High tech magnesium cone  
Aluminum cast basket  
Linearized neodymium magnet  
Speaker grill included  
Handmade in Germany



Optional speaker housing  
GZSP 80MID



GZPK 16SQ

High End 165 mm / 6.5" midwoofer  
130 WRMS / 210 WMAX  
30 – 3000 Hz / FS: 45.3 Hz  
Ceramic anodized aluminum cone  
Aluminum cast basket  
Linearized ferrite magnet  
Speaker grill included  
Handmade in Germany

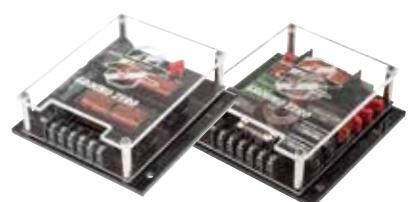
GZPX 165SQ

High End 2 Way crossover set  
Cutoff 2800 Hz  
For GZPK 16SQ + GZPT 28SX  
Mundorf Mcaps®  
Low distortion air coils  
Protection softfit  
MOX resistors  
Adjustable tweeter level



GZPX 16.3SQ

High End 3 Way crossover set  
Cutoff 200/3000 Hz  
For GZPK 16SQ + GZPM 80SQX + GZPT 28SX  
Mundorf Mcaps®  
Low distortion air coils  
Protection softfit  
MOX resistors  
Adjustable tweeter level



With several particular features of the High End PLUTONIUM line, GROUND ZERO managed to position the NUCLEAR line products at a lower price level. Nevertheless, the amazingly sounding speakers are "Made in Germany". The subwoofers are predestined for high level audio setups as well as for SPL competition while massive multi-channel and impressively powerful mono amplifiers deliver excellent performance.



## NUCLEAR Amplifiers

The NUCLEAR line of massive multi-channel and impressively powerful mono amplifiers deliver ultimate performance providing a variety of important features for sound adjustment.

- High power amplifiers
- 1 ohm stable high current circuits
- Stabilized dual power supplies
- SMD technology
- Wide band crossover filters
- Gold plated terminals and RCA sockets
- Bass remote control



GZNA 2850XII

High power 2 channel class AB amplifier  
2 x 430 / 800 / 1200 W @ 4 / 2 / 1 Ω  
Bridgemode 1 x 2800 W Max @ 2 Ω  
Subsonic / Highpass / Lowpass  
Bandpass/ Phaseshift / Bass Boost



GZNA 4330XII

High power 4 channel class AB amplifier  
4 x 200 / 350 / 550 W @ 4 / 2 / 1 Ω  
Bridgemode 2 x 1300 W Max @ 2 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Phaseshift / Bass Boost



GZNA 1.2550DXII

High power mono class D amplifier  
850 / 1500 / 2400 W @ 4 / 2 / 1 Ω  
Linkmode 6200 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost

## NUCLEAR SPL Subwoofers

Paired with the yellow colored surround stitch and an ultra solid perfectly ventilated aluminum cast basket, these subwoofers are predistined for high level audio setups and furthermore for serious competition use.

- High power SPL subwoofers
- Fiber reinforced paper cone
- Multilayer foam U-Shape SPL surround
- High temperature 75 mm / 3" CCA voice coils
- Multilayer Conex spiders
- Massive aluminum cast basket
- Designed for advanced SPL competition



GZNW 12XSPL

300 mm / 12" subwoofer  
4500 W SPL / 2 x 1 Ω  
38.1 Hz / Qts 0.41  
VAS 25.7 L / 0.91 ft<sup>3</sup>  
4-Layer Conex spider



GZNW 15XSPL

380 mm / 15" subwoofer  
5500 W SPL / 2 x 1 Ω  
39 Hz / Qts 0.57  
VAS 48 L / 1.69 ft<sup>3</sup>  
5-Layer Conex spider



## NUCLEAR Xmax Subwoofers

These two NUCLEAR Xmax subwoofers expand the new line of long excursion models introduced by the PLUTONIUM Xmax providing excellent low bass performance.

- High power low bass subwoofers
- Massive aluminum cone
- GZ Xmax 3-layer foam „open U-shape“ surround
- Long stroke 75 mm / 3" CCA US-made voice coil
- High flexible 4-Layer Nomex spider
- Massive aluminum cast basket
- Designed for extreme low bass



GZNW 12Xmax

300 mm / 12" subwoofer  
3000 WRMS / 2 x 1 Ω  
35.6 Hz / Qts 0.61  
VAS 13.59 L / 0.48 ft<sup>3</sup>  
60 mm / 2.36" Xmax



GZNW 15Xmax

380 mm / 15" subwoofer  
4000 WRMS / 2 x 1 Ω  
29.5 Hz / Qts 0.33  
VAS 35.72 L / 1.26 ft<sup>3</sup>  
80 mm / 3.15" Xmax

## NUCLEAR Speakers

The NUCLEAR line includes a passive 2-way system that fits most of the car's installation places. However, each of the three drivers is available separately, to compile an individual and customer specific active 2- or 3-way sound system as well.

- High quality speakers for SQ enthusiasts
- Made in Germany and selected in pairs
- Resonance free aluminum cast baskets
- Lightweight coated paper cones
- Impedance linearizing copper caps
- Powerful Klippel optimized motors
- Natural and emotional performance



**GZNC 1650SQ**



High End 2 Way passive system  
150 WRMS / 250 WMAX  
40 – 28000 Hz / Cutoff 2800 Hz  
Midwoofer: GZNK 165SQ  
Tweeter: GZNT 25SQ  
High quality crossover  
Speaker grill included  
Handmade in Germany



**GZNT 25SQ**



High Quality 25 mm / 1" tweeter  
80 WRMS / 130 WMAX  
2 – 28 kHz / FS: 750 Hz  
2 layer coated silk dome  
Damped coupled chamber  
Anodized aluminum housing  
High efficient neo magnet  
Handmade in Germany

**GZNM 80SQ**



High Quality 80 mm / 3.15" midrange  
60 WRMS / 100 WMAX  
150 – 5000 Hz / FS: 115 Hz  
Linearized neodymium magnet  
Speaker grill included  
Handmade in Germany



Optional speaker housing  
GZSP 80MID

**GZNK 165SQ**



High End 165 mm / 6.5" midwoofer  
130 WRMS / 200 WMAX  
40 – 3000 Hz / FS: 55.2 Hz  
Linearized ferrite magnet  
Speaker grill included  
Handmade in Germany



Each product of the URANIUM line-up has been developed carefully to fulfill the demands of music enthusiasts with high audiophile expectations at a reasonable price level. Applying all of Ground Zero's sound quality competition experience while tuning the product details carefully, result in emotional and amazing audio reproduction. The distinguished amplifiers point out the main purpose by their designation: SQ beyond the average!



## URANIUM Amplifiers

Particular features like the unique BIAS setting increase the sound quality to the next level while highly accurate and variable wide band filters allow various combinations of full active speaker setups.

- Sound quality class AB amplifiers
- Variable Bias setting
- Gold plated RCA sockets
- High End Sanken transistors
- Burr-Brown OP-amplifier
- Wide band crossover filters up to 4 kHz
- Gold plated terminals and RCA sockets



GZUA 6.200SQ-Plus

Sound quality 6 channel amplifier  
4 x 110 / 160 W Channel 1-4 @ 4 / 2 Ω  
2x 160 / 280 W Channel 5-6 @ 4 / 2 Ω  
2 x 320 W Channel 1-4 @ 4 Ω bridge mode  
1 x 560 W Channel 5-6 @ 4 Ω bridge mode  
Subsonic / Highpass / Lowpass  
Bandpass / Bypass



GZUA 4.150SQ-Plus

Sound quality 4 channel amplifier  
4 x 110 / 190 W @ 4 / 2 Ω  
Bridgemode 2 x 460 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bypass



GZUA 2.250SQ-Plus

Sound quality 2 channel amplifier  
2 x 180 / 320 / 500 W @ 4 / 2 / 1 Ω  
Bridgemode 1 x 1200 W Max @ 2 Ω  
Subsonic / Highpass / Lowpass / Bandpass  
Bypass / Phaseshift / Bass Boost  
Bass remote control included

## GZUC 650SQX

High quality 2 Way passive system  
140 WRMS / 220 WMAX  
40 – 25000 Hz / Cutoff 2800 Hz  
Midwoofer: GZUK 65SQX  
Tweeter: GZUT 25SQX  
Speaker grill included



## URANIUM Speakers

By using outstanding materials for the cones and by accurate tuning, these speakers provide an amazing sound quality performance. The drivers are available separately for active setups or compiled to a high quality 2-way passive speaker system.

- High tech speakers for ambitious SQ-applications
- Resonance free aluminum cast baskets
- Highly damped 2-Layer WFWC® cone
- LDW® surround for eliminating partial oscillation
- Variable bi-amping crossover
- Linearized, Klippel optimized motors
- Precise and harmonic sound for music lovers

## GZUT 25SQX

High quality 25 mm / 1" tweeter  
70 WRMS / 120 WMAX  
2 – 25 kHz / FS: 750 Hz  
Coated silk dome  
Damped coupled chamber  
Anodized aluminum housing  
High efficient neo magnet



## GZUF 60SQ

High quality 60 mm / 2.5" fullrange  
60 WRMS / 100 WMAX  
300 – 20000 Hz / FS: 150 Hz  
Black aluminum cone  
Fiber composite basket  
Neodymium magnet  
Speaker grill included  
Mounting accessories included



## GZUK 65SQX

High quality 165 mm / 6.5" midwoofer  
120 WRMS / 200 WMAX  
40 – 4000 Hz / FS: 55.1 Hz  
WFWC® cone  
LDW® surround  
Speaker grill included



## URANIUM Subwoofers

High performance speaker setups require equivalent low frequency extension.  
The URANIUM series subwoofers match perfectly and offer various enclosure options.

- High quality SQ subwoofers
- Pressed and coated paper cone
- 50 mm / 2.5" copper voice coils
- Audiophile POLYCOT spiders
- Filigree ventilated aluminum cast basket
- Designed for advanced SQ competition



## GZUW 12SQX

300 mm / 12" subwoofer  
600 WRMS / 2 x 2 Ω  
38.6 Hz / Qts 0.62  
VAS 41.1 L / 1.45 ft³

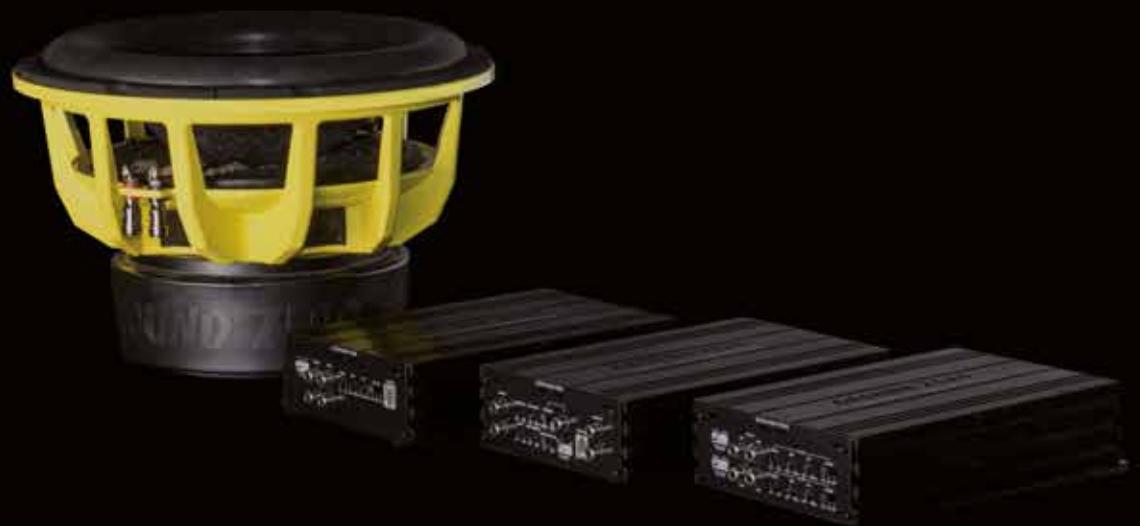
## GZUW 10SQX

250 mm / 10" subwoofer  
450 WRMS / 2 x 2 Ω  
46.7 Hz / Qts 0.62  
VAS 14.2 L / 0.5 ft³

## GZUW 8SQ

200 mm / 8" subwoofer  
300 WRMS / 2 x 2 Ω  
44.5 Hz / Qts 0.46  
VAS 12.1 L / 0.43 ft³

The HYDROGEN line satisfies all demands of highly sophisticated customers. Amazing performance, great sound quality and much higher SPL than imagined. The subwoofers have been developed to handle a huge amount of input power reaching extremely high bass levels to be used successfully under competition conditions. Especially for limited installation space, three extremely small amplifiers have been added to the line of well known existing high power models.



## HYDROGEN Mini Amplifiers

Meeting all requirements, 2- and a 4-channel models as well as a mono version in a small-sized black-anodized aluminum heatsink are available.

- Compact class D amplifiers
- Stabilized power supplies
- SMD technology
- Wide band crossover filters
- Massive power and speaker terminals
- High-Level inputs with auto-on



GZHA MINI FOUR

Compact 4 channel fullrange amplifier  
4 x 140 / 200 @ 4 / 2 Ω  
Bridgemode 2 x 500 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Phaseshift / Bass Boost



GZHA MINI TWO

Compact 2 channel fullrange amplifier  
2 x 130 / 230 W @ 4 / 2 Ω  
Bridgemode 1 x 550 W Max @ 2 Ω  
Subsonic / Highpass / Lowpass /  
Bandpass / Phaseshift  
Bass remote control included



GZHA MINI ONE

Compact mono subwoofer amplifier  
220 / 390 / 630 W @ 4 / 2 / 1 Ω  
Linkmode 1500 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost  
Bass remote control included

## HYDROGEN Amplifiers

The massive strand-cast aluminum heatsink of the HYDROGEN XII amplifiers is identical to the NUCLEAR line. The affordable 2- and 4-channel class AB models and the class D mono version feature latest SMD technology and a stabilized dual power supply.

- High power amplifiers
- Stabilized dual power supplies
- SMD technology
- Wide band crossover filters
- Gold plated terminals and RCA sockets
- Bass remote control



GZHA 1.1850DXII

High power mono class D amplifier  
700 / 1200 / 1850 W @ 4 / 2 / 1 Ω  
Linkmode 4800 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost



GZHA 2400XII

High power 2 channel class AB amplifier  
2 x 270 / 480 / 750 W @ 4 / 2 / 1 Ω  
Bridgemode 1 x 1800 W Max @ 2 Ω  
Subsonic / Highpass / Lowpass /  
Bandpass / Phaseshift / Bass Boost



GZHA 4200XII

High power 4 channel class AB amplifier  
4 x 140 / 200 @ 4 / 2 Ω  
Bridgemode 2 x 500 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass /  
Bandpass / Phaseshift / Bass Boost

## HYDROGEN Subwoofers

Following GROUND ZERO's very own tradition these subwoofers are predestined to reproduce realistic and extremely low bass even out of rather small enclosures.

- High power low bass subwoofers
- Massive aluminum cone
- U-Shape rubber surround
- High temperature copper voice coils
- Flexible Conex spider
- Massive aluminum cast basket
- Powerful low bass performance



**GZHW 30X**

300 mm / 12" subwoofer  
800 WRMS / 2 x 2 Ω  
23.5 Hz / Qts 0.33  
VAS 62 L / 2.19 ft<sup>3</sup>



**GZHW 25X**

High power 250 mm / 10" subwoofer  
600 WRMS / 2 x 2 Ω  
27.1 Hz / Qts 0.37  
VAS 27 L / 0.95 ft<sup>3</sup>



**GZHW 20X**

200 mm / 8" subwoofer  
400 WRMS / 2 x 2 Ω  
36 Hz / Qts 0.35  
VAS 8.3 L / 0.29 ft<sup>3</sup>

A vented bass enclosure increases low frequency output by adding the internally built up air pressure through a calculated port. Due to high airspeed however, flow noises could appear disturbing the sound quality. Following the same principle but avoiding noise, a passive radiator can replace the port. These two models are suitable for small enclosures (30-35 l!).

**GZUP 10    GZUP 12**

Diameter	25 cm / 10"	30 cm / 12"
Cone area (Sd)	346,36 cm <sup>2</sup>	510,71 cm <sup>2</sup>
Installation depth	7,3 cm / 2.87"	8,6 cm / 3.39"
FS	33,08 Hz	29,62 Hz
Mms	251.62 g	304.05 g



## HYDROGEN SPL Subwoofers

The HYDROGEN SPL subwoofer line-up contains five models in different sizes for various demands.

Massive aluminum cast baskets and a wide range of further technologies enhance the reachable SPL level.

- High power SPL subwoofers
- Fiber reinforced paper cone
- Multilayer foam U-Shape SPL surround
- High temperature copper US-made voice coils
- Progressive 2-Layer spiders
- Massive aluminum cast basket
- Powerful streetbass and SPL performance

### GZHW 30SPL

300 mm / 12" subwoofer  
3000 WSPL / 2 x 1 Ω  
35.4 Hz / Qts 0.44  
VAS 15.8 L / 0.56 ft<sup>3</sup>  
75 mm / 3" voice coil



### GZHW 38SPL

380 mm / 15" subwoofer  
3500 WSPL / 2 x 1 Ω  
36.3 Hz / Qts 0.52  
VAS 32.84 L / 1.6 ft<sup>3</sup>  
75 mm / 3" voice coil



### GZHW 8XSPL-D1

200 mm / 8" subwoofer  
1500 WSPL / 2 x 1 Ω  
39.3 Hz / Qts 0.45  
VAS 4.3 L / 0.15 ft<sup>3</sup>  
63 mm / 2.5" voice coil

### GZHW 10XSPL-D1

250 mm / 10" subwoofer  
2500 WSPL / 2 x 1 Ω  
40.5 Hz / Qts 0.412  
VAS 10.16 L / 0.36 ft<sup>3</sup>  
63 mm / 2.5" voice coil

### GZHW 18XSPL-D1

460 mm / 18" subwoofer  
4000 WSPL / 2 x 1 Ω  
34.3 Hz / Qts 0.381  
VAS 75.21 L / 2.66 ft<sup>3</sup>  
75 mm / 3" voice coil

The RADIOACTIVE line offers a wide range of exceptional high efficient speakers and subwoofers for daily and SPL use. During the development GROUND ZERO focused especially on natural and dynamical audio reproduction of digitally compressed music. Apart from some powerful amplifiers, the line contains extremely small amplifiers for limited space environments.



## RADIOACTIVE Micro Amplifiers

In a modern car environment, the installation space for an audio system is very limited. Due to this, the RADIOACTIVE line includes the smallest amplifiers GROUND ZERO ever built. The GZRA MICRO series amplifiers allow uncomplicated and space-saving installation and offer all necessary filters for the sound setup.

- Extremely compact amplifiers
- High efficient class D technology
- 2 ohm stable SMD circuit
- Wide band crossover filters
- High-Level inputs with auto-on



**GZRA MICRO ONE**

Compact mono amplifier  
220 / 350 W @ 4 / 2 Ω  
Subsonic / Lowpass  
Bandpass/ Bass Boost  
Bass remote control included



Original size



**GZRA MICRO FOUR**

Compact 4 channel fullrange amplifier  
4 x 60 / 100 @ 4 / 2 Ω  
Bridgemode 2 x 250 W Max @ 4 Ω  
Highpass / Lowpass



**GZRA 1.2500DX**

High power mono class D amplifier  
750 / 1400 / 2200 W @ 4 / 2 / 1 Ω  
Linkmode 6000 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost  
Stabilized triple power supply  
Bass remote control included



**GZRA 1.1650DX**

High power mono class D amplifier  
650 / 1250 / 1800 W @ 4 / 2 / 1 Ω  
Linkmode 4600 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost  
Stabilized dual power supply  
Bass remote control included



**GZRA 2255X**

High power 2 channel class AB amplifier  
2 x 150 / 250 @ 4 / 2 Ω  
Bridgemode 1 x 600 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bass Boost  
Bass remote control included



**GZRA 4230X**

High power 4 channel class AB amplifier  
4 x 140 / 230 @ 4 / 2 Ω  
Bridgemode 2 x 550 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bass Boost  
High current dual power supply



**GZRW 38XSPL-D2**

380 mm / 15" subwoofer  
1800 W SPL / 2 x 2 Ω  
33.5 Hz / Qts 0.62  
VAS 65.3 L / 2.3 ft<sup>3</sup>  
75 mm / 3" voice coil

### RADIOACTIVE SPL Subwoofers

RADIOACTIVE SPL subwoofers include some particular technologies for SPL use at a very reasonable price. The right choice for dedicated SPL competition rookies.

- High power SPL subwoofers
- Fiber reinforced paper cone
- Multilayer foam U-Shape SPL surround
- High temperature copper US-made voice coils
- Progressive double layer spiders
- The ultimate woofers for SPL-Rookies



**GZRW 25XSPL-D2**

250 mm / 10" subwoofer  
800 W SPL / 63 mm / 2.5" voice coil  
2 x 2 Ω / 44.8 Hz / Qts 0.64  
VAS 10.25 L / 0.36 ft<sup>3</sup>

**GZRW 30XSPL-D2**

300 mm / 12" subwoofer  
1500 W SPL / 75 mm / 3" voice coil  
2 x 2 Ω / 36.1 Hz / Qts 0.591  
VAS 22.94 L / 0.81 ft<sup>3</sup>



**GZRW 15D2**

380 mm / 15" subwoofer  
1000 WRMS / 2 x 2 Ω  
23.58 Hz / Qts 0.439  
VAS 163.08 L / 5.76 ft<sup>3</sup>  
75 mm / 3" voice coil

### RADIOACTIVE Subwoofers

Similar to the line of SPL models, the RADIOACTIVE subwoofers offer a number special components. However, instead of highest SPL, the main focus is set on excellent low bass performance for everyday use.

- Powerful low bass subwoofers
- Fiber reinforced paper cone
- Multilayer foam U-Shape surround
- High temperature copper voice coils
- High Xmax single layer spiders
- Low bass specialists



**GZRW 10D2/D4**

250 mm / 10" subwoofer  
600 WRMS / 63 mm / 2.5" voice coil  
**GZRW 10D2**  
2 x 2 Ω / 34 Hz / Qts 0.61  
VAS 23.2 L / 0.82 ft<sup>3</sup>  
**GZRW 10D4**  
2 x 4 Ω / 34.6 Hz / Qts 0.63  
VAS 22.5 L / 0.79 ft<sup>3</sup>

**GZRW 12D2/D4**

300 mm / 12" subwoofer  
800 WRMS / 75 mm / 3" voice coil  
**GZRW 12D2**  
2 x 2 Ω / 28.4 Hz / Qts 0.43  
VAS 50.4 L / 1.78 ft<sup>3</sup>  
**GZRW 12D4**  
2 x 4 Ω / 30.2 Hz / Qts 0.48  
VAS 47.6 L / 1.68 ft<sup>3</sup>



**GZRB 3000XSPL**

Loaded SPL subwoofer enclosure  
Woofers: GZRW 30XSPL-D2  
1500 W SPL / 2 x 2 Ω  
Solid MDF wood  
63 Liter / 2.22 ft<sup>3</sup> front bass tunnel  
Black Plexiglas front



**GZRW 8FL**

Flat 200 mm / 8" Woofer  
150 WRMS / 250 WMAX / 1x 2 Ω  
30 – 600 Hz / 45.3 Hz  
Qts 0.938 / VAS 17.6 L / 0.62 ft<sup>3</sup>  
Extra flat IMPP cone  
Rubber surround  
Nomex spider  
36 mm / 1.42" copper voice coil  
Flat steel basket  
Optimized for free-air applications

## RADIOACTIVE AL Speakers

Each RADIOACTIVE line speaker has been developed following the market request for dynamical and high efficient audio reproduction. Particular materials used for the midwoofers and tweeters enhance the performance especially when listening to compressed music files.

- Dynamic and efficient speakers for various purpose
- High tech aluminum cones for precise sound
- Exclusive crispy performing titanium dome tweeters
- Separated 12dB inline-crossovers for tweeter and midwoofer
- Supreme efficiency because of high power **3 Ohm** voice coils
- Impedance linearizing copper caps in Klippel optimized motors
- Installer Version for easy installation
- Slant tweeter housing with rubber surface finish
- Maximum dynamic without concealing any detail



**GZRC 130AL-IV**

High quality 2 Way passive system  
100 WRMS / 160 WMAX  
Freq. response 60 – 26000 Hz  
130 mm / 6.5" midwoofer  
Tweeter: GZRT 25T  
Speaker grill included



**GZRC 165AL-IV**

High quality 2 Way passive system  
120 WRMS / 190 WMAX  
Freq. response 35 – 26000 Hz  
Midwoofer: GZRK 16AL  
Tweeter: GZRT 25T  
Speaker grill included



**GZRK 16AL**

High quality 165 mm / 6.5" midwoofer  
110 WRMS / 160 WMAX  
35 – 4000 Hz / FS: 60.1 Hz  
Speaker grill included



**GZRT 25T**

High quality 25 mm / 1" tweeter  
70 WRMS / 110 WMAX  
3 – 26 kHz / FS: 1500 Hz  
Titanium dome  
Ferrofluid cooling

Optional tweeterhousing  
GZTH 25B



**GZHT 25X**

High quality 25 mm / 1" tweeter  
60 WRMS / 100 WMAX  
3 – 20 kHz / FS: 1600 Hz  
Coated silk dome  
Ferrofluid cooling



**GZRF 40AL**

High quality 2 Way coaxial  
70 WRMS / 110 WMAX  
Freq. response 70 – 25000 Hz  
100 mm / 4" midwoofer  
13 mm / 0.51" PEI tweeter  
Speaker grill included



**GZRF 52AL**

High quality 2 Way coaxial  
80 WRMS / 120 WMAX  
Freq. response 60 – 25000 Hz  
130 mm / 5.25" midwoofer  
13 mm / 0.51" PEI tweeter  
Speaker grill included



**GZRF 65AL**

High quality 2 Way coaxial  
100 WRMS / 140 WMAX  
Freq. response 50 – 25000 Hz  
165 mm / 6.5" midwoofer  
13 mm / 0.51" PEI tweeter  
Speaker grill included



**GZRF 69AL**

High quality 3 Way coaxial  
130 WRMS / 200 WMAX  
Freq. response 40 – 25000 Hz  
6 x 9" midwoofer  
13 mm / 0.51" PEI tweeter  
50 mm / 2" PEI midrange  
Speaker grill included



## RADIOACTIVE NEO Speakers

RADIOACTIVE NEO speakers follow the main idea of powerful, dynamical and high efficient reproduction. Apart from that, these models are significantly reduced in installation depth by using high effective neodymium magnets.

- Extremely flat speakers for various purpose
- Lightweight coated paper cones for dynamic sound
- Exclusive crispy performing titanium dome tweeters
- Separated 12dB inline-crossovers for tweeter and midwoofer
- Supreme efficiency because of high power **3 Ohm** voice coils
- Lightweight Klippe optimized Neodymium motors
- Installer Version for easy installation
- Slant tweeter housing with rubber surface finish
- Powerful and dynamic performance



### GZRC 165NEO-IV

Flat 2 Way passive system  
110 WRMS / 170 WMAX  
Freq. response 50 – 26000 Hz  
Midwoofer: GZMW 165X-NEO  
Tweeter: GZRT 25T  
Speaker grill included



### GZRC 100NEO-IV

Flat 2 Way passive system  
80 WRMS / 120 WMAX  
Freq. response 80 – 26000 Hz  
100 mm / 4" midwoofer  
Tweeter: GZRT 25T  
Speaker grill included



### GZRC 200NEO-IV

Flat 2 Way passive system  
120 WRMS / 190 WMAX  
Freq. response 35 – 26000 Hz  
Midwoofer: GZMW 200X-NEO  
Tweeter: GZRT 25T  
Speaker grill included



### GZMW 165X-NEO

Flat 165 mm / 6.5" midwoofer  
90 WRMS / 140 WMAX  
50 – 4000 Hz / FS: 44.3 Hz  
Speaker grill included



### GZMW 200X-NEO

Flat 200 mm / 8" midwoofer  
100 WRMS / 160 WMAX  
35 – 3500 Hz / FS: 38.4 Hz  
Speaker grill included

## RADIOACTIVE LIMITED WHITE EDITION

Following the request for personal customization of sophisticated customers, GROUND ZERO proudly presents a compo speaker system in fashionable white color combined with aluminum cones. The set includes stylish white tweeters, woofers and grills as well as crossovers. This outstanding system is strictly limited to 999 pieces with consecutive serial numbers.

- Limited edition 2-Way compo system
- Dynamic and efficient speakers
- High tech anodized aluminum cone for precise sound
- Exclusive crispy performing aluminum dome tweeter
- High quality 12dB crossover with multiple adjustments
- Supreme efficiency because of high power **3 Ohm** voice coils
- Impedance linearizing copper caps in Klippel optimized motors
- Slant tweeter housing with rubber surface finish
- Including white speaker protection grills
- Maximum dynamic without concealing any detail



GZRC 165AL-WHITE

High Quality 2 Way passive system  
120 WRMS / 190 WMAX  
Freq. response 35 – 26000 Hz  
165 mm / 6.5" midwoofer  
White anodized Aluminum cone  
25 mm / 1" Aluminum dome tweeter



## RADIOACTIVE MARINE Speaker

Since listening to favorite music isn't limited to cars, GROUND ZERO offers a particular speaker for environments with special requirements to the construction and water resistance.

A sophisticated RADIOACTIVE MARINE coaxial speaker is available in white finish, suitable for places with high humidity such as bathrooms and pool areas or even for off-shore applications with occasionally appearing direct splashing water such as on outer decks or on leisure boats.

- Water resistant and UV-stable marine speakers
- Optimized for applications in high humidity areas
- Dynamic 13 mm / 0.51" PEI tweeter
- Audiophile IMPP cone with rubber surround
- Including white speaker protection grills



GZRM 165X

Water-resistant 2 Way coaxial  
70 WRMS / 120 WMAX  
Freq. response 60 – 25000 Hz  
165 mm / 6.5" midwoofer  
with IMPP cone  
13 mm / 0.51" PEI tweeter



The products of the TITANIUM line combine premium quality and high efficiency. A wide range of dedicated speakers meet most of the customer's need. The amplifiers are equipped with sophisticated technology and encased by a posh heat-sink with brushed titanium color surface. Especially for trucks, GROUND ZERO offers two models of the TITANIUM amplifier line-up as a 24-Volt version.



## TITANIUM Amplifiers

- High power amplifiers
- Stabilized power supplies
- Massive aluminum heatsinks
- Black high gloss plexi glass inlay
- Covered connectors and terminals



**GZTA 1.1200DX-II**

High quality mono class D amplifier  
400 / 800 / 1300 W @ 4 / 2 / 1 Ω  
Linkmode 3000 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost  
Stabilized dual power supply  
Bass remote control included



**GZTA 1.800DX-II**

High quality mono class D amplifier  
350 / 550 / 850 W @ 4 / 2 / 1 Ω  
Linkmode 2000 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost  
Stabilized dual power supply  
Bass remote control included



**GZTA 2155X-II**

High quality 2 channel class AB amplifier  
2 x 100 / 150 @ 4 / 2 Ω  
Bridgemode 1 x 400 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bass Boost  
Bass remote control optional



**GZTA 4125X-II**

High quality 4 channel class AB amplifier  
4 x 90 / 130 @ 4 / 2 Ω  
Bridgemode 2 x 320 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bass Boost



**GZTA 5120X-II**

High quality 5 channel class AB amplifier  
4 x 50 + 1 x 180 W @ 4 Ω  
4 x 70 + 1 x 260 W @ 2 Ω  
Subsonic / Highpass  
Lowpass / Bass Boost  
Bass remote control included



**GZTA 1.800DX-II 24V**

24 Volt mono class D amplifier  
350 / 550 / 850 W @ 4 / 2 / 1 Ω  
Linkmode 2000 W Max @ 2 Ω  
Subsonic / Lowpass / Bandpass  
Phaseshift / Bass Boost  
Stabilized 24 Volt power supply  
Bass remote control included



**GZTA 4125X-II 24V**

24 Volt 4 channel class AB amplifier  
4 x 90 / 130 @ 4 / 2 Ω  
Bridgemode 2 x 320 W Max @ 4 Ω  
Subsonic / Highpass / Lowpass  
Bandpass / Bass Boost  
Stabilized 24 Volt power supply





## TITANIUM Speakers

- High quality speakers
- Audiophile coated paper cones
- Natural sounding silk dome tweeters
- Compact inline-crossovers
- All-rounder with linear and natural performance

### GZTC 165TX

High quality 2 Way passive system  
110 WRMS / 160 WMAX  
Freq. response 50 – 20000 Hz  
165 mm / 6.5" midwoofer  
25 mm / 1" silk dome tweeter  
Speaker grill included



### GZTF 8.7TX

High quality 2 Way coaxial  
50 WRMS / 90 WMAX  
Freq. response 100 – 20000 Hz  
87 mm / 3.5" midwoofer  
13 mm / 0.51" Mylar tweeter

### GZTF 12TX

High quality 2 Way coaxial  
60 WRMS / 100 WMAX  
Freq. response 75 – 20000 Hz  
120 mm / 4.7" midwoofer  
13 mm / 0.51" Mylar tweeter  
Optimized for Mercedes W124

### GZTF 16TX

High quality 2 Way coaxial  
80 WRMS / 120 WMAX  
Freq. response 70 – 20000 Hz  
165 mm / 6.5" midwoofer  
13 mm / 0.51" Mylar tweeter  
Speaker grill included



### GZTF 46TX

High quality 2 Way coaxial  
70 WRMS / 110 WMAX  
Freq. response 80 – 20000 Hz  
4 x 6" midwoofer  
13 mm / 0.51" Mylar tweeter  
Speaker grill included

### GZTF 69TX

High quality 3 Way coaxial  
120 WRMS / 180 WMAX  
Freq. response 40 – 20000 Hz  
6 x 9" midwoofer  
13 mm / 0.51" Mylar tweeter  
55 mm / 2.17" Mylar midrange  
Speaker grill included

Representing the entry level of GROUND ZERO, the IRIDIUM line offers a lot of useful features and an amazing performance. The range contains a variety of affordable amplifiers, speakers and subwoofers for the daily use and for SPL purpose. These are available as single drivers for custom-built applications as well as in loaded passive and active enclosures.



## IRIDIUM Amplifiers

- High power amplifiers
- Stabilized power supplies
- Black anodized aluminum heatsinks
- Black high gloss plexi glass inlay
- Massive block terminals
- High-Level input with auto-on



**GZIA 1.1450DXII**

Mono class D amplifier  
400 / 750 / 1250 W @ 4 / 2 / 1 Ω  
Highpass / Lowpass / Bass Boost  
Bass remote control included



**GZIA 1.1000DXII**

Mono class D amplifier  
350 / 650 / 1000 W @ 4 / 2 / 1 Ω  
Highpass / Lowpass / Bass Boost  
Bass remote control included



**GZIA 1.600HPX-II**

Mono fullrange class AB amplifier  
230 / 400 / 600 W @ 4 / 2 / 1 Ω  
Lowpass / Bass Boost  
Bass remote control included



**GZIA 4115HPX-II**

4 channel class AB amplifier  
4 x 70 / 115 @ 4 / 2 Ω  
Bridgemode 2 x 250 W Max @ 4 Ω  
Highpass / Lowpass



**GZIA 2235HPX-II**

2 channel class AB amplifier  
2 x 150 / 235 @ 4 / 2 Ω  
Bridgemode 1 x 540 W Max @ 4 Ω  
Highpass / Lowpass  
Bass remote control optional



**GZIA 2130HPX-II**

2 channel class AB amplifier  
2 x 85 / 130 @ 4 / 2 Ω  
Bridgemode 1 x 320 W Max @ 4 Ω  
Highpass / Lowpass / Bass Boost  
Bass remote control optional



**GZIA 2080HPX-II**

High quality amplifier  
2 x 60 / 80 @ 4 / 2 Ω  
Bridgemode 1 x 240 W Max @ 4 Ω  
Highpass / Lowpass / Bass Boost



**GZTA Bassremote**

Optional Bassremote for GZIA, GZTA,  
GZRA, GZHA and GZNA Amps

## IRIDIUM SPL Subwoofers

- Entry level SPL subwoofers
- Fiber reinforced paper cone
- Multilayer foam V-Shape SPL surround
- High temperature 63 mm / 2.5" copper voice coils
- Progressive 2-Layer POLYCOT / Conex spiders
- Powerful bass for SPL-Rookies



GZIW 12SPL

300 mm / 12" subwoofer  
1000 WSPL / 2 x 2 Ω  
36.9 Hz / Qts 0.67  
VAS 35.6 L / 1.257 ft<sup>3</sup>



GZIW 10SPL

250 mm / 10" subwoofer  
700 WSPL / 2 x 2 Ω  
30.1 Hz / Qts 0.44  
VAS 43.8 L / 1.55 ft<sup>3</sup>



GZIW 15SPL

380 mm / 15" subwoofer  
1200 WSPL / 2 x 2 Ω  
39.9 Hz / Qts 0.54  
VAS 61.36 L / 2.17 ft<sup>3</sup>



GZIW 12SPL PINK

300 mm / 12" subwoofer  
1000 WSPL / 2 x 2 Ω  
36.9 Hz / Qts 0.67  
VAS 35.6 L / 1.257 ft<sup>3</sup>



GZIB 2.3000SPL

Loaded SPL subwoofer enclosure  
Woofer: 2x GZIW 12SPL  
2000 WSPL / 4 x 2 Ω  
Solid MDF wood  
Efficient front bass tunnel



GZIB 3000SPL

Loaded SPL subwoofer enclosure  
Woofer: GZIW 12SPL  
1000 WSPL / 2 x 2 Ω  
Solid MDF wood  
Efficient front bass tunnel

## IRIDIUM Subwoofers

- High quality subwoofers
- Stable IMPP cone
- U-Shape rubber surround
- High power copper voice coils
- Audiophile PC spiders
- Pushterminals and woven-in leadwires
- Powerful all-rounder



GZIW 165X

165 mm / 6.5" subwoofer  
100 WRMS / 1 x 4 Ω  
43 Hz / Qts 0.36  
VAS 11 L / 0.39 ft<sup>3</sup>  
38 mm / 1.5" voice coil



GZIW 300X

300 mm / 12" subwoofer  
350 WRMS / 1 x 4 Ω  
34.9 Hz / Qts 0.69  
VAS 53.6 L / 1.89 ft<sup>3</sup>  
50 mm / 2" voice coil



GZIW 250X

250 mm / 10" subwoofer  
250 WRMS / 1 x 4 Ω  
30.1 Hz / Qts 0.44  
VAS 43.8 L / 1.55 ft<sup>3</sup>  
50 mm / 2" voice coil



GZIW 200X

200 mm / 8" subwoofer  
150 WRMS / 1 x 4 Ω  
38.4 Hz / Qts 0.48  
VAS 27 L / 0.95 ft<sup>3</sup>  
38 mm / 1.5" voice coil



GZIB 2.300BR

Loaded subwoofer enclosure  
2 x 30 cm / 12" Woofer  
700WRMS / 2 x 2 Ω  
70 Liter / 2.47 ft<sup>3</sup>



GZIB 300BR

Loaded subwoofer enclosure  
30 cm / 12" Woofer  
350WRMS / 1 x 4 Ω  
37 Liter / 1.31 ft<sup>3</sup>



GZIB 200BR

Loaded subwoofer enclosure  
Woofer: GZIW 200X  
150WRMS / 1 x 4 Ω  
17 Liter / 0.6 ft<sup>3</sup>



GZIB 165BR

Loaded subwoofer enclosure  
Woofer: GZIW 165X  
100WRMS / 1 x 4 Ω  
11 Liter / 0.39 ft<sup>3</sup>



GZIB 165BR-ACT

Loaded subwoofer enclosure  
Woofer: GZIW 165X  
80 WRMS / 150 WMAX  
Lowpass / Phaseshift  
High-Level input with auto-on  
11 Liter / 0.39 ft<sup>3</sup>



GZIB 200BR-ACT

Loaded subwoofer enclosure  
Woofer: GZIW 200X  
100 WRMS / 200 WMAX  
Lowpass / Phaseshift  
High-Level input with auto-on  
17 Liter / 0.6 ft<sup>3</sup>



GZIB 300BR-ACT

Loaded subwoofer enclosure  
30 cm / 12" Woofer  
150 WRMS / 300 WMAX  
Lowpass / Phaseshift  
High-Level input with auto-on  
37 Liter / 1.31 ft<sup>3</sup>

GZ BASS KIT 12.300

Powerful 30 cm / 12" bass kit  
Loaded subwoofer enclosure  
37 Liter / 1.31 ft<sup>3</sup>  
Efficient front bass tunnel  
2 Channel class AB amplifier  
300W max / bass boost  
Variable lowpass  
High-Level input with auto-on  
Optional cable kit



**GZIC 13X**

High quality 2 Way passive system  
90 WRMS / 140 WMAX  
Freq. response 60 – 20000 Hz  
130 mm / 5.25" midwoofer  
19 mm / 0.75" softdome tweeter

**GZIC 16X**

High quality 2 Way passive system  
100 WRMS / 150 WMAX  
Freq. response 50 – 20000 Hz  
165 mm / 6.5" midwoofer  
19 mm / 0.75" softdome tweeter

**GZIF 40X**

High quality 2 Way coaxial  
60 WRMS / 100 WMAX  
Freq. response 80 – 20000 Hz  
100 mm / 4" midwoofer  
13 mm / 1" Mylar tweeter

**GZIF 52X**

High quality 2 Way coaxial  
70 WRMS / 110 WMAX  
Freq. response 60 – 20000 Hz  
130 mm / 5.25" midwoofer  
13 mm / 0.51" Mylar tweeter

**GZIF 65X**

High quality 2 Way coaxial  
80 WRMS / 120 WMAX  
Freq. response 50 – 20000 Hz  
165 mm / 6.5" midwoofer  
13 mm / 1" Mylar tweeter

**GZIF 69X**

High quality 3 Way coaxial  
120 WRMS / 180 WMAX  
Freq. response 40 – 20000 Hz  
6 x 9" midwoofer  
13 mm / 0.51" Mylar tweeter  
50 mm / 2" Mylar midrange

**GZIC 525FX**

Flat 2 Way passive system  
80 WRMS / 120 WMAX  
Freq. response 60 – 20000 Hz  
130 mm / 5.25" midwoofer  
Tweeter: GZHT 19X

**GZIC 650FX**

Flat 2 Way passive system  
100 WRMS / 140 WMAX  
Freq. response 50 – 20000 Hz  
165 mm / 6.5" midwoofer  
Tweeter: GZHT 19X

**GZHT 19X**

High quality 19 mm / 0.75" tweeter  
40 WRMS / 70 WMAX  
3.5 – 20 kHz / FS: 1650 Hz  
Coated silk dome  
Ferrofluid cooling

**GZIC 400FX**

Flat 2 Way passive system  
60 WRMS / 100 WMAX  
Freq. response 70 – 20000 Hz  
100 mm / 4" midwoofer  
Tweeter: GZHT 19X

**GZIF 4001FX**

Flat 2 Way coaxial  
50 WRMS / 90 WMAX  
Freq. response 80 – 20000 Hz  
100 mm / 4" midwoofer  
13 mm / 0.51" Mylar tweeter

**GZIF 5201FX**

Flat 2 Way coaxial  
60 WRMS / 100 WMAX  
Freq. response 70 – 20000 Hz  
130 mm / 5.25" midwoofer  
13 mm / 0.51" Mylar tweeter

**GZIF 6501FX**

Flat 2 Way coaxial  
70 WRMS / 110 WMAX  
Freq. response 60 – 20000 Hz  
165 mm / 6.5" midwoofer  
13 mm / 0.51" Mylar tweeter

## IRIDIUM Speakers

- High efficient speakers
- Lightweight HQPP cones
- Soft dome tweeters
- Compact inline-crossovers
- Crispy and dynamic performance
- Design protection grill

The experience of a real concert atmosphere or club feeling needs professional high SPL levels to be achieved. This however, requires very special and powerful speakers as well as amplifiers. GROUND ZERO's development department doesn't make any compromise, whenever the purpose of the product is that clear. Because of this, a COMPETITION product is the right choice for demanding customers with high SPL level expectations.



## COMPETITION Amplifiers

Each of the new full-range class D amplifiers offers a huge amount of output power for any kind of open show or SPL application. At the top end, the COMPETITION line includes one of the most powerful amplifiers in the world – delivering the unbelievable power of 35.000 Watts RMS!

- Made in Brazil mono amplifiers
- Wide frequency range performance
- Optimized for serious SPL and SQL setups
- 1 Ohm stable high voltage circuits
- Variable filters (Subsonic / Lowpass)
- Variable Bass Boost
- Bass remote control



GZCA 35K-SPL

High power mono amplifier  
Most powerful GZ amplifier ever  
35000 Watt @1 Ohm  
Frequency range: 5 – 1000 Hz  
Optimized for serious SPL and SQL setups  
1 Ohm stable high voltage circuits





GZCA 12K-SPL

High power mono amplifier  
9000 / 13700 W @ 2 / 1 Ω  
(1% THD+N / 14.4V)  
Frequency range: 10 – 15000 Hz



GZCA 8.0K-SPL

High power mono amplifier  
4480 / 8960 W @ 2 / 1 Ω  
(1% THD+N / 14.4V)  
Frequency range: 10 – 15000 Hz



GZCA 5.0K-SPL

High power mono amplifier  
2800 / 5600 W @ 2 / 1 Ω  
(1% THD+N / 14.4V)  
Frequency range: 10 – 15000 Hz



GZCA 3.0K-SPL

High power mono amplifier  
1800 / 3400 W @ 2 / 1 Ω  
(1% THD+N / 14.4V)  
Frequency range: 10 – 20000 Hz



GZCA 1.2K-SPL

High power mono amplifier  
675 / 1350 W @ 2 / 1 Ω  
(1% THD+N / 14.4V)  
Frequency range: 10 – 30000 Hz

## COMPETITION Midrange Speakers

The COMPETITION series midrange drivers have been optimized for free-air application as well as horn or vented installations. With a lightweight pressed paper cone, these speakers are even suitable for wide-band use.

- High efficient SPL competition midranges
- Lightweight reinforced paper cones
- Massive motors and short CCAW voice coils for maximum midrange efficiency
- Designed to perform highest SPL levels
- Including speaker protection grills



GZCM 6-4PPX

High power 170 mm / 6.69" midrange  
150 WRMS / 400 WMAX  
150 – 10000 Hz / SPL 95 dB  
Aluminum phaseplug  
50 mm / 2" voice coil  
Aluminum cast basket



GZCM 8-4PPX

High power 200 mm / 8" midrange  
200 WRMS / 500 WMAX  
150 – 10000 Hz / SPL 96 dB  
Aluminum phaseplug  
50 mm / 2" voice coil  
Aluminum cast basket



GZCM 10-4PPX

High power 250 mm / 10" midrange  
300 WRMS / 600 WMAX  
120 – 5000 Hz / SPL 96 dB  
Aluminum phaseplug  
75 mm / 3" voice coil  
Aluminum cast basket



GZCM 6-4FX

Flat 165 mm / 6.5" midrange  
100 WRMS / 300 WMAX  
100 – 5000 Hz / SPL 94 dB  
38 mm / 1.5" voice coil



GZCM 8-4FX

Flat 200 mm / 8" midrange  
100 WRMS / 400 WMAX  
100 – 4000 Hz / SPL 94 dB  
38 mm / 1.5" voice coil



GZCM 10-4FX

Flat 250 mm / 10" midrange  
200 WRMS / 500 WMAX  
120 – 5000 Hz / SPL 96 dB  
50 mm / 2" voice coil

## COMPETITION Midwoofers

Each driver of GROUND ZERO's COMPETITION line can handle an enormous amount of power input and offers an extraordinary clear and realistic sound quality at the same time. During the development, not only various kinds of installation options have influenced the result, but also the performance in a studio environment. These speakers will leave no wish unfulfilled, whenever the realistic sound experience is the goal!

- High efficient SPL competition midranges
- Stiff reinforced paper cones
- Long stroke CCAW voice coils for optimized midbass performance
- Flexible high roll w-surrounds
- Designed to perform highest SPL levels
- Including speaker protection grills



### GZCK 250SPL

High power 250 mm / 10" midwoofer  
200 WRMS / 400 WMAX  
40 – 6000 Hz / SPL 95 dB  
High roll w-surround  
50 mm / 2" voice coil

### GZCK 200SPL

High power 200 mm / 8" midwoofer  
150 WRMS / 300 WMAX  
50 – 6000 Hz / SPL 93 dB  
High roll w-surround  
38 mm / 1.5" voice coil

### GZCK 165SPL

High power 165 mm / 6.5" midwoofer  
100 WRMS / 250 WMAX  
50 – 4000 Hz / SPL 93 dB  
High roll w-surround  
38 mm / 1.5" voice coil



### GZCW 12-50

High power 300 mm / 12" midwoofer  
300 WRMS / 600 WMAX  
50 – 3000 Hz / SPL 96 dB  
High roll w-surround  
50 mm / 2" voice coil

### GZCW 12-75SPL

High power 300 mm / 12" midwoofer  
400 WRMS / 800 WMAX  
40 – 3000 Hz / SPL 96 dB  
High roll w-surround  
75 mm / 3" voice coil

## COMPETITION Midrange Speakers

Apart from the tweeters and midrange drivers, the COMETITION line-up includes some high-tech fullrange speakers and unique 8" SPL models for extremely loud applications on highest sound quality level.

- High efficient SPL competition fullrange speakers
- Lightweight reinforced paper cones
- Integrated tweeters for wide range performance
- Designed to perform highest SPL levels
- Including speaker protection grills



### GZCF 7104XSPL

High power 4 Way coaxial  
220 WRMS / 300 WMAX  
35 – 25000 Hz / SPL 93 dB  
 $7 \times 10"$  midwoofer  
13 mm / 0.51" Piezo super tweeter  
13 mm / 0.51" PEI tweeter  
50 mm / 2" Paper cone midrange  
6 x 9" adapter included



### GZCF 8-4COAX-SPL

High power 2 Way coaxial  
Handmade in Italy  
200 mm / 8" midwoofer  
150 WRMS / 300 WMAX  
90 – 2500 Hz / SPL 93 dB  
32 mm / 1.26" silk dome tweeter  
50 WRMS / 150 WMAX  
2.5 – 26 kHz / SPL 93 dB  
Optional grill GZCG 20SC



### GZCX 8-4COAX-SPL

High power 2 Way crossover set  
Cutoff 2500 Hz  
For GZCF 8-4COAX-SPL



### GZCF 165COAX

High power 2 Way coaxial  
165 mm / 6.5" midrange  
125 WRMS / 200 WMAX  
180 – 3500 Hz / SPL 97 dB  
35 mm / 1.38" Compression tweeter  
25 WRMS / 100 WMAX  
3.5 – 25 kHz / SPL 100 dB  
6 dB crossover included

### GZCF 200COAX

High power 2 Way coaxial  
200 mm / 8" midrange  
150 WRMS / 250 WMAX  
150 – 3000 Hz / SPL 98 dB  
44.5 mm / 1.75" Compression tweeter  
50 WRMS / 150 WMAX  
3 – 25 kHz / SPL 100 dB  
6 dB crossover included



**GZCT 25SQL**

25 mm / 1" horn SQ tweeter  
100 WRMS / 150 WMAX  
3 – 22 kHz / SPL 93 dB  
Coated silk dome  
Dispersion 60°  
Aluminum cast horn  
Ferrofluid cooling  
Cooled neodymium magnet

## COMPETITION Tweeters

For the best high frequency reproduction, a variety of high-efficient compression tweeters are available. Apart from massive aluminum horn drivers, Ground Zero offers some models with a wide-angle dispersion for special purpose.

- High efficient SPL competition tweeters
- Compression horn drivers
- Massive aluminum cast housings
- High temperature voice coils
- Designed to perform highest SPL levels
- Including 6 dB crossover



**GZCT 0500X**

High power compression tweeter  
30 WRMS / 100 WMAX  
4 – 25 kHz / SPL 102 dB  
Dispersion 30°  
Aluminum dome  
25 mm / 1" CCAW voice coil  
Neodymium magnet



**GZCT 2000X**

High power compression tweeter  
30 WRMS / 100 WMAX  
3 – 25 kHz / SPL 100 dB  
Dispersion 40°  
Aluminum dome  
25 mm / 1" CCAW voice coil



**GZCT 2200X**

High power compression tweeter  
40 WRMS / 120 WMAX  
4 – 25 kHz / SPL 105 dB  
Dispersion 40°  
Aluminum dome  
38 mm / 1.5" CCAR voice coil



**GZCT 3500X-S / -B**

High power compression tweeter  
30 WRMS / 100 WMAX  
3 – 25 kHz / SPL 99 dB  
Dispersion 40°  
Aluminum dome  
25 mm / 1" CCAW voice coil  
GZCT 3500X-S: Silver  
GZCT 3500X-B: Black



**GZCT 1000X**

High power compression tweeter  
30 WRMS / 100 WMAX  
5 – 20 kHz / SPL 105 dB  
Dispersion 90° x 60°  
Aluminum dome  
25 mm / 1" CCAW voice coil



**GZCT 4000X**

High power compression tweeter  
50 WRMS / 140 WMAX  
2.5 – 20 kHz / SPL 103 dB  
Dispersion 90° x 60°  
Aluminum dome  
44.5 mm / 1.75" CCAW voice coil



**GZCT 5000SPL / -B**

High power compression tweeter  
70 WRMS / 180 WMAX  
2.5 – 20 kHz / SPL 108 dB  
Dispersion 90° x 60°  
Titanium dome  
44.5 mm / 1.75" CCAW voice coil  
Elliptical plastic injection tractrix horn  
GZCT 5000SPL: Yellow  
GZCT 5000SPL-B: Black

## COMPETITION PRO Speakers

The new COMPETITION Pro series marks the very top level of electrically and mechanically possible power handling, nowadays. These drivers have been designed especially for long distance open show and demonstration performances at very high SPL level as well as for the more and more popular "Pancadão" open-air stages featuring a wall of speakers, a competition trend coming from Brazil.

- High end SPL competition mids
- Lightweight reinforced paper cones
- Midranges with high efficient neodymium motors
- Massive midwoofers with cooled ferrite motors
- Red painted aluminum cast baskets
- High quality push terminals
- Designed to perform highest SPL levels



GZCM 6.5N-PRO

High end 165 mm / 6.5" midrange  
200 WRMS / 400 WMAX  
150 – 12000 Hz / SPL 96 dB  
38 mm / 1.5" CCAW voice coil  
Neodymium magnet



GZCM 8.0N-PRO

High end 200 mm / 8" midrange  
300 WRMS / 500 WMAX  
130 – 10000 Hz / SPL 98 dB  
63 mm / 2.5" CCAW voice coil  
Neodymium magnet



GZCW 12.1200-PRO

High end 300 mm / 12" midwoofer  
800 WRMS / 1200 WMAX  
60 – 2000 Hz / SPL 95 dB  
High roll w-surround  
100 mm / 4" copper voice coil



GZCW 15.1500-PRO

High end 380 mm / 15" midwoofer  
1000 WRMS / 1500 WMAX  
50 – 2000 Hz / SPL 96 dB  
High roll w-surround  
100 mm / 4" copper voice coil

## GZCT 19N-PRO S / B

High end compression tweeter  
30 WRMS / 100 WMAX  
3 – 22 kHz / SPL 109 dB  
Dispersion vertical 60° / 30°  
Dispersion horizontal 45°  
Unsymmetrical aluminium waveguide  
Titanium dome  
25 mm / 1" CCAL voice coil  
Neodymium magnet  
Available in silver or black



## COMPETITION PRO Tweeters

- High-End SPL competition speakers
- Compression horn drivers
- Middle and long-distance horns
- High temperature voice coils
- Designed to perform highest SPL levels



## GZCT 25-PRO

High end compression tweeter  
40 WRMS / 120 WMAX  
5 – 20 kHz / SPL 105 dB  
Dispersion 40°  
Aluminium cast horn  
Aluminium dome  
25 mm / 1" CCAW voice coil



## GZCM 100N-PRO

High end compression midrange  
80 WRMS / 180 WMAX  
600 – 18000 Hz / SPL 110 dB  
Dispersion 45°  
Aluminium cast horn  
Titanium dome  
100 mm / 4" CCAR voice coil  
Neodymium magnet



## GZCT 44-PRO

High end compression tweeter  
80 WRMS / 180 WMAX  
2.5 – 20 kHz / SPL 106 dB  
Dispersion 60 x 40°  
ABS injection plastic horn  
Titanium dome  
44.5 mm / 1.75" CCAW voice coil

## GZCM 50-PRO

High end compression midrange  
80 WRMS / 180 WMAX  
600 – 7000 Hz / SPL 106 dB  
Dispersion 60 x 40°  
ABS injection plastic horn  
Fabric dome  
50 mm / 2" CCAW voice coil



## GZCH 45LD

Long distance horn  
Dispersion 45°  
Suitable for GZCT 44-PRO, GZCM 50-PRO



Most OEM speaker systems cannot completely satisfy the expectations of sophisticated customers. Especially the basic equipment leaves a lot of space for improvements of dynamics and sound quality. Installing car specific aftermarket speakers is a simple way to enhance the audio system. GROUND ZERO's line of CAR SPECIFIC solutions consists of various components designed for upgrading the OEM audio systems of modern cars easily.



## CAR SPECIFIC Flat Active Subwoofers

Fulfilling the customer's desire for lower frequency response and compact bass upgrades, GROUND ZERO offers a line of aluminum cast active subwoofers and one plastic-injection mold housing model. Each of these active under-seat subwoofers comes with very flat housing, enabling the installer to find a place even in the most limited space.

- High quality flat active subwoofers
- Integrated high power amplifier
- Massive sealed enclosures
- High-Level input with auto-on
- Including remote control
- Optimized for underseat or hidden installation



**GZTB 20ACT**

Flat active subwoofer  
20 cm / 8" woofer  
100 WRMS / 160 WMAX  
Plastic injection enclosure



**GZUB 600XACTII**

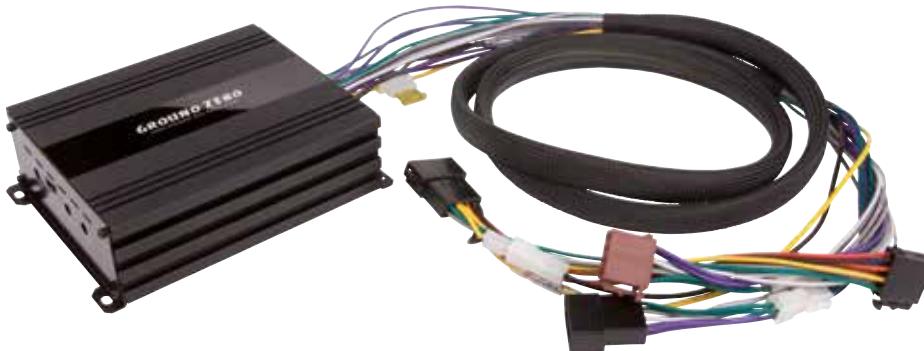
Flat active subwoofer  
16 cm / 6" woofer  
Dual voice coil  
100 WRMS / 160 WMAX  
Aluminum cast enclosure

**GZUB 800XACTII**

Flat active subwoofer  
20 cm / 8" woofer  
Triple voice coil  
120 WRMS / 180 WMAX  
Aluminum cast enclosure

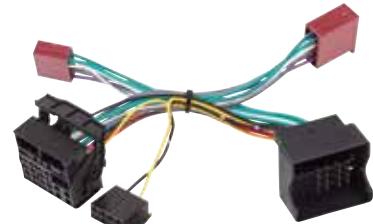
**GZUB 1000XACTII**

Flat active subwoofer  
25 cm / 10" woofer  
Triple voice coil  
150 WRMS / 210 WMAX  
Aluminum cast enclosure



**GZCS 4.60ISO**

High quality upgrade amplifier  
4 x 70 / 90 @ 4 / 2 Ω  
3CH Mode 2 x 70 + 1 x 180 W @ 4Ω  
Highpass / Lowpass  
Including 2 m / 6.56 ft cable harness  
with ISO adaption



**GZCS ISO Quadlock**

Quadlock (Fakra) adapter for  
VW / Audi / BMW / Mercedes / etc.  
until 2013

**GZCS ISO Quadlock II**

Quadlock II (Fakra II) adapter for  
VW / Audi / BMW / Mercedes / etc.  
from 2013 on



GZCS 10SUB

Flat spare wheel subwoofer  
Double voice coil 2 x 2 Ω  
Power handling 300 W



GZCS 10SUB-ACT

Flat spare wheel active subwoofer  
Class AB amplifier 300 WMax  
High-Level input with auto-on



**Suitable for** each car with conventional spare wheel recess such as:  
Volkswagen (e.g. Polo, Golf, Passat, Tiguan, Touareg,...)  
Audi (e.g. all A and Q Models)  
Skoda (e.g. Fabia, Octavia, Superb,...)  
Seat (e.g. Ibiza, Leon,...)  
Mercedes, BMW, Ford, Opel, Peugeot, Renault, Citroen, Dacia, Fiat, Alfa Romeo, Lancia, Volvo, Kia, Hyundai, Honda, Suzuki, Toyota, Mazda, Nissan, Mitsubishi, Chrysler, Dodge, Buick, Cadillac and many further models.

#### CAR SPECIFIC Spare Wheel Subwoofer

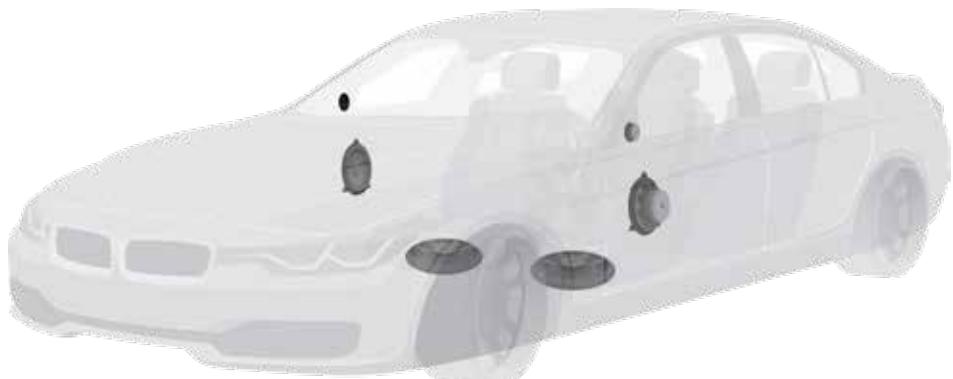
The extra flat spare wheel subwoofers, suitable for almost all types and sizes of spare wheel recess offered as active or passive version, realizes an impressive low bass performance due to their high efficient down fire technology.

- High quality spare wheel subwoofers
- Perfect solution for flat spare wheel recesses
- No cut-out in the original trunk floor panel required
- Efficient downfire technology
- Massive sealed MDF enclosures
- High power 25 cm / 10" chassis with reinforced paper cone

## CAR SPECIFIC Speakers

The CAR SPECIFIC line contains four speaker versions that will fit to BMW E- and F-series as well as to the i8. The compatibility chart informs about the actually available upgrade options. Furthermore and as first company on the market, GROUND ZERO offers a Plug'n'Play sound upgrade for the latest MINI F- and some R-series models including a pair of surface mount tweeters in rubber-touch built-on housings that fit perfectly to the car's interior. Additionally to the stereo speaker sets, an under-seat subwoofer is available separately in pairs and completes the sound upgrade in all BMW & MINI models, optionally.

- Made in Germany car specific 2 way compo
- 100% plug'n'play solution
- 100 mm / 4" Midwoofer with paper-fibre cone
- High efficient 3 Ohm copper voice coil
- High flexible BiMAX® spider
- Loss-free flat-shape rubber surround
- Soft dome dustcap
- Dynamic 25 mm / 1" Titanium dome tweeter
- 12 dB crossover with tweeter protection



GZCS 100BMW-A

2 Way passive system  
50 WRMS / 100 WMAX  
100 – 25000 Hz  
suitable for:  
MINI\* F54 / F55 / F56 / F57  
(\*with Harman/Kardon® System)  
BMW i8 / X1 / X3 / X4  
BMW 1 / 2 / 3 / 4 / 6  
Made in Germany



GZCS 100BMW-B

2 Way passive system  
50 WRMS / 100 WMAX  
100 – 25000 Hz  
suitable for:  
BMW X1 / 1 / 3 / 5 / 6  
Made in Germany



GZCS 100BMW-C

2 Way passive system  
50 WRMS / 100 WMAX  
100 – 25000 Hz  
suitable for:  
MINI R60 / R61  
BMW i8 / X1 / X3 / X5 / X6 / Z4  
BMW 1 / 2 / 3 / 4 / 5 / 6 / 7  
Center for BMW E, F & G series  
Made in Germany

GZCS 100BMW-D

2 Way passive system  
50 WRMS / 100 WMAX  
100 – 25000 Hz  
suitable for:  
BMW X5 / X6  
Made in Germany



Model / Series	BMW 6 series			BMW 7 series		BMW i8			
	E63 E64	F12 F13	F06	E65 E66 E657	F01 F02 F03 F04	I12 Coupé			
Front				BMW-A	n/a	BMW-C	BMW-A		
				BMW-B	BMW-B (rear door)				
Rear				BMW-C (rear shelf)	BMW-C (rear shelf)	BMW-C	BMW-C		
Center		BMW-C							
Subwoofer		GZCS 200BMW-SW							

Model / Series	BMW X1		BMW X3		BMW X4	BMW X5		BMW X6		BMW Z4	
	E84	F48	E83	F25	F26	E70	F15	E71	F16 F86		
Front	BMW-B	BMW-A			BMW-A		BMW-D		BMW-D		
Rear	BMW-C	BMW-A (rear door)	BMW-C (rear shelf)	BMW-C	BMW-A	BMW-C	BMW-D (rear door)	BMW-C (D-pillar)	BMW-D (rear door)	BMW-C (D-pillar)	BMW-C
Center	BMW-C	n/a			BMW-C					n/a	
Subwoofer					GZCS 200BMW-SW						

Model / Series	BMW 1 series			BMW 2 series			BMW 3 series			BMW 4 series		BMW 5 series		
	E81 E82 E87	E88	F10 F21	F22 F87	F23 F45 F46	E90 E92	E91 E93	F30 F34 F35 F80	F31	F32 F36 F82	F33 F83	E60 E61	F07	F10 F11 F18
Front	BMW-B	BMW-B	BMW-A	BMW-A			BMW-B		BMW-A		BMW-A		BMW-C	BMW-C
Rear	BMW-C			BMW-C	BMW-A	BMW-C	BMW-B	BMW-A (rear door)	BMW-B	BMW-A (rear door)	BMW-C (rear shelf)	BMW-A		
Center								BMW-C						
Subwoofer								GZCS 200BMW-SW						

Errors and omissions excepted.



### GZCS 100MINI

2 Way passive system  
50 WRMS / 100 WMAX  
100 – 25000 Hz  
suitable for:  
MINI\* F54 / F55 / F56 / F57  
(\*with MINI Basic Sound System)  
No additional A-pillar parts needed  
Made in Germany



Model / Series	MINI					
	F54 F55 F56 F57	with Basic Sound System	F54 F55 F56 F57	with Harman/Kardon Sound System	R60 R61	with Basic Sound System
Front	MINI-A			BMW-A		
Rear				BMW-C*		
Center	BMW-C				n/a	
Subwoofer	GZCS 200BMW-SW					

\*Front install: The OEM mirror panels of HIFI system or Harman/Kardon® sound system need to be retrofitted. Errors and omissions excepted.



### GZCS 200BMW-SW

200 mm / 8" Underseat woofer  
100 WRMS / 160 WMAX / 1x 2 Ω  
35 – 250 Hz / 2 Ohm  
High efficient neodymium motor  
50 mm / 2" copper voice coil  
Suitable for:  
BMW E6.. / E7.. / E8.. / E9  
BMW F- and G-Models  
MINI F-Models



### GZRC 6857X

High Quality 2 Way passive system  
120 WRMS / 180 WMAX  
Freq. response 55 – 22000 Hz  
5 x 7" / 6 x 8" midwoofer  
with coated paper cone  
25 mm / 1" silkdome tweeter  
High quality crossover  
Speaker grill included

The in-car environment offers adverse conditions and installation positions for speakers. However, inaccurate audio reproduction can be corrected using digital technologies.

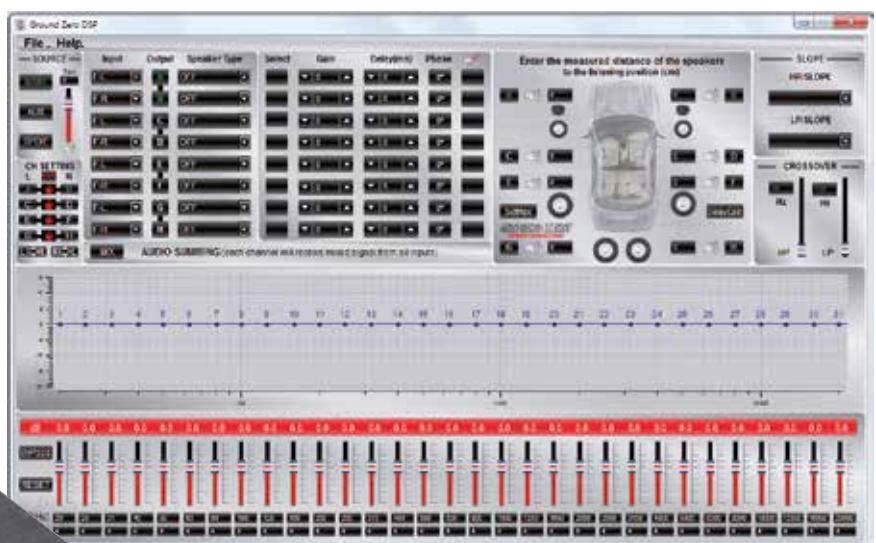
For this purpose, the GROUND ZERO DSP product line-up contains an 8-channel DSP unit with a variety of connection options for OEM or aftermarket systems. The adjustment can be done in real time using the included PC software.

These features are available integrated into a plug 'n' play 4-channel amplifier with an ISO connection harness, too. Additionally, GROUND ZERO offers a 4- and a 6- channel amplifier with integrated DSP. Finally, a matching designed mono channel amplifier completes the line-up.



## CAR SPECIFIC DSP

- Cirrus Logic Single Core 32 bit, 8-Channel, 192 kHz
- HiRes Audio compatible 24bit / 192 kHz
- Easy adjustable one page GUI
- 10 presets individually programmable
- Crossover: BPF / LPF / HPF Butterworth 20 – 20000 Hz
- Slope: 6 / 12 / 18 / 24 / 30 / 36 / 42 / 48 dB/Okt.
- Time alignment: 0 – 15 ms / 0 – 510 cm each channel
- Parametric EQ: 6 x 31 band for output A – F (20 – 20000 Hz)
- 2 x 11 band for output G&H (20 – 200 Hz)
- Optional remote control (GZDSP Remote) with LED-Display for master-volume, preset and input-mode selection



## GZDSP 6-8X

High quality 6 to 8 DSP  
Main in: 6 x RCA / 6 x high-level with auto-on  
Aux in: 3.5 mm (1/8") stereo jack  
Digital input: TOSLINK optical stereo  
Output: 8 x RCA

## GZDSP REMOTE

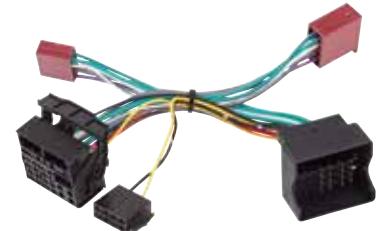
Remote control for GZDSP 6-8X /  
GZUA 4.80DSP / GZUA 6.120DSP / GZDSP 4.60ISO  
Black brushed aluminum front  
White LED display  
Input selection  
Master volume control  
Sub volume control  
10 preset selection  
Cable included





### GZDSP 4.60ISO

High quality DSP upgrade amplifier  
 4 x 40 W @ 4 Ω  
 4 x 60 W @ 2 Ω  
 Integrated 8 Channel DSP  
 2x Stereo output  
 Aux in: 3.5 mm (1/8") stereo jack  
 Digital input: TOSLINK optical stereo  
 Including 1 m / 3.28 ft cable harness  
 with ISO adaption  
 GZDSP Remote optional



### GZCS ISO Quadlock

Quadlock (Fakra) adapter for  
 VW / Audi / BMW / Mercedes / etc.  
 until 2013

### GZCS ISO Quadlock II

Quadlock II (Fakra II) adapter for  
 VW / Audi / BMW / Mercedes / etc.  
 from 2013 on



### GZDSP 4.80AMP

High quality 4 channel class D amplifier  
 Integrated 8 Channel DSP  
 4 x 90 / 150 @ 4 / 2 Ω  
 Bridgemode 2 x 350 W @ 4 Ω  
 2x Stereo output  
 Main in: 6 x RCA / 6 x high-level with auto-on  
 Aux in: 3.5 mm (1/8") stereo jack  
 Digital input: TOSLINK optical stereo  
 GZDSP Remote optional

### GZDSP 6.120AMP

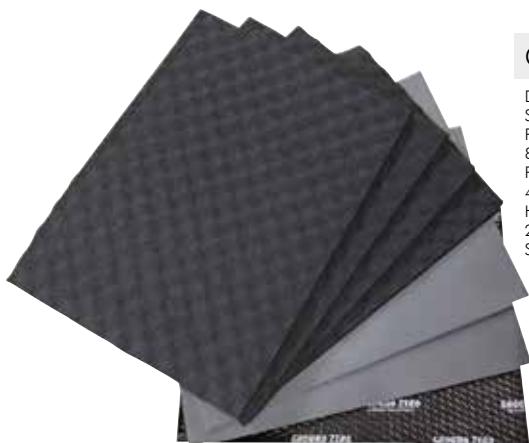
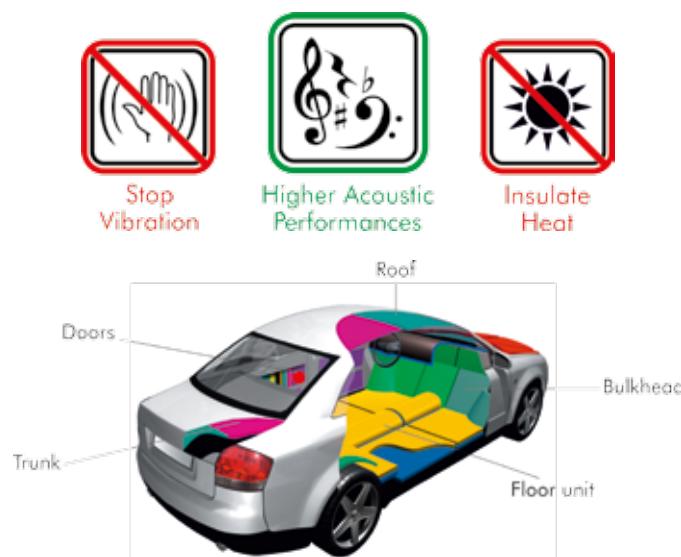
High quality 6 channel class D amplifier  
 Integrated 8 Channel DSP  
 4 x 60 + 2 x 120 W @ 4 Ω  
 4 x 100 + 2 x 200 W @ 2 Ω  
 1x Stereo output  
 Main in: 6 x RCA / 6 x high-level with auto-on  
 Aux in: 3.5 mm (1/8") stereo jack  
 Digital input: TOSLINK optical stereo  
 GZDSP Remote optional

### GZDSP 1.600AMP (no image)

High quality mono class D amplifier  
 200 / 360 / 600 W @ 4 / 2 / 1 Ω  
 Subsonic / Lowpass  
 Phaseshift / Bass Boost

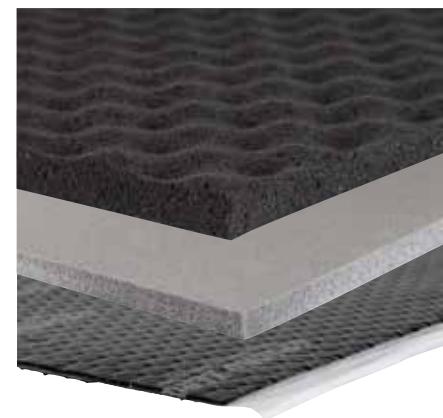
Listening to favorite music is most enjoyable if there is no disturbing noise around. Unfortunately, in-car environments consist of a wide range of materials causing a lot of annoying noises. Especially large scaled body parts tend to vibrate and affect the audio reproduction of the car speakers in a negative way. GROUND ZERO damping materials offer high efficient noise proofing. They reduce vibration, increase bass response as well as dynamics and by that ensure precise audio reproduction. There are particular products for each neuralgic car part influencing the sound quality available.

## ((NO VIBRATION - JUST SOUND))



### GZDM DOORKIT

Damping kit for 2 doors  
Self adhesive high efficient damping material  
Package content:  
8 sheets GZDM 3750AB-SILVER  
Polymer damping material based on butyl rubber with layer of aluminum  
4 sheets GZDF 1500SA  
High efficient sound absorbing polyurethane foam  
2 sheets Waterproof high density noise damping polyethylene foam  
Size per sheet: 375 x 500 mm / 14.76" x 19.69"





### GZDM 3750AB-GOLD

Self adhesive high efficient single layer damping material  
One layer of polymer based butyl rubber  
Aluminum foil as outer surface  
Application on body parts, doors and panels  
High mechanical loss factor  
Very flexible and waterproof  
Total thickness: 2,2 mm / 0.087"  
Size per sheet: 750 mm x 500 mm / 29.53" x 19.69"  
Package content: 10 sheets



### GZDM 3750AB-SILVER

Self adhesive lightweight single layer damping material  
One layer of polymer based butyl rubber  
Aluminum foil as outer surface  
Application on body parts, doors and panels  
High mechanical loss factor  
Very flexible and waterproof  
Total thickness: 1,7 mm / 0.067"  
Size per sheet: 750 mm x 500 mm / 29.53" x 19.69"  
Package content: 10 sheets



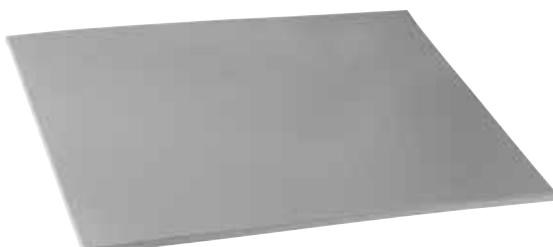
### GZDM 1900ML-GOLD

Self adhesive high efficient multi layer damping material  
One layer of bitumen mastic  
One layer of polymer based butyl rubber  
Aluminum foil as outer surface  
Application on body parts, doors and panels  
Very high mechanical loss factor  
Total thickness: 4,2 mm / 0.165"  
Size per sheet: 375 mm x 500 mm / 14.76" x 19.69"  
Package content: 10 sheets



### GZDM 1900MC-GOLD

Self adhesive multi component damping material  
One layer of viscous elastic polyurethane foam  
One layer of polymer based butyl rubber  
Aluminum foil as substrate  
Application on body parts, doors, panels and coverings  
Noise absorption: -85%  
Total thickness: 7 mm / 0.28"  
Size per sheet: 375 mm x 500 mm / 14.76" x 19.69"  
Package content: 10 sheets



### GZDF 400SI

Self-adhesive noise damping and heat insulating material  
High density, waterproof polyethylene foam  
Reducing standing waves inside the door panel  
Operating temperature: -30° to 90° C  
Total thickness: 4,0 mm / 0.158"  
Size per sheet: 375 mm x 500 mm / 14.76" x 19.69"



### GZDF 1500SA

Self adhesive lightweight single layer damping material  
High efficient viscous-elastic sound absorbing polyurethane foam  
Application inside of the passenger's compartment  
and on the backside of the door trims  
Heat insulating and vibration damping when compressed  
Noise absorbing: -85%  
Total thickness: 15 mm / 0.59"  
Size per sheet: 500 x 375 mm / 14.76" x 19.69"  
Package contents: 8 sheets



### GZDR 1000

Heavy duty damping roller

## ACCESSORIES

### POWER KITS

- High quality amplifier connection kits
- Flexible CCA wire with 30% copper coating
- Red power wire (5.2 m / 17.06 ft)
- Black ground wire (0.8 m / 2.62 ft)
- Blue remote wire (5 m / 16.4 ft)
- Shielded RCA cable (5m / 16.4 ft)
- Including accessories and connectors



#### GZPK 50X

50 mm<sup>2</sup> / 0 AWG power kit  
Triple shielded RCA cable  
ANL fuseholder incl. 300 A fuse

#### GZPK 35X

35 mm<sup>2</sup> / 2 AWG power kit  
Triple shielded RCA cable  
ANL fuseholder incl. 200 A fuse

#### GZPK 20X

20 mm<sup>2</sup> / 4 AWG power kit  
Triple shielded RCA cable  
Mini ANL fuseholder incl. 80 A fuse

#### GZPK 10X

10 mm<sup>2</sup> / 7 AWG power kit  
Triple shielded RCA cable  
Mini ANL fuseholder incl. 60 A fuse

#### GZPK 10XLC

10 mm<sup>2</sup> / 7 AWG power kit  
Twisted RCA cable  
1.5 m / 4.92 ft 2.5 mm<sup>2</sup> / 13 AWG speaker cable  
Mini ANL fuseholder incl. 60 A fuse

### POWER CABLES

- High quality power cable
- Flexible CCA wire with 30% copper coating
- Available on spools and in power kits

#### GZPC 10B/R

10 mm<sup>2</sup>/ 7 AWG cable spool  
Strands: 7\*81/0.15CCA  
OD 6.7 mm / 0.26"  
Cable length: 50 m / 164.04 ft

#### GZPC 20B/R

20 mm<sup>2</sup>/ 4 AWG cable spool  
Strands: 7\*7\*23/0.15CCA  
OD 10 mm / 0.39"  
Cable length: 50 m / 164.04 ft



#### GZPC 35B/R

35 mm<sup>2</sup>/ 2 AWG cable spool  
Strands: 7\*7\*40/0.15CCA  
OD 12.8 mm / 0.5"  
Cable length: 30 m / 98.43 ft

#### GZPC 50B/R

50 mm<sup>2</sup>/ 0 AWG cable spool  
Strands: 7\*7\*58/0.15CCA  
OD 15.5 mm / 0.61"  
Cable length: 20 m / 65.62 ft

### SPEAKER CABLES

- High quality speaker cable
- Flexible CCA wire with 30% copper coating
- Available on ABS plastic spools



#### GZSC 2-0.75

2 x 0.75 mm<sup>2</sup>/ 18 AWG  
Strands: 2\*42/0.15CCA  
OD 2.4 + 2.4 mm / .094" + .094"  
Cable length: 200 m / 656.17 ft

#### GZSC 2-1.50

2 x 1.50 mm<sup>2</sup>/ 15 AWG  
Strands: 2\*85/0.15CCA  
OD 3 + 3 mm / 0.12" + 0.12"  
Cable length: 200 m / 656.17 ft

#### GZCC X-TP Cables

- A perfect harmonically audio-bionic connection of the single components is created by homogeneously derived cable lengths from the circle constant PI
- Triple shielded, twisted RCA cable
- Gold plated brass RCA connectors
- Black & yellow snake skin
- High quality blister packaging



#### GZCC X-TP

GZCC 0.57X-TP: 0.57 m / 1.87 ft  
GZCC 1.14X-TP: 1.14 m / 3.74 ft  
GZCC 3.14X-TP: 3.14 m / 10.3 ft  
GZCC 5.49X-TP: 5.49 m / 18.01 ft



#### GZCC 5.3X

High quality RCA cable  
5 m / 16.4 ft triple shielded  
Including remote wire



#### GZCC 5.1XLC

High quality twisted RCA cable  
5 m / 16.4 ft single shielded



#### GZCY 30X

High quality Y-adapter  
1 x female / 2 x male




**GZTC 1.0FX**

1.0 Farad Power Cap  
16 V / 20 V Surge  
Voltmeter with white illumination  
Including mounting bracket


**GZEQ 4.7X**

High quality pre-amplifier  
4-band equalizer -16 > +16 dB  
Freq. response: 5 Hz – 30 kHz  
Input sensitivity: 50 mV – 3 VRMS  
Output voltage: 7 VRMS  
Adjustable LPF: 50 – 250 Hz


**GZCV 2.0HL**

Active high to low converter  
12 V Remote out


**GZRX 2-Way Kick**

Kick / 2 Way crossover  
to combine component or coaxial  
speakers with additional kickwoofers  
Lowpass 200 / 250 Hz  
Highpass 90 / 150 Hz


**GZ PROtect**

High quality speaker protection  
Protects speakers against clipping  
and electrical overload  
Contains 3 different protection-soffits  
(5W, 10W, 20W)  
Powerhandling 150 W  
Min. impedance load 2 Ω


**GZFH 1.50/1.50 ANL/MANL**

**GZFH 1.50/2.20 ANL/MANL**

**GZFH 1.20/1.20 MANL**

**GZBT 2.50 MANL-POS**

**GZBT 2.50 NEG**

**GZDB 3.50/4.20**

**GZFH 3.50/4.20 ANL/MANL**

**GZFH 1.20 IL-MANL**
**GZFH 1.20/1.20 MANL**

Model	Type	Input	Output
GZFH 1.50/1.50 ANL/MANL	ANL/MANL fuseholder	1 x 50 mm <sup>2</sup> / 0 AWG	1 x 50 mm <sup>2</sup> / 0 AWG
GZFH 1.50/2.20 ANL/MANL	ANL/MANL fuseholder	1 x 50 mm <sup>2</sup> / 0 AWG	2 x 20 mm <sup>2</sup> / 4 AWG
GZFH 1.20/1.20 MANL	MANL fuseholder	1 x 20 mm <sup>2</sup> / 4 AWG	1 x 20 mm <sup>2</sup> / 4 AWG
GZFH 1.20 IL-MANL	MANL fuseholder	1 x 20 mm <sup>2</sup> / 4 AWG	1 x 20 mm <sup>2</sup> / 4 AWG
GZFH 3.50/4.20 ANL/MANL	ANL/MANL fuseholder	3 x 50 mm <sup>2</sup> / 0 AWG	4 x 20 mm <sup>2</sup> / 4 AWG
GZBT 2.50 MANL-POS	Battery terminal + (with MANL fuse)	-	1 x 50 mm <sup>2</sup> / 0 AWG direct (1 x 50 mm <sup>2</sup> / 0 AWG fused with MANL)
GZBT 2.50 NEG	Battery terminal -	-	2 x 50 mm <sup>2</sup> / 0 AWG
GZDB 3.50/4.20	Distribution block	3 x 50 mm <sup>2</sup> / 0 AWG	4 x 20 mm <sup>2</sup> / 4 AWG

Model	Ampere	QTY
GZFU 100A / 1 ANL	100	1 in blister
GZFU 100A / 10 ANL	100	10 in polybag
GZFU 150A / 1 ANL	150	1 in blister
GZFU 150A / 10 ANL	150	10 in polybag
GZFU 200A / 1 ANL	200	1 in blister
GZFU 200A / 10 ANL	200	10 in polybag
GZFU 300A / 1 ANL	300	1 in blister
GZFU 300A / 10 ANL	300	10 in polybag
GZFU 400A / 1 ANL-SPL	400	1 in blister
GZFU 400A / 10 ANL-SPL	400	10 in polybag



Model	Ampere	QTY
GZFU 40A / 2 MANL	40	2 in blister
GZFU 40A / 10 MANL	40	10 in polybag
GZFU 60A / 2 MANL	60	2 in blister
GZFU 60A / 10 MANL	60	10 in polybag
GZFU 80A / 2 MANL	80	2 in blister
GZFU 80A / 10 MANL	80	10 in polybag
GZFU 100A / 2 MANL	100	2 in blister
GZFU 100A / 10 MANL	100	10 in polybag
GZFU 150A / 2 MANL	150	2 in blister
GZFU 150A / 10 MANL	150	10 in polybag
GZFU 200A / 2 MANL	200	2 in blister
GZFU 200A / 10 MANL	200	10 in polybag



**GZTG 200T**

200 mm / 8" Protection grill  
ABS plastic injection

**GZTG 250T**

250 mm / 10" Protection grill  
ABS plastic injection

**GZTG 300T**

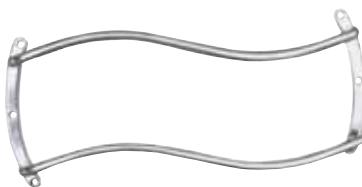
300 mm / 12" Protection grill  
ABS plastic injection

**GZTG 380T**

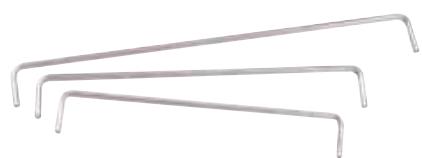
380 mm / 15" Protection grill  
ABS plastic injection

**GZMG 165/6.5**

165 mm / 6.5" Protection grill  
Black chrome steel  
For all 165 mm / 6.5" speakers

**GZMG 38/15**

Chrome woofer/speaker protection  
for 380 mm / 15" speaker

**GZBRK**

Woofer protection bar  
GZBRK 290 (290 mm / 11.42")  
GZBRK 425 (425 mm / 16.73")

**GZBR 200BMW**

Upgrade adapter for all BMW E- and F-series  
Compatible with  
GZMW 200X-NEO and GZRW 8FL

**GZCG 20SC**

200 mm / 8" Protection mesh grill  
For GZCM / GZCW / GZCF 8-4SPL /  
GZCF 8-4Coax-SPL

**X-GZRW 8FL Grill**

200 mm / 8" Protection mesh grill  
For GZCM / GZCW / GZCF 8-4SPL /  
GZCF 8-4Coax-SPL / GZRW 8FL /  
GZMW 200X-NEO

**GZAP 80Y**

Yellow airflow optimized ABS plastic port  
with ø 80 mm / 3.15" and  
400 mm / 15.85" port length

**GZAP 80B**

Black airflow optimized ABS plastic port  
with ø 80 mm / 3.15" and  
400 mm / 15.85" port length

**GZAP 80A**

Anthracite airflow optimized ABS plastic port  
with ø 80 mm / 3.15" and  
400 mm / 15.85" port length

### GZHP 9-IE

High quality in-ear headphone with aluminum housing  
Speaker: 9 mm  
Sensitivity: 98 dB at 1 kHz  
Microphone sensitivity: -42 ±3 dB  
Impedance: 32 Ω  
Frequency Response: 20 Hz – 20KHz  
RMS: 3 mW  
Plug Type: 3.5 mm  
Cable length: 120 cm / 47 in.  
Weight: 15 g  
In-Line Mic compatible with  
Apple/Samsung/HTC and more



### GZHP 40-OE

High quality foldable on-ear headphone  
Speaker: 40 mm  
Sensitivity: 100±3 dB at 1 kHz  
Microphone sensitivity: -43 ±4 dB  
Frequency Response: 20 Hz – 20KHz  
Impedance: 32 ± 15% Ω  
Max Power: 30 mW  
Plug Type: 3.5 mm  
Cable length: 120 cm / 47 in.  
Cable: Dual side cable  
Weight: 150 g  
In-Line Mic compatible with  
Apple/Samsung/HTC and more



## Amplifier

Series

Product	Output power @ 4/2/1 Ohm	Bridged max @ 4/2 Ohm (link mode)	LPF	HPF / *Subsonic	BP	Bass-boost	Phase-shift	Remote	Line Out	High-level & auto-on	Dimensions (mm/inch)
GZPA Reference 4 Pure	4x 150/270/425 W	2x 650/1000 W max									236 x 67,5 x 590 9.29 x 2.66 x 23.23
GZPA Reference 2 Pure	2x 420/750/1150 W	1x 1800/2700 W max									236 x 67,5 x 590 9.29 x 2.66 x 23.23
GZPA Reference 4 Sym	4x 150/270/425 W	2x 650/1000 W max	✓	✓	✓						236 x 67,5 x 590 9.29 x 2.66 x 23.23
GZPA Reference 2 Sym	2x 420/750/1150 W	1x 1800/2700 W max	✓	✓	✓	✓	✓	✓			236 x 67,5 x 590 9.29 x 2.66 x 23.23
GZPA Reference 4XS	4x 120/220/- W	2x 500 W max @ 4 Ohm	✓	✓	✓						236 x 67,5 x 420 9.29 x 2.66 x 16.54
GZPA Reference 2XS	2x 200/380/- W	1x 900 W max @ 4 Ohm	✓	✓	✓	✓	✓	✓	✓		236 x 67,5 x 420 9.29 x 2.66 x 16.54
GZPA 1.10K-HCX	1x 3200/5900/10500 W	1x 23000 W max @ 2 Ohm (linkmode)	✓	✓	✓	✓	✓	✓	✓		290 x 67,5 x 900 11.42 x 2.66 x 35.43
GZPA 1.8K-HCX	1x 2600/4800/8400 W	1x 18600 W max @ 2 Ohm (linkmode)	✓	✓	✓	✓	✓	✓	✓		290 x 67,5 x 820 11.42 x 2.66 x 32.28
GZPA 1.6K-HCX	1x 1700/3200/5800 W	1x 13600 W max @ 2 Ohm (linkmode)	✓	✓	✓	✓	✓	✓	✓		230 x 66 x 650 9.06 x 2.6 x 25.59
GZPA 1.4K-HCX	1x 1200/2400/4000 W	1x 10000 W max @ 2 Ohm (linkmode)	✓	✓	✓	✓	✓	✓	✓		230 x 63 x 550 9.06 x 2.48 x 21.65
GZNA 4330XII	4x 200/350/550 W	2x 1300 W max @ 2 Ohm	✓	✓	✓	✓	✓	✓			293 x 67 x 560 11.54 x 2.64 x 22.05
GZNA 2850XII	2x 430/800/1200 W	1x 2800 W max @ 2 Ohm	✓	✓	✓	✓	✓	✓	✓		293 x 67 x 600 11.54 x 2.64 x 23.62
GZNA 1.2550DXII	1x 850/1500/2400 W	1x 6200 W max @ 2 Ohm (linkmode)	✓	Subsonic	✓	✓	✓	✓	✓		293 x 67 x 560 11.54 x 2.64 x 22.05
GZUA 6.200SQ-Plus	4x 110/160/- & 2x 160/280/-	2x 320 W & 1x 560 W max @ 4 Ohm	✓	✓	✓						209 x 46 x 550 8.23 x 1.81 x 21.65
GZUA 4.150SQ-Plus	4x 110/190/- W	2x 460 W max @ 4 Ohm	✓	✓	✓						209 x 46 x 360 8.23 x 1.81 x 14.17
GZUA 2.250SQ-Plus	2x 180/320/500 W	1x 1200 W max @ 2 Ohm	✓	✓	✓	✓	✓	✓	✓		209 x 46 x 360 8.23 x 1.81 x 14.17
GZHA 4200XII	4x 140/200/- W	2x 500 W max @ 4 Ohm	✓	✓	✓	✓	✓	✓	✓		293 x 67 x 400 11.54 x 2.64 x 15.75
GZHA 2400XII	2x 270/480/750 W	1x 1800 W max @ 2 Ohm	✓	✓	✓	✓	✓	✓	✓		293 x 67 x 400 11.54 x 2.64 x 15.75
GZHA 1.1850DXII	1x 700/1200/1850 W	1x 4800 W max @ 2 Ohm (linkmode)	✓	Subsonic	✓	✓	✓	✓	✓		293 x 67 x 400 11.54 x 2.64 x 15.75
GZHA MINI FOUR	4x 80/130/- W	2x 320 W max @ 4 Ohm	✓	✓	✓			✓		✓	135 x 52 x 210 5,32 x 2.05 x 8.27
GZHA MINI TWO	2x 130/230/- W	1x 550 W max @ 4 Ohm	✓	✓	✓			✓	✓	✓	135 x 52 x 210 5,32 x 2.05 x 8.27
GZHA MINI ONE	1x 220/390/630 W	1x 1500 W max @ 2 Ohm (linkmode)	✓	Subsonic	✓	✓	✓	✓	✓	✓	135 x 52 x 210 5,32 x 2.05 x 8.27
GZRA 4230X	4x 140/230/-	2x 550 W max @ 4 Ohm	✓	✓	✓	✓					230 x 53 x 476 9.06 x 2.09 x 18.74
GZRA 2255X	2x 150/250/- W	1x 600 W max @ 4 Ohm	✓	✓	✓	✓	✓		✓		230 x 53 x 396 9.06 x 2.09 x 16.34
GZRA 1.2500DX	1x 750/1400/2200 W	1x 6000 W max @ 2 Ohm (linkmode)	✓	Subsonic		✓	✓	✓	✓		230 x 53 x 615 9.06 x 2.09 x 24.21
GZRA 1.1650DX	1x 650/1250/1800 W	1x 4600 W max @ 2 Ohm (linkmode)	✓	Subsonic		✓	✓	✓	✓		230 x 53 x 446 9.06 x 2.09 x 17.56
GZRA MICRO FOUR	4x 60/100/- W	2x 250 W max @ 4 Ohm	✓	✓						✓	75 x 44 x 190 2.95 x 1.73 x 7.48
GZRA MICRO ONE	1x 220/350/- W		✓	Subsonic		✓		✓		✓	75 x 44 x 190 2.95 x 1.73 x 7.48

Amplifier												
Series	Product	Output power @ 4/2/1 Ohm	Bridged max @ 4/2 Ohm (link mode)	LPF	HPF / *Subsonic	BP	Bass-boost	Phase-shift	Remote	Line Out	High-level & auto-on	Dimensions (mm/inch)
	GZTA 5120X-II	4x 50/70/- W & 1x 180/260/- W		✓	✓	✓	✓	✓	✓			230 x 53 x 476 9.06 x 2.09 x 18.74
	GZTA 4125X-II	4x 90/130/- W	2x 320 W max @ 4 Ohm	✓	✓	✓	✓					230 x 53 x 396 9.06 x 2.09 x 15.59
	GZTA 2155X-II	2x100/150/- W	1x 400 W max @ 4 Ohm	✓	✓	✓	✓		✓			230 x 53 x 296 9.06 x 2.09 x 11.65
	GZTA 1.800DX-II	1x 350/550/850 W	1x 2000 W max @ 2 Ohm (linkmode)	✓	Subsonic	✓	✓	✓	✓	✓		230 x 53 x 365 9.06 x 2.09 x 14.37
	GZTA 1.1200DX-II	1x 400/800/1300 W	1x 3000 W max @ 2 Ohm (linkmode)	✓	Subsonic	✓	✓	✓	✓	✓		230 x 53 x 445 9.06 x 2.09 x 17.52
	GZTA 4125X-II24V	4x 90/130/- W	2x 320 W max @ 4 Ohm	✓	✓	✓	✓					230 x 53 x 397 9.06 x 2.09 x 15.63
	GZTA 1.800DX-II24V	1x 350/550/850 W	1x 2000 W max @ 2 Ohm (linkmode)	✓	Subsonic	✓	✓	✓	✓	✓		230 x 53 x 365 9.06 x 2.09 x 14.37
	GZIA 1.1450DX-II	1x 400 / 750 / 1250 W		✓			✓	✓	✓		✓	192 x 49 x 360 7.56 x 1.93 x 14.17
	GZIA 1.1000DX-II	1x 350 / 650 / 1000 W		✓			✓	✓	✓		✓	192 x 49 x 302 7.56 x 1.93 x 11.89
	GZIA 1.600HPX-II	1x 230/400/600 W		✓			✓		✓		✓	192 x 49 x 332 7.56 x 1.93 x 13.07
	GZIA 4115HPX-II	4x 70/115/- W	2x 250 W max @ 4 Ohm	✓	✓						✓	192 x 49 x 284 7.56 x 1.93 x 11.18
	GZIA 2235HPX-II	2x 150/235/- W	1x 540 W max @ 4 Ohm	✓	✓				optional		✓	192 x 49 x 284 7.56 x 1.93 x 11.18
	GZIA 2130HPX-II	2x 85/130/- W	1x 320 W max @ 4 Ohm	✓	✓				optional		✓	192 x 49 x 214 7.56 x 1.93 x 8.43
	GZIA 2080HPX-II	2x 60/80/- W	1x 240 W max @ 4 Ohm	✓							✓	192 x 49 x 174 7.56 x 1.93 x 6.85
	GZCA 35K-SPL	35000 W @ 1 Ohm								✓		225 x 68 x 836 8.85 x 2.67 x 32.91
	GZCA 12K-SPL	1x - / 9000 / 13700 W		✓	✓	✓	✓			✓		225 x 68 x 505 8.85 x 2.67 x 19.88
	GZCA 8.0K-SPL	1x - / 4480 / 8960 W		✓	✓	✓	✓			✓		225 x 68 x 373 8.85 x 2.67 x 14.68
	GZCA 5.0K-SPL	1x - / 2800 / 5600 W		✓	✓	✓	✓			✓		225 x 68 x 297 8.85 x 2.67 x 11.69
	GZCA 3.0K-SPL	1x - / 1800 / 3400 W		✓	✓	✓	✓			✓		225 x 68 x 214 8.85 x 2.67 x 8.43
	GZCA 1.2K-SPL	1x - / 675 / 1350 W		✓	Subsonic	✓	✓			✓		225 x 56 x 214 8.85 x 2.2 x 8.43
	GZCS 4.60ISO	4x 70/90	2x 70 W & 1x 180 W @ 4 Ohm	✓	✓						ISO	135 x 52 x 165 5.31 x 2.05 x 6.5
	GZDSP 4.80AMP	4x 90/150	2x 350 W @ 4 Ohm			DSP			optional	4 channel	✓	185 x 40 x 181 7.28 x 1.57 x 7.13
	GZDSP 6.120AMP	4x 60/100 W & 2x 120/200 W				DSP			optional	2 channel	✓	185 x 40 x 211 7.28 x 1.57 x 8.31
	GZDSP 4.60ISO	4x40/60 W				DSP			optional	4 channel	✓	185 x 40 x 100 7.28 x 1.57 x 3.94
	GZDSP 1.600AMP	1 x 200/360/600 W		✓	Subsonic	✓	✓		✓			185 x 40 x 140 7.28 x 1.57 x 5.51

Active subwoofer											
Series	Product	Woofer	Type	Enclosure	Dimensions (mm/inch)				Lowpass	Bass remote	Output power
	GZUB 1000XACTII	250 mm / 10" Flat woofer	Flat active woofer	Aluminum cast	360 x 270 x 78 / 14.17 x 10.63 x 3.07				50 - 100 Hz	✓	150 / 210 W
	GZUB 800XACTII	200 mm / 8" Flat woofer	Flat active woofer	Aluminum cast	345 x 240 x 68 / 13.58 x 9.45 x 2.68				50 - 100 Hz	✓	120 / 180 W
	GZUB 600XACTII	160 mm / 6" Flat woofer	Flat active woofer	Aluminum cast	290 x 203 x 72 / 11.42 x 7.99 x 2.83				50 - 100 Hz	✓	100 / 160 W
	GZTB 20ACT	200 mm / 8" Flat woofer	Flat active woofer	Plastic injection	345 x 237 x 72 / 13.58 x 9.33 x 2.83				50 - 100 Hz	✓	100 / 160 W
	GZIB 300BR-ACT	300 mm / 12" Woofer	Front-Basstunnel	37 L / 1.31 ft³ Wood	440 x 365 x 390 (300) / 17.32 x 14.37 x 15.35 (12)				60 - 180 Hz		150 / 300 W
	GZIB 200BR-ACT	GZIW 200X	Front-Basstunnel	17 L / 0.6 ft³ Wood	380 x 260 x 310 (245) / 15 x 10.24 x 12.2 (9.65)				60 - 180 Hz		100 / 200 W
	GZIB 165BR-ACT	GZIW 165X	Front-Basstunnel	11 L / 0.39 ft³ Wood	310 x 220 x 300 (250) / 12.2 x 8.66 x 11.81 (9.8)				60 - 180 Hz		80 / 150 W
	GZCS 10SUB-ACT	250 mm / 10" Woofer	Sealed	15 L / 0.53 ft³	620 x 440 x 120 (145 incl. feet) / 12.21 x 17.32 x 4.72 (5.71 incl. feet)				60 - 180 Hz		150 / 300 W

Component									
Series	Product	Outer Ø	Mounting Ø	Depth	Tweeter	Midwoofer	Frequency range	Impedance	Power handling RMS/MAX
GZPC 16.3SQ	165 mm / 6.5" 94 mm / 3.7"	143,5 mm / 5.65" 76,5 mm / 3.01"	68 mm / 2.68" 34 mm / 1.34"	GZPT 28SX	GZPK 16SQ GZPM 80SQX	30 Hz - 30 kHz	3 Ω	200 / 300 W	
GZPC 16.3SQ-ACT	165 mm / 6.5" 94 mm / 3.7"	143,5 mm / 5.65" 76,5 mm / 3.01"	68 mm / 2.68" 34 mm / 1.34"	GZPT 28SX	GZPK 16SQ GZPM 80SQX	30 Hz - 30 kHz	4 / 4 / 4 Ω		
GZPC 165SQ	165 mm / 6.5"	143,5 mm / 5.65"	68 mm / 2.68"	GZPT 28SX	GZPK 16SQ	30 Hz - 30 kHz	4 Ω	150 / 250 W	
GZPC 165SQ-ACT	165 mm / 6.5"	143,5 mm / 5.65"	68 mm / 2.68"	GZPT 28SX	GZPK 16SQ	30 Hz - 30 kHz	4 / 4 Ω		
GZNC 1650SQ	165 mm / 6.5"	143,5 mm / 5.65"	68 mm / 2.68"	GZNT 25SQ	GZNK 165SQ	40 Hz - 26 kHz	4 Ω	150 / 250 W	
GZUC 650SQX	165 mm / 6.5"	142 mm / 5.59"	70 mm / 2.76"	GZUT 25SQX	GZUK 65SQX	40 Hz - 25 kHz	4 Ω	140 / 220 W	
GZUC 650SQ-II	165 mm / 6.5"	145,7 mm / 5.74"	66 mm / 2.6"	GZHT 25SQ	WFWC Cone	40 Hz - 24 kHz	4 Ω	130 / 210 W	
GZRC 165AL-White	165 mm / 6.5"	142,5 mm / 5.61"	68 mm / 2.68"	25 mm / 1" Alu dome	Anodized alu cone	35 Hz - 26 kHz	3 Ω	120 / 190 W	
GZRC 200NEO-IV	205 mm / 8.07"	182 mm / 7.17"	57 mm / 2.24"	GZRT 25T	GZMW 200X-NEO	35 Hz - 26 kHz	3 Ω	120 / 190 W	
GZRC 165NEO-IV	165 mm / 6.5"	142,5 mm / 5.61"	48 mm / 1.89"	GZRT 25T	GZMW 165X-NEO	50 Hz - 26 kHz	3 Ω	110 / 170 W	
GZRC 100NEO-IV	102 mm / 4.02"	94 mm / 3.7"	31 mm / 1.22"	GZRT 25T	Coated paper cone	80 Hz - 26 kHz	3 Ω	80 / 120 W	
GZRC 165AL-IV	165 mm / 6.5"	142,5 mm / 5.61"	68 mm / 2.68"	GZRT 25T	GZRK 16AL	35 Hz - 26 kHz	3 Ω	120 / 190 W	
GZRC 130AL-IV	130 mm / 5.25"	117,5 mm / 4.63"	60 mm / 2.36"	GZRT 25T	Aluminum cone	60 Hz - 26 kHz	3 Ω	100 / 160 W	
GZRC 6857X	5 x 7" / 6 x 8"	123 x 180 mm / 4.84 x 7"	59 mm / 2.3"	25 mm / 1" silkdome	Coated paper cone	55 Hz - 22 kHz	4 Ω	120 / 180 W	
GZTC 165TX	165 mm / 6.5"	142,5 mm / 5.61"	67 mm / 2.64"	25 mm / 1" silkdome	Coated paper cone	50 Hz - 20 kHz	4 Ω	110 / 160 W	
GZIC 16X	165 mm / 6.5"	143,5 mm / 5.65"	60 mm / 2.36"	19 mm / 0.75 softdome	HQPP cone	50 Hz - 20 kHz	4 Ω	100 / 150 W	
GZIC 13X	130 mm / 5.25"	114 mm / 4.49"	50 mm / 1.97"	19 mm / 0.75 softdome	HQPP cone	60 Hz - 20 kHz	4 Ω	90 / 140 W	
GZIC 650FX	165 mm / 6.5"	142,5 mm / 5.61"	44 mm / 1.73"	GZHT 19X	Coated paper cone	50 Hz - 20 kHz	4 Ω	100 / 140 W	
GZIC 525FX	130 mm / 5.25"	117,5 mm / 4.63"	36 mm / 1.42"	GZHT 19X	Coated paper cone	60 Hz - 20 kHz	4 Ω	80 / 120 W	
GZIC 400FX	102 mm / 4.02"	93 mm / 3.66"	30 mm / 1.18"	GZHT 19X	Coated paper cone	70 Hz - 20 kHz	4 Ω	60 / 100 W	
GZCS 100BMW-A	Car specific				25 mm / 1" Titanium dome	Paper-fibre cone	100 Hz - 25 kHz	3 Ω	50 / 100 W
GZCS 100BMW-B	Car specific				25 mm / 1" Titanium dome	Paper-fibre cone	100 Hz - 25 kHz	3 Ω	50 / 100 W
GZCS 100BMW-C	Car specific				25 mm / 1" Titanium dome	Paper-fibre cone	100 Hz - 25 kHz	3 Ω	50 / 100 W
GZCS 100BMW-D	Car specific				25 mm / 1" Titanium dome	Paper-fibre cone	100 Hz - 25 kHz	3 Ω	50 / 100 W
GZCS 100MINI-A	Car specific				25 mm / 1" Titanium dome	Paper-fibre cone	100 Hz - 25 kHz	3 Ω	50 / 100 W

Coaxial									
Series	Product	Outer Ø	Mounting Ø	Depth	Tweeter	Midwoofer	Frequency range	Impedance	Power handling RMS/MAX
GZRF 69AL	150 x 230 mm / 6 x 9"	152 x 214 mm / 5.98 x 8.4"	82 mm / 3.23"	13 mm / 0.51" PEI 50 mm / 2" PEI	Aluminum cone	40 Hz - 25 kHz	3 Ω	130 / 200 W	
GZRF 65AL	165 mm / 6.5"	142,5 mm / 5.61"	68 mm / 2.68"	13 mm / 0.51" PEI	Aluminum cone	50 Hz - 25 kHz	3 Ω	100 / 140 W	
GZRF 52AL	130 mm / 5.25"	117,5 mm / 4.63"	59 mm / 2.32"	13 mm / 0.51" PEI	Aluminum cone	60 Hz - 20 kHz	3 Ω	80 / 120 W	
GZRF 40AL	102 mm / 4.02"	93 mm / 3.66"	47 mm / 1.85"	13 mm / 0.51" PEI	Aluminum cone	70 Hz - 20 kHz	3 Ω	70 / 110 W	
GZRM 165	165 mm / 6.5"	142,5 mm / 5.61"	62 mm / 2.44"	13 mm / 0.51" Mylar	IMPP cone	60 Hz - 20 kHz	4 Ω	70 / 120 W	
GZTF 69TX	150 x 230 mm / 6 x 9"	152 x 214 mm / 5.98 x 8.4"	80 mm / 3.15"	13 mm / 0.51" Mylar 55 mm / 2.17" Mylar	Coated paper cone	40 Hz - 20 kHz	4 Ω	120 / 180 W	
GZTF 16TX	165 mm / 6.5"	142,5 mm / 5.61"	61 mm / 2.4"	13 mm / 0.51" Mylar	Coated paper cone	70 Hz - 20 kHz	4 Ω	80 / 120 W	
GZTF 12TX	118 mm / 4.65"	109 mm / 4.29"	50 mm / 1.97"	13 mm / 0.51" Mylar	Coated paper cone	75 Hz - 20 kHz	4 Ω	60 / 100 W	
GZTF 8.7TX	87 mm / 3.43"	80 mm / 3.15"	43 mm / 1.69"	13 mm / 0.51" Mylar	Coated paper cone	100 Hz - 20 kHz	4 Ω	50 / 90 W	
GZTF 46TX	100 x 150 mm / 4 x 6"	90 x 141 mm / 3.54 x 5.55"	48 mm / 1.89"	13 mm / 0.51" Mylar	Coated paper cone	80 Hz - 20 kHz	4 Ω	70 / 110 W	
GZIF 69X	150 x 230 mm / 6 x 9"	150 x 220 mm / 5.9 x 8.66"	81,5 mm / 3.2"	13 mm / 0.51" Mylar 50 mm / 2" Mylar	HQPP cone	40 Hz - 20 kHz	4 Ω	120 / 180 W	
GZIF 65X	165 mm / 6.5"	143,5 mm / 5.65"	60 mm / 2.36"	13 mm / 0.51" Mylar	HQPP cone	50 Hz - 20 kHz	4 Ω	80 / 120 W	
GZIF 52X	130 mm / 5.25"	114 mm / 4.49"	50 mm / 1.97"	13 mm / 0.51" Mylar	HQPP cone	60 Hz - 20 kHz	4 Ω	70 / 110 W	
GZIF 40X	102 mm / 4.02"	92 mm / 3.6"	47 mm / 1.85"	13 mm / 0.51" Mylar	HQPP cone	80 Hz - 20 kHz	4 Ω	60 / 100 W	
GZIF 6501FX	165 mm / 6.5"	142,5 mm / 5.61"	44 mm / 1.73"	13 mm / 0.51" Mylar	Coated paper cone	60 Hz - 20 kHz	4 Ω	70 / 110 W	
GZIF 5201FX	130 mm / 5.25"	117,5 mm / 4.63"	37 mm / 1.46"	13 mm / 0.51" Mylar	Coated paper cone	70 Hz - 20 kHz	4 Ω	60 / 100 W	
GZIF 4001FX	102 mm / 4.02"	93 mm / 3.66"	30 mm / 1.18"	13 mm / 0.51" Mylar	Coated paper cone	80 Hz - 20 kHz	4 Ω	50 / 90 W	
GZCF 7104XSPL	180 x 250 mm / 7 x 10"	6 x 9" Adapter	86 mm / 3.39"	13 mm / 0.51" PEI 50 mm / 2" paper cone 13 mm / 0.51" piezo	Fiber reinforced paper cone	35 Hz - 25 kHz	4 Ω	200 / 300 W	
GZCF 8-4COAX-SPL	210 mm / 8.27"	185 mm / 7.28"	95 mm / 3.74"	32 mm / 1.26" silkdome	Fiber reinforced paper cone	TW: 2.5 - 26 kHz MID: 90 Hz - 2.5 kHz	TW: 5 Ω MID: 4 Ω	TW: 50 / 100 W Mid: 150 / 300 W	
GZCF 200COAX	210 mm / 8.27"	184 mm / 7.24"	89 mm / 3.5"	44.5 mm / 1.75" titanium compression horn	Fiber reinforced paper cone	TW: 3 - 25 kHz MID: 150 Hz - 3 kHz	TW: 4 Ω MID: 4 Ω	TW: 50 / 150 W Mid: 150 / 250 W	
GZCF 165COAX	169 mm / 6.65"	147,5 mm / 5.8"	79 mm / 3.11"	35 mm / 1.38" PEN compression horn	Fiber reinforced paper cone	TW: 3.5 - 25 kHz MID: 180Hz - 3.5kHz	TW: 4 Ω MID: 4 Ω	TW: 25 / 100 W Mid: 125 / 200 W	

Woofer / Midwoofer / Midrange / Fullrange												
Series	Product	Outer Ø	Mounting Ø	Depth	Voice coil Ø	Cone	FS	QTS	VAS	Frequency range	Impedance	Power handling RMS/MAX
GZMW Reference 180	181,2 mm / 7.13"	155,5 mm / 6.12"	68 mm / 2.68"	25 mm / 1"	Coated paper	56.8 Hz	0.58	16 L / 0.56 ft³	40 Hz - 3.5 kHz	4 Ω	100 / 150 W	
GZPM Reference 80	98 mm / 3.86"	85.4 mm / 3.36"	45 mm / 1.77"	19 mm / 0.75"	Coated paper	107.5 Hz	0.60	0.8 L / 0.028 ft³	150 Hz - 6 kHz	4 Ω	80 / 120 W	
GZPK 16SQ	165 mm / 6.5"	143,5 mm / 5.65"	68 mm / 2.68"	36 mm / 1.42"	Alu-Ceramic	45.3 Hz	0.62	22.1 L / 0.78 ft³	30 Hz - 3 kHz	4 Ω	130 / 210 W	
GZPM 80SQX	94 mm / 3.7"	76,5 mm / 3.01"	34 mm / 1.34"	25 mm / 1"	Magnesium	109.4 Hz	0.46	0.9 L / 0.032 ft³	150 Hz - 4 kHz	4 Ω	70 / 110 W	
GZNK 165SQ	165 mm / 6.5"	143,5 mm / 5.65"	68 mm / 2.68"	36 mm / 1.42"	Coated paper	55.2 Hz	0.65	14.6 L / 0.52 ft³	40 Hz - 3 kHz	4 Ω	130 / 200 W	
GZNM 80SQ	94 mm / 3.7"	76,5 mm / 3.01"	34 mm / 1.34"	25 mm / 1"	Coated paper	115 Hz	0.39	1 L / 0.035 ft³	150 Hz - 5 kHz	4 Ω	60 / 100 W	
GZUK 65SQX	165 mm / 6.5"	142 mm / 5.59"	70 mm / 2.76"	31 mm / 1.22"	WFWC	55.1 Hz	0.49	12.6 L / 0.45 ft³	40 Hz - 4 kHz	4 Ω	120 / 200 W	
GZUF 60SQ	72 mm / 2.83"	61 mm / 2.4"	36 mm / 1.42"	25 mm / 1"	Black Aluminum	150 Hz	0.64	0.4 L / 0.14 ft³	300 Hz - 20 kHz	4 Ω	50 / 80 W	
GZMW 200X-NEO	205 mm / 8.07"	182 mm / 7.17"	57 mm / 2.24"	30 mm / 1.18"	Coated paper	38.4 Hz	0.48	41.9 L / 1.48 ft³	35 Hz - 3.5 kHz	3 Ω	100 / 160 W	
GZMW 165X-NEO	165 mm / 6.5"	142.5 mm / 5.61"	48 mm / 1.89"	30 mm / 1.18"	Coated paper	44.3 Hz	0.47	21.4 L / 0.76 ft³	50 Hz - 4 kHz	3 Ω	90 / 140 W	
GZRK 16AL	165 mm / 6.5"	142.5 mm / 5.61"	68 mm / 2.68"	25 mm / 1"	Aluminum	60.1 Hz	0.65	11.5 L / 0.41 ft³	35 Hz - 4 kHz	3 Ω	110 / 160 W	
GZCW 15.1500-PRO	393 mm / 15.47"	355 mm / 13.98"	163 mm / 6.42"	100 mm / 4"	Reinforced paper	48.2 Hz	0.31	93.8 L / 3.3 ft³	50 Hz - 2 kHz	4 Ω	1000/1500W	
GZCW 12.1200-PRO	320 mm / 12.6"	283 mm / 11.14"	117 mm / 4.6"	100 mm / 4"	Reinforced paper	51.4 Hz	0.28	43.8 L / 1.55 ft³	60 Hz - 2 kHz	4 Ω	800 / 1200W	
GZCM 8.0N-PRO	209 mm / 8.23"	184 mm / 7.24"	83 mm / 3.27"	63 mm / 2.5"	Reinforced paper	102.2 Hz	0.28	9.1 L / 0.32 ft³	130 Hz - 10 kHz	4 Ω	300 / 500 W	
GZCM 6.5N-PRO	173 mm / 6.81"	148 mm / 5.83"	68 mm / 2.68"	38 mm / 1.5"	Reinforced paper	116.2 Hz	0.33	5.6 L / 0.20 ft³	150 Hz - 12 kHz	4 Ω	200 / 400 W	
GZCW 12-75SPL	312 mm / 12.28"	282 mm / 11.1"	133 mm / 5.24"	75 mm / 3"	Reinforced paper	42.2 Hz	0.27	71.9 L / 2.54 ft³	40 Hz - 3 kHz	4 Ω	400 / 800 W	
GZCW 12-50	312 mm / 12.28"	282 mm / 11.1"	130 mm / 5.12"	50 mm / 2"	Reinforced paper	47.1 Hz	0.42	93.4 L / 3.68 ft³	50 Hz - 3 kHz	4 Ω	300 / 600 W	
GZCM 10-4PPX	261 mm / 10.28"	232 mm / 9.13"	108 mm / 4.25"	75 mm / 3"	Reinforced paper	117.9 Hz	0.65	10.4 L / 0.37 ft³	120 Hz - 5 kHz	4 Ω	300 / 600 W	
GZCM 8-4PPX	209 mm / 8.23"	184 mm / 7.24"	92 mm / 3.62"	50 mm / 2"	Reinforced paper	124.3 Hz	0.47	6.8 L / 0.24 ft³	150 Hz - 10 kHz	4 Ω	200 / 500 W	
GZCM 6-4PPX	173 mm / 6.81"	148 mm / 5.83"	82 mm / 3.23"	50 mm / 2"	Reinforced paper	126.5 Hz	0.46	4.8 / 0.17 ft³	150 Hz - 10 kHz	4 Ω	150 / 400 W	
GZCM 10-4FX	257 mm / 10.12"	230 mm / 9.06"	76 mm / 2.99"	50 mm / 2"	Reinforced paper	91.2 Hz	0.69	23.5 L / 0.83 ft³	120 Hz - 5 kHz	4 Ω	200 / 500 W	
GZCM 8-4FX	210 mm / 8.27"	180 mm / 7.09"	65 mm / 2.56"	38 mm / 1.5"	Reinforced paper	132.1 Hz	1.02	6.3 L / 0.22 ft³	150 Hz - 4 kHz	4 Ω	100 / 400 W	
GZCM 6-4FX	165 mm / 6.5"	143 mm / 5.63"	52 mm / 2.05"	38 mm / 1.5"	Reinforced paper	216.6 Hz	0.94	1.8 l / 0.06 ft³	200 Hz - 5 kHz	4 Ω	100 / 300 W	
GZCK 250SPL	255 mm / 10.04"	230 mm / 9.06"	107 mm / 4.21"	50 mm / 2"	Reinforced paper	45.4 Hz	0.36	67.9 L / 2.4 ft³	40 Hz - 6 kHz	4 Ω	200 / 400 W	
GZCK 200SPL	209 mm / 8.23"	183 mm / 7.2"	86 mm / 3.39"	38 mm / 1.5"	Reinforced paper	54.3 Hz	0.38	31.2 L / 1.10 ft³	50 Hz - 6 kHz	4 Ω	150 / 300 W	
GZCK 165SPL	167 mm / 6.57"	145 mm / 5.7"	71,5 mm / 2.81"	38 mm / 1.5"	Reinforced paper	56.8 Hz	0.31	16.2 L / 0.57 ft³	50 Hz - 4 kHz	4 Ω	100 / 250 W	

Tweeter												
Series	Product	Outer Ø w/o frame	Outer Ø incl. frame	Mounting Ø incl. frame	Total height w/o frame	Mounting depth incl. frame	Voice coil Ø	Dome	FS	Frequency range	Impedance	Power handling RMS/MAX
	GZPT Reference 28	54 mm / 2.1"		48 mm / 1.89"	50 mm / 1.97"	39 mm / 1.54"	28 mm / 1.1"	Coated silk	600 Hz	1.5 - 30 kHz	4 Ω	100 / 150 W
	GZPT 28SX	54 mm / 2.1"		48 mm / 1.89"	42 mm / 1.65"	31 mm / 1.22"	28 mm / 1.1"	Coated silk	750 Hz	2 - 30 kHz	4 Ω	100 / 150 W
	GZNT 25SQ	49 mm / 1.93"		43.1 mm / 1.7"	32.8 mm / 1.29"	21.5 mm / 0.85"	25 mm / 1"	Coated silk	750 Hz	2 - 28 kHz	4 Ω	80 / 130 W
	GZUT 25SQX	49.5 mm / 1.95"		43.1 mm / 1.7"	34.3 mm / 1.35"	22 mm / 0.87"	25 mm / 1"	Coated silk	750 Hz	2 - 25 kHz	4 Ω	70 / 120 W
	GZRT 25T	49.5 mm / 1.95"		44 mm / 1.73"	18.8 mm / 0.74"	10 mm / 0.39"	25 mm / 1"	Titanium	1500 Hz	3 - 26 kHz	3 Ω	70 / 110 W
	GZHT 25X	42 mm / 1.65"	54 mm / 2.13"	48 mm / 1.89"	21 mm / 0.83"	20 mm / 0.79"	25 mm / 1"	Coated silk	1600 Hz	3 - 20 kHz	4 Ω	60 / 100 W
	GZHT 19X	37 mm / 1.46"	50 mm / 1.97"	41 mm / 1.61"	18 mm / 0.71"	15 mm / 0.59"	19 mm / 0.75"	Coated silk	1650 Hz	3.5 - 20 kHz	4 Ω	40 / 70 W

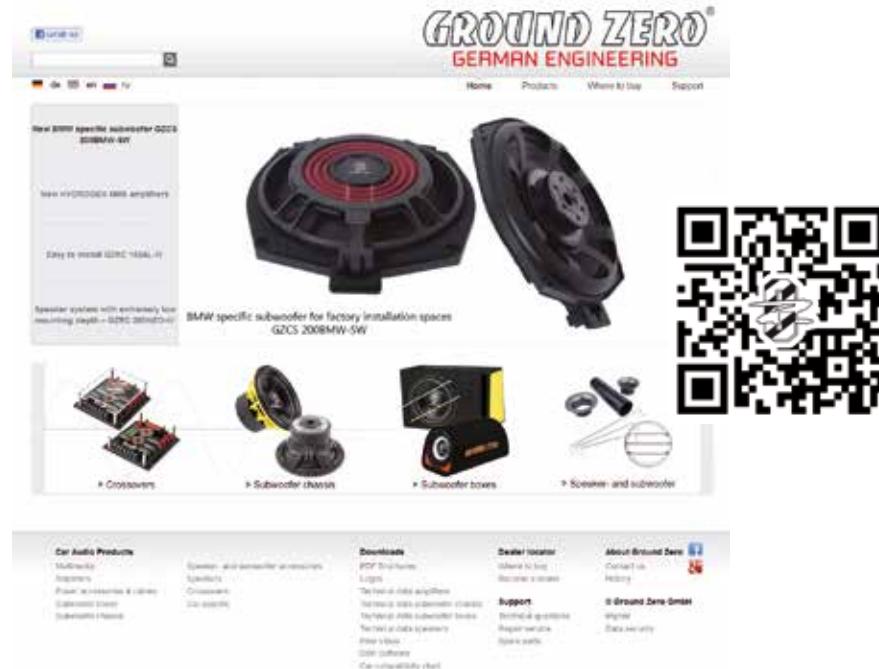
Competition Tweeter										
Series	Product	Outer Ø w/o frame	Outer Ø incl. frame	Mounting Ø incl. frame	Voice coil Ø	Dome	Frequency range	Impedance	Power handling RMS/MAX	
	GZCM 100N-PRO	155 x 155 mm / 6.1 x 6.1"	140 mm / 5.51"	210 mm / 8.27"	100 mm / 4"	Titanium	600 Hz - 18 kHz	4 Ω	90 / 200 W	
	GZCM 50-PRO	158 x 142 mm / 6.22 x 5.59"	113 x 113 mm / 4.45 x 4.45"	144 mm / 5.67"	50 mm / 2"	Fabric	600 Hz - 7 kHz	4 Ω	80 / 180 W	
	GZCT 44-PRO	158 x 142 mm / 6.22 x 5.59"	113 x 113 mm / 4.45 x 4.45"	139 mm / 5.47"	44.5 mm / 1.75"	Titanium	2.5 - 20 kHz	4 Ω	80 / 180 W	
	GZCT 19N-PRO	84 x 54 mm / 3.3 x 2.13"	60 x 46 mm / 2.36 x 1.81"	48 mm / 1.89"	25 mm / 1"	Titanium	3 - 22 kHz	4 Ω	30 / 100 W	
	GZCT 25-PRO	89 mm / 3.5"	72 mm / 2.83"	60 mm / 2.36"	25 mm / 1"	Aluminum	5 - 20 kHz	4 Ω	40 / 120 W	
	GZCT 5000SPL (-B)	200 x 150 mm / 8 x 5.9"	165 x 130 mm / 6.5 x 5.12"	142 mm / 5.59"	44.5 mm / 1.75"	Titanium	1.5 - 20 kHz	4 Ω	70 / 180 W	
	GZCT 4000X	160 x 120 mm / 6.3 x 4.7"	128 x 88 mm / 5 x 3.46"	87 mm / 3.43"	44.5 mm / 1.75"	Aluminum	2.5 - 20 kHz	4 Ω	50 / 140 W	
	GZCT 1000X	100 x 75 mm / 4 x 3"	82 x 58 / 3.23 x 2.28"	56 mm / 2.2"	25 mm / 1"	Aluminum	5 - 20 kHz	4 Ω	30 / 100 W	
	GZCT 2200X	79 x 79 mm / 3.1 x 3.1"	71 mm / 2.8"	53 mm / 2.09"	25 mm / 1"	Aluminum	3 - 25 kHz	4 Ω	40 / 120 W	
	GZCT 2000X	102 x 102 mm / 4.02 x 4.02"	90 mm / 3.54"	58 mm / 2.28"	38 mm / 1.5"	Aluminum	4 - 25 kHz	4 Ω	30 / 100 W	
	GZCT 0500X	58 mm / 2.28"	43 mm / 1.69"	43 mm / 1.69"	25 mm / 1"	Aluminum	4 - 25 kHz	4 Ω	30 / 100 W	
	GZCT 3500X-S (-B)	98 mm / 3.86"	72 mm / 2.83"	40 mm / 1.57"	25 mm / 1"	Aluminum	3 - 25 kHz	4 Ω	30 / 100 W	
	GZCT 25SQL	75 mm / 2.95"	50 mm / 1.97"	36 mm / 1.42"	25 mm / 1"	Coated silk	3 - 22 kHz	4 Ω	100 / 150 W	

Subwoofer												
Series	Product	Outer Ø	Mounting Ø	Depth	Voice coil Ø	Cone	FS	QTS	VAS	Impedance	Power handling	Recommended amplifier power
	GZPW Reference 250	275 mm / 10.8"	235 mm / 9.25"	128 mm / 5.04"	50 mm / 2"	3 layer sandwich	31.3 Hz	0.4	36.5 L / 1.29 ft³	2 x 2 Ω	500 W RMS	300 - 600 W
	The GERMANATOR	840 mm / 33"	771 mm / 30.35"	420 mm / 16.54"	160 mm / 6"	Reinforced paper	24.4 Hz	0.51	534 L / 18.86 ft³	2 x 1 Ω	15000 W RMS	10 - 20 kW
	GZ PLUTONIUM Xmax	392 mm / 15.43"	358 mm / 14.09"	313 mm / 12.32"	100 mm / 4"	Aluminum	33.3 Hz	0.44	22.8 L / 0.8 ft³	2 x 1 Ω	6000 W RMS	4000 - 8000 W
	GZPW 18SPL-Extreme	465 mm / 18.3"	426 mm / 16.77"	299 mm / 11.77"	100 mm / 4"	Carbon sandwich	45.1 Hz	0.31	43.5 L / 1.54 ft³	2 x 1 Ω	7000 W RMS / 15000 W SPL	5000 - 15000 W
	GZPW 15SPL-Extreme	392 mm / 15.43"	358 mm / 14.09"	272 mm / 10.71	100 mm / 4"	Carbon sandwich	46.7 Hz	0.31	22.9 L / 0.81 ft³	2 x 1 Ω	7000 W RMS / 15000 W SPL	4000 - 15000 W
	GZPW 12SPL-Extreme	314 mm / 12.36"	284 mm / 11.18"	220 mm / 8.66"	75 mm / 3"	Carbon sandwich	47.7 Hz	0.45	14.9 L / 0.53 ft³	2 x 1 Ω	4000 W RMS / 8000 W SPL	2000 - 8000 W
	GZPW 21SPL	545 mm / 21.5"	500 mm / 19.69"	320 mm / 12.6"	130 mm / 5"	Reinforced paper	34.5 Hz	0.55	111.9 L / 3.95 ft³	2 x 1 Ω	7000 W RMS / 10000 W SPL	6000 - 10000 W
	GZPW 18SPL	465 mm / 18.3"	426 mm / 16.77"	292 mm / 11.5"	100 mm / 4"	Reinforced paper	34 Hz	0.26	87 L / 3.07 ft³	2 x 1 Ω	6000 W RMS / 10000 W SPL	5000 - 10000 W
	GZPW 15SPL	392 mm / 15.43"	358 mm / 14.09"	272 mm / 10.71	100 mm / 4"	Reinforced paper	39.1 Hz	0.23	36.8 L / 1.3 ft³	2 x 1 Ω	6000 W RMS / 10000 W SPL	4000 - 10000 W
	GZPW 12SPL	314 mm / 12.36"	284 mm / 11.18"	220 mm / 8.66"	75 mm / 3"	Reinforced paper	47.7 Hz	0.45	14.9 L / 0.53 ft³	2 x 1 Ω	3000 W RMS / 6500 W SPL	2000 - 6500 W
	GZNW 15Xmax	392 mm / 15.43"	358 mm / 14.09"	285 mm / 11.22"	75 mm / 3"	Aluminum	29.5 Hz	0.33	35.72 L / 1.26 ft³	2 x 1 Ω	4000 W RMS	3000 - 5000 W
	GZNW 12Xmax	314 mm / 12.36"	282 mm / 11.1"	250 mm / 9.84"	75 mm / 3"	Aluminum	35.6 Hz	0.61	13.59 L / 0.48 ft³	2 x 1 Ω	3000 W RMS	2000 - 4000 W
	GZNW 15XSPL	392 mm / 15.43"	358 mm / 14.09"	260 mm / 10.24"	75 mm / 3"	Reinforced paper	39 Hz	0.57	48 L / 1.69 ft³	2 x 1 Ω	3000 W RMS / 5500 W SPL	2000 - 5500 W
	GZNW 12XSPL	314 mm / 12.36"	284 mm / 11.18"	226 mm / 8.9"	75 mm / 3"	Reinforced paper	38.1 Hz	0.41	25.7 L / 0.91 ft³	2 x 1 Ω	2500 W RMS / 4500 W SPL	1500 - 4500 W

Subwoofer												
Series	Product	Outer Ø	Mounting Ø	Depth	Voice coil Ø	Cone	FS	QTS	VAS	Impedance	Power handling	Recommended amplifier power
GZUW 12SQX	315 mm / 12.4"	281 mm / 11.06"	150 mm / 5.91"	50 mm / 2"	Reinforced paper	38.6 Hz	0.62	41.1 L / 1.45 ft³	2 x 2 Ω	600 W RMS	400 - 800 W	
GZUW 10SQX	262 mm / 10.31"	236 mm / 9.29"	148 mm / 5.83"	50 mm / 2"	Reinforced paper	46.7 Hz	0.62	14.2 L / 0.5 ft³	2 x 2 Ω	450 W RMS	300 - 600 W	
GZUW 8SQ	215 mm / 8.46"	181 mm / 7.13"	108 mm / 4.25"	50 mm / 2"	Reinforced paper	44.5 Hz	0.46	12.1 L / 0.43 ft³	2 x 2 Ω	300 W RMS	200 - 400 W	
GZHW 18XSPL-D1	464 mm / 18.27"	425 mm / 16.73"	255 mm / 10.04"	75 mm / 3"	Reinforced paper	34.3 Hz	0.38	75.21 L / 2.66 ft³	2 x 1 Ω	4000 W SPL	2000 - 4000 W	
GZHW 38SPL	390 mm / 15.35"	360 mm / 14.17"	231 mm / 9.09"	75 mm / 3"	Reinforced paper	36.3 Hz	0.52	32.84 L / 1.6 ft³	2 x 1 Ω	2000 W RMS / 3500 W SPL	1500 - 3500 W	
GZHW 30SPL	315 mm / 12.4"	284 mm / 11.18"	198 mm / 7.8"	75 mm / 3"	Reinforced paper	35.4 Hz	0.44	15.8 L / 0.56 ft³	2 x 1 Ω	1500 W RMS / 3000 W SPL	1000 - 3000 W	
GZHW 10XSPL-D1	272 mm / 10.71"	240 mm / 9.45"	155 mm / 6.1"	63 mm / 2.5"	Reinforced paper	40.5 Hz	0.41	10.16 L / 0.36 ft³	2 x 1 Ω	1200 W RMS / 2500 W SPL	800 - 2500 W	
GZHW 8XSPL-D1	215 mm / 8.46"	187 mm / 7.36"	152 mm / 5.98"	63 mm / 2.5"	Reinforced paper	42.5 Hz	0.47	3.65 L / 0.13 ft³	2 x 1 Ω	700 W RMS / 1500 W SPL	500 - 1500 W	
GZHW 30X	314 mm / 12.36"	281 mm / 11.06"	162 mm / 6.43"	63 mm / 2.5"	Aluminum	23.5 Hz	0.33	62 L / 2.19 ft³	2 x 2 Ω	800 W RMS	600 - 1000 W	
GZHW 25X	272 mm / 10.71"	240 mm / 9.45"	149 mm / 5.91"	50 mm / 2"	Aluminum	27.1 Hz	0.37	27 L / 0.95 ft³	2 x 2 Ω	600 W RMS	400 - 800 W	
GZHW 20X	211 mm / 8.3"	187 mm / 7.36"	120 mm / 4.8"	50 mm / 2"	Aluminum	36 Hz	0.35	8.3 L / 0.29 ft³	2 x 2 Ω	400 W RMS	300 - 600 W	
GZRW 38XSPL-D2	390 mm / 15.35"	353 mm / 13.9"	184 mm / 7.24"	75 mm / 3"	Reinforced paper	33.5 Hz	0.62	65.3 L / 2.3 ft³	2 x 2 Ω	1200 W RMS / 1800 W SPL	1000 - 1800 W	
GZRW 30XSPL-D2	320 mm / 12.6"	283 mm / 11.14"	159 mm / 6.26"	75 mm / 3"	Reinforced paper	36.1 Hz	0.51	22.94 L / 0.81 ft³	2 x 2 Ω	1000 W RMS / 1500 W SPL	800 - 1500 W	
GZRW 25XSPL-D2	272 mm / 10.71"	233 mm / 9.17"	145 mm / 5.71"	63 mm / 2.5"	Reinforced paper	44.8 Hz	0.64	10.25 L / 0.36 ft³	2 x 2 Ω	800 W RMS / 1200 W SPL	600 - 1200 W	
GZRW 15D2	390 mm / 15.35"	353 mm / 13.9"	184 mm / 7.24"	75 mm / 3"	Reinforced paper	23.6 Hz	0.44	163.08 L / 5.76 ft³	2 x 2 Ω	1000 W RMS	800 - 1400 W	
GZRW 12D4	320 mm / 12.6"	283 mm / 11.14"	159 mm / 6.26"	75 mm / 3"	Reinforced paper	30.2 Hz	0.48	47.6 L / 1.68 ft³	2 x 4 Ω	800 W RMS	600 - 1200 W	
GZRW 12D2	320 mm / 12.6"	283 mm / 11.14"	159 mm / 6.26"	75 mm / 3"	Reinforced paper	28.4 Hz	0.43	50.4 L / 1.78 ft³	2 x 2 Ω	800 W RMS	600 - 1200 W	
GZRW 10D4	272 mm / 10.71"	233 mm / 9.17"	145 mm / 5.71"	63 mm / 2.5"	Reinforced paper	34.6 Hz	0.63	22.5 L / 0.79 ft³	2 x 4 Ω	600 W RMS	400 - 800 W	
GZRW 10D2	272 mm / 10.71"	233 mm / 9.17"	145 mm / 5.71"	63 mm / 2.5"	Reinforced paper	34 Hz	0.61	23.2 L / 0.82 ft³	2 x 2 Ω	600 W RMS	400 - 800 W	
GZRW 8FL	204 mm / 8.03"	178 mm / 7.01"	55 mm / 2.17"	36 mm / 1.42"	IMPP	45.3 Hz	0.94	17.6 L / 0.62 ft³	2 Ω	150 W RMS	80 - 250 W	
GZIW 15SPL	386 mm / 15.2"	360 mm / 14.17	188 mm / 7.4"	63 mm / 2.5"	Reinforced paper	39.9 Hz	0.54	61.36 L / 2.17 ft³	2 x 2 Ω	900 W RMS / 1200 W SPL	800 - 1200 W	
GZIW 12SPL	310 mm / 12.2"	285 mm / 11.22"	162 mm / 6.38"	63 mm / 2.5"	Reinforced paper	36.9 Hz	0.67	35.6 L / 1.26 ft³	2 x 2 Ω	700 W RMS / 1000 W SPL	600 - 1000 W	
GZIW 10SPL	257 mm / 10.12"	230 mm / 9.06"	147 mm / 5.79"	63 mm / 2.5"	Reinforced paper	40.8 Hz	0.62	14.3 L / 0.505 ft³	2 x 2 Ω	500 W RMS / 700 W SPL	400 - 800 W	
GZIW 300X	310 mm / 12.2"	285 mm / 11.22"	145 mm / 5.71"	50 mm / 2"	IMPP	34.9 Hz	0.69	53.6 L / 1.89 ft³	4 Ω	350 W RMS	200 - 400 W	
GZIW 250X	257 mm / 10.12"	230 mm / 9.06"	130 mm / 5.1"	50 mm / 2"	IMPP	30.1 Hz	0.44	43.8 L / 1.55 ft³	4 Ω	250 W RMS	200 - 300 W	
GZIW 200X	211 mm / 8.3"	182 mm / 7.17"	101 mm / 3.98"	38 mm / 1.5"	IMPP	38.4 Hz	0.48	27 L / 0.95 ft³	4 Ω	150 W RMS	100 - 200 W	
GZIW 165X	168 mm / 6.6"	147 mm / 5.79"	80 mm / 3.15"	38 mm / 1.5"	IMPP	43 Hz	0.36	11 L / 0.39 ft³	4 Ω	100 W RMS	60 - 150 W	
GZCS 200BMW-SW	Car specific			50 mm / 2"	Coated paper	59.1 Hz	1.18	15.98 L / 0.56 ft³	2 Ω	100 WRMS	80 - 160 W	

Enclosures										
Series	Product	Woofer	Type	Net. Volume	Dimensions (mm/inch)			Impedance	Power handling	Recommended amplifier power
GZRB 3000XFL	GZRW 12XFL	Sealed		19 L / 0.67 ft³	700 x 380 x 140 (90) / 27.56 x 15 x 5.51 (3.54)			2 x 2 Ω	500 W RMS	400 - 600 W
GZIB 2.3000SPL	2 x GZIW 12SPL	Front-Basstunnel		82 L / 2.9 ft³	840 x 380 x 420 (300) / 33.07 x 15 x 16.54 (11.81)			4 x 2 Ω	2000 W SPL	1200 - 2000 W
GZIB 2.300BR	2 x 300 mm / 12"	Front-Basstunnel		70 L / 2.47 ft³	820 x 365 x 390 (290) / 32.28 x 14.37 x 15.35 (11.4)			2 x 2 Ω	700 WRMS	500 - 800 W
GZIB 300BR	300 mm / 12"	Front-Basstunnel		37 L / 1.31 ft³	440 x 365 x 390 (300) / 17.32 x 14.37 x 15.35 (12)			4 Ω	350 WRMS	250 - 400 W
GZIB 200BR	GZIW 200X	Front-Basstunnel		17 L / 0.6 ft³	380 x 260 x 290 (230) / 15 x 10.24 x 11.42 (9.06)			4 Ω	150 WRMS	100 - 200 W
GZIB 165BR	GZIW 165X	Front-Basstunnel		11 L / 0.39 ft³	305 x 220 x 300 (250) / 12.01 x 8.66 x 11.81 (9.8)			4 Ω	100 W RMS	60 - 150 W
GZCS 10SUB	250 mm / 10"	Sealed		15 L / 0.53 ft³	620 x 440 x 120 (145 incl. feet) / 12.21 x 17.32 x 4.72 (5.71 incl. feet)			2 x 2 Ω	150 WRMS	100 - 200 W

For further information about the GROUND ZERO product line, pictures, technical data, manual download and much more visit the Official Webpage.



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Ground Zero directs special attention to develop perfect working and sounding speakers and subwoofers.

Therefore, as one of just a few companies in car audio industry, each speaker is tested using a Klipper® measurement system belonging to Ground Zero's development department to optimize every detail and achieve the requested speaker characteristics.

As a result, Ground Zero speakers and subwoofers comply with their indicated parameters under every kind of application and each condition.

## Klippel® R&D system and measurement methods

The behavior of electro dynamical loudspeakers at high amplitudes cannot be described by a linear model. This conventional model suggests a transfer response independent of input signal amplitudes. In fact thermal and nonlinear mechanisms cause signal distortion and limit acoustical output.

New techniques are developed for the identification of nonlinearities. They allow measurement and prediction of nonlinear transfer behavior and also the subjective evaluation of the nonlinear distortion in audio-signals.

The tools give valuable information about the correlation between the physical characteristics of driver and perceived sound quality.

It is possible to recognize the physical causes of distortion by understanding the measured loudspeaker parameters.

(Extracted from [www.klippel.de/know-how/introduction.html](http://www.klippel.de/know-how/introduction.html))

## LSI – Large Signal Identification

The LSI measurement delivers linear, nonlinear and thermal parameters of loudspeakers dynamically by monitoring voltage and current at the speaker terminal according to IEC standard 62458. The speakers are measured under normal working conditions (free air, sealed or vented enclosure) and will be excited by an audio-like signal (noise).

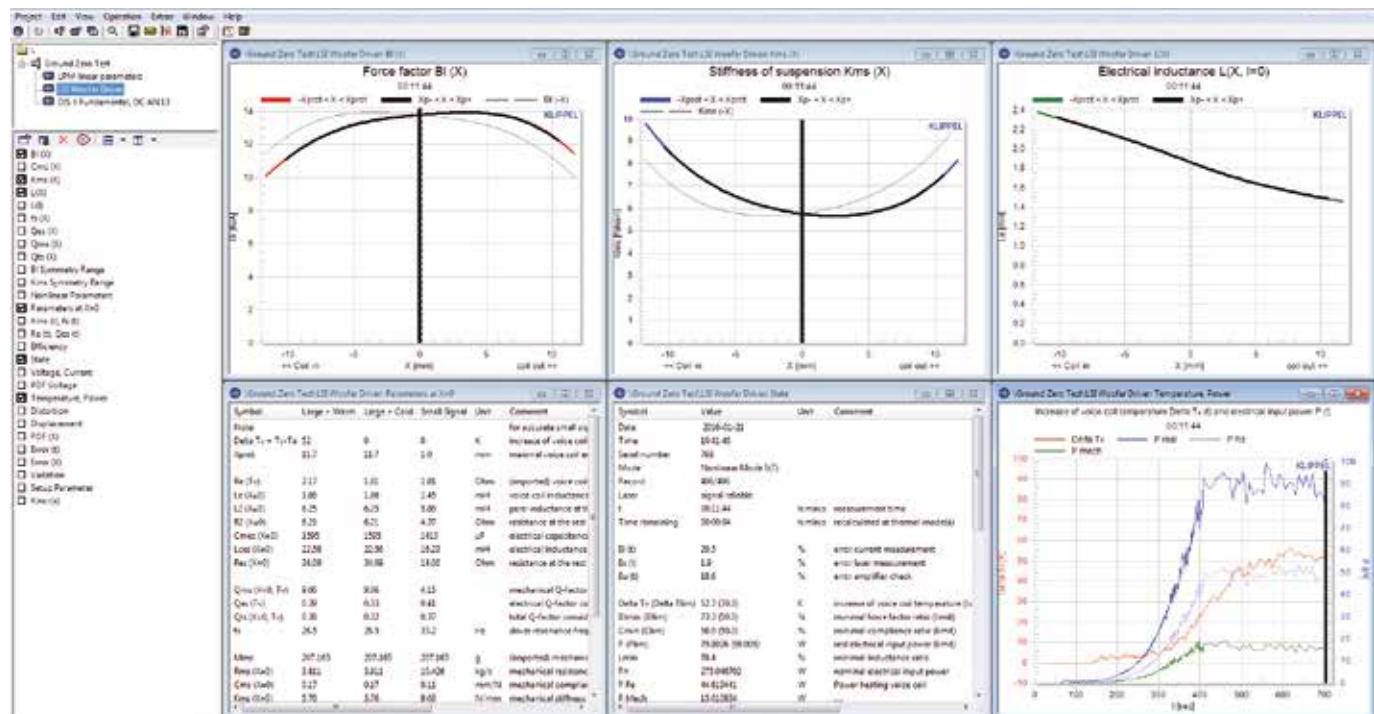
DIS – 3D Distortion Measurement

This method performs a series of measurements using a single or two-tone stimulus varied in amplitude and frequency to check the large signal behavior of audio systems. The results are the steady-state amplitude responses of the DC component, fundamentals, harmonic and intermodulation components.

LPM – Linear Parameter Measurement

LPM identifies the lumped parameters of the speaker's equivalent circuit including T/S, creep and lossy inductance parameters.

A multi-tone stimulus is used to measure the voltage, current, voice coil displacement and sound pressure at sufficient SNR while operating the speaker in the small signal domain.





*High End car audio since 1995*



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