

GROUND ZERO[®]

GERMAN ENGINEERING

URANIUM SERIES

Loudspeaker System

GZUC 165.3SQ
GZUC 165.3SQ-ACT

Owner's Manual
(AWV2.0)

English

Introduction

Thank you for choosing a GROUND ZERO product and welcome to your new URANIUM series loudspeaker!

This is the owner's manual providing instructions on the operation and installation of this loudspeaker system. Please, read it carefully. If you have any further questions, please contact your local GROUND ZERO dealer or our regional distribution partner.

The loudspeaker system is one of the most important parts of your car audio system. However, it will only be able to deliver its full performance when each part of the whole system is tuned carefully matching each other. Therefore, we recommend consulting a car audio specialist to compile the desired sound system, as well as for installation and tuning.

We hope you will enjoy the sound quality of an enthusiastic development by the GROUND ZERO engineering team!

URANIUM Series – Amazing Sound Quality

Products belonging to the GROUND ZERO URANIUM series stand for high-end sound quality or extreme power handling capability.

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, results in emotional and amazing audio reproduction. The distinguished amplifiers point out the main purpose by their designation: SQ beyond the average!

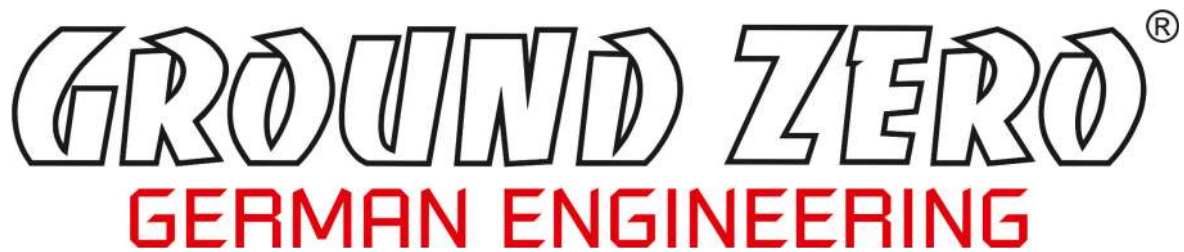
GZUC 165.3SQ/SQ-ACT is a loudspeaker system of the new URANIUM series, delivering an outstanding sound performance.

Terms of Warranty

The limited warranty for this product is covered by GROUND ZERO's regional distribution partners and their terms and conditions. For further information contact your local retailer or regional distributor.

General installation note

- Never drill a hole to the vehicle's gas tank or brake lines, to wirings or any other important vehicle parts!
- Never pass wires over sharp edges or vehicle parts due avoid any kind of damage
- Keep the wiring away from the antenna and electronic devices contributing to radio reception
- Lay the power supply wiring always separated from speaker wiring to avoid disturbance



URANIUM SERIES

Loudspeaker System

GZUC 165.3SQ

GZUC 165.3SQ-ACT

Features

- 3-way SQ component loudspeaker system
- Klippel® optimized 165 mm / 6.5" midwoofer
- Black anodized aluminum cone
- GZ design aluminum cast basket
- High-efficient, linearized neodymium motor
- Durable rubber surround
- Gold plated terminals
- 55 mm / 2.17" SQ silk dome midrange
- 28 mm / 1.1" SQ silk dome tweeter with flush mount housing
- Variable 12 dB/oct crossover (not for ACT model) with level adjustment and 2-way semi-active option
- GZ design hexagon style protection grill

GROUND ZERO GZUC 165.3SQ / SQ-ACT

Specifications

Model	GZUC 165.3SQ
Speaker type	165 mm / 6.5" 3-way loudspeaker system incl. crossover
Impedance (nominal)	4 ohms
Frequency response	40 Hz – 25 kHz
High pass filter	4500 Hz @ 12 dB/oct.
Band pass filter	HP: 450 Hz @ 12 dB/oct. / LP: 4500 Hz @ 12 dB/oct.
Low pass filter	450 Hz @ 12 dB/oct. (jumper in OFF position: 6 dB/oct.)
Power handling (RMS)	160 Watts
Power handling (max.)	250 Watts

Model	GZUC 165.3SQ-ACT
	165 mm / 6.5" 3-way loudspeaker system for active application

Model	GZUT 28SQ
Diameter (nominal)	28 mm / 1.1"
Housing	Plastic
Dome	Coated silk
Voice Coil	28 mm / 1.1" copper
Motor	Neodymium magnet
Impedance	4 ohms
Frequency response	2500 Hz – 25 kHz
Power handling	80 Watts RMS 130 Watts max. (12 dB/oct HPF @ 3 kHz)
Resonance frequency	1300 Hz
Efficiency (SPL)	90 dB

Model	GZUK 165SQ
Diameter (nominal)	165 mm / 6.5"
Basket	Aluminum cast
Cone	Anodized aluminum
Voice coil	50 mm / 2" copper
Motor	Neodymium magnet
Impedance (nominal)	4 ohms
Frequency response	40 Hz – 3.5 kHz
Power handling	120 Watts RMS 180 Watts max. (60 Hz HPF @ 12dB/oct)
Resonance frequency	54.6 Hz
Efficiency (SPL)	87 dB
R_e	3.2 ohms
Q_{ms}	3.87
Q_{es}	0.77
Q_{ts}	0.64
V_{as}	12.6 L
M_{ms}	16.3 g
B_L	4.84 N/A
R_{ms}	1.44 kg/s
C_{ms}	0.52 mm/N
L_e	0.17 mH
X_{max} (excursion)	12 mm / 0.47" (p2p)

Model	GZUM 55SQ
Diameter (nominal)	55 mm / 2.17"
Dome	Coated silk
Voice Coil	55 mm / 2.17" copper
Motor	Neodymium magnet
Impedance	4 ohms
Frequency response	500 Hz – 11 kHz
Power handling	90 Watts RMS 150 Watts max. (12 dB/oct HPF @ 600 Hz)
Resonance frequency	353 Hz
Efficiency (SPL)	88 dB

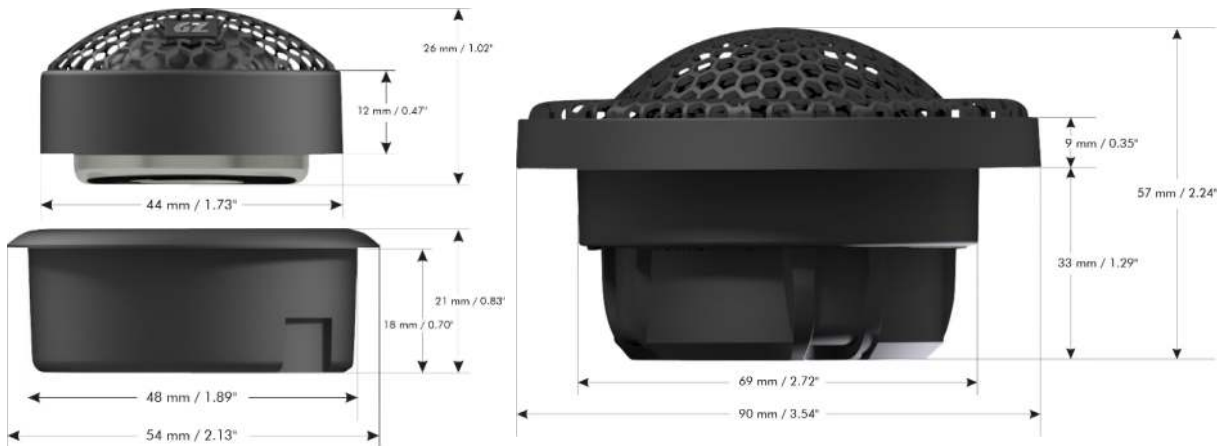
GZUT 28SQ	
Outer diameter	54 mm / 2.13"
Mounting diameter	48 mm / 1.89"
Mounting depth	18 mm / 0.71"

GZUM 55SQ	
Outer diameter	90 mm / 3.54"
Mounting diameter	69 mm / 2.72"
Mounting depth	33 mm / 1.30"

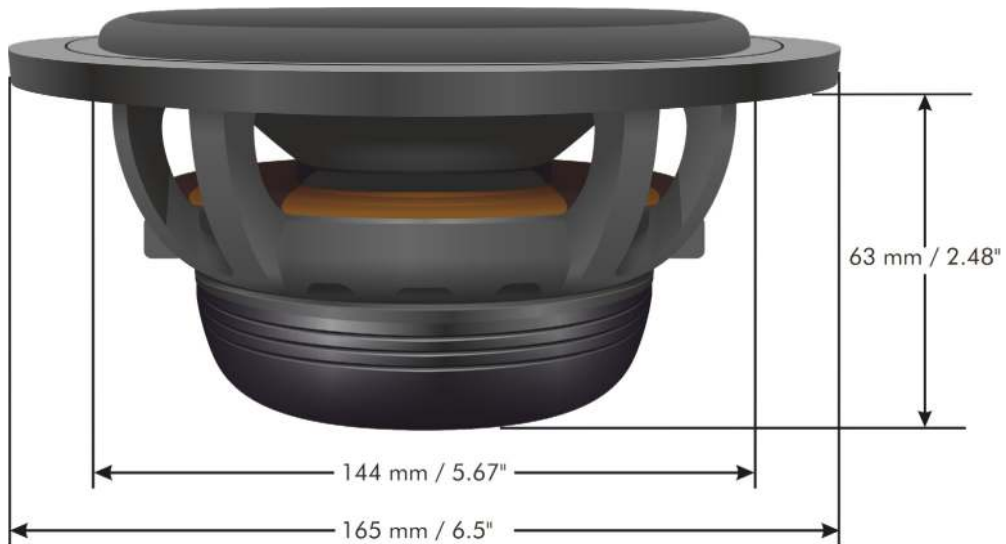
GZUC 165.3SQ (w x h x d)	85 x 42 x 140mm / 3.35 x 1.65 x 5.51"
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GROUND ZERO GZUC 165.3SQ / SQ-ACT

GZUT 28SQ / GZUM 55SQ Dimensions



GZUK 165SQ Dimensions

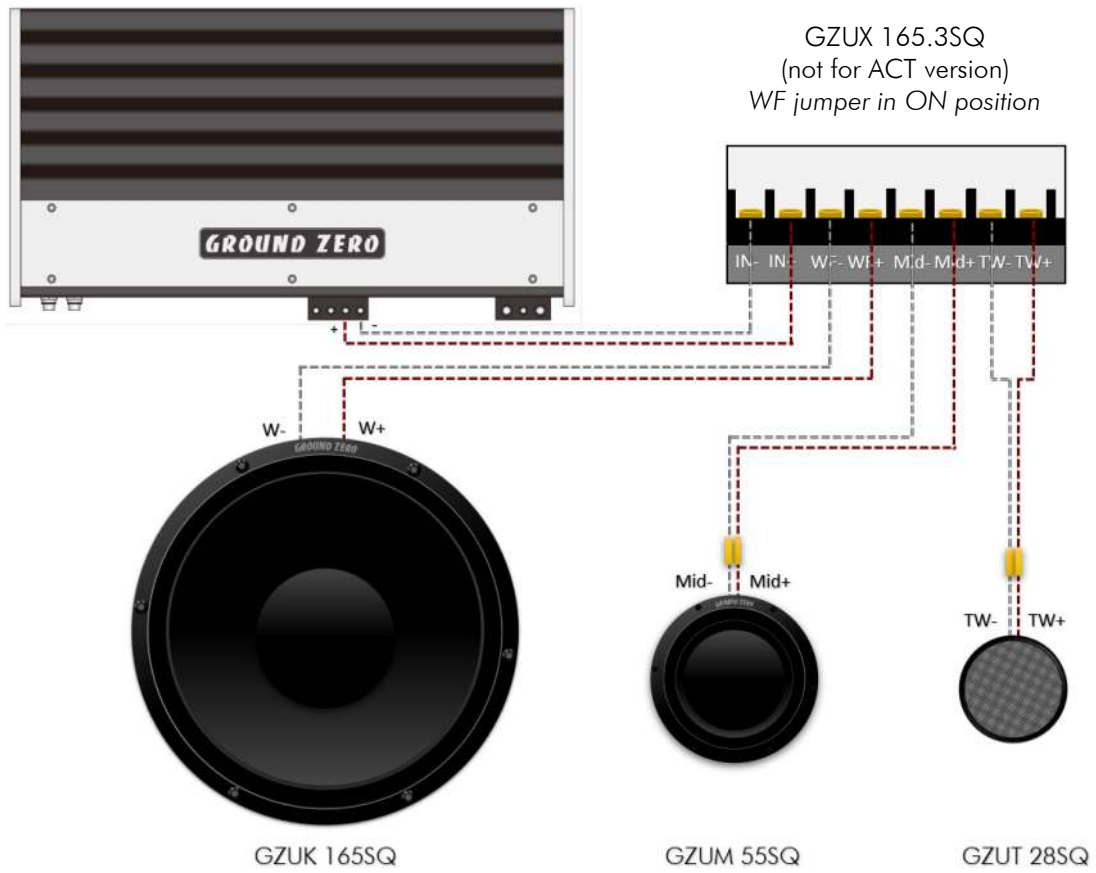


Crossover Setup (not for ACT model)

<p>Diagram showing crossover setup components: Tweeter level adjustment (TW) with +2 dB, 0 dB, and -2 dB positions; Midrange level adjustment (MID) with -2 dB, 0 dB, and +1 dB positions; and a Woofer (WF) jumper with ON and OFF positions. The diagram also shows the speaker terminals: IN-, IN+, WF-, WF+, MID-, MID+, TW-, TW+.</p>	<p>Tweeter level adjustment: The tweeter level can be set by positioning the jumper to the required level position</p> <p>Midrange level adjustment: The midrange level can be set by positioning the jumper to the required level position</p> <p>Semi-active use IMPORTANT! If the midwoofer is connected to a separate amplifier the midwoofer section must be de-activated to use the crossover for midrange and tweeter only. Set the WF jumper to the OFF position</p>
<p>IN TW OUT MID OUT WF OUT</p>	<p>Input from head unit / amplifier Tweeter connector Midrange connector Kickwoofer connector</p>

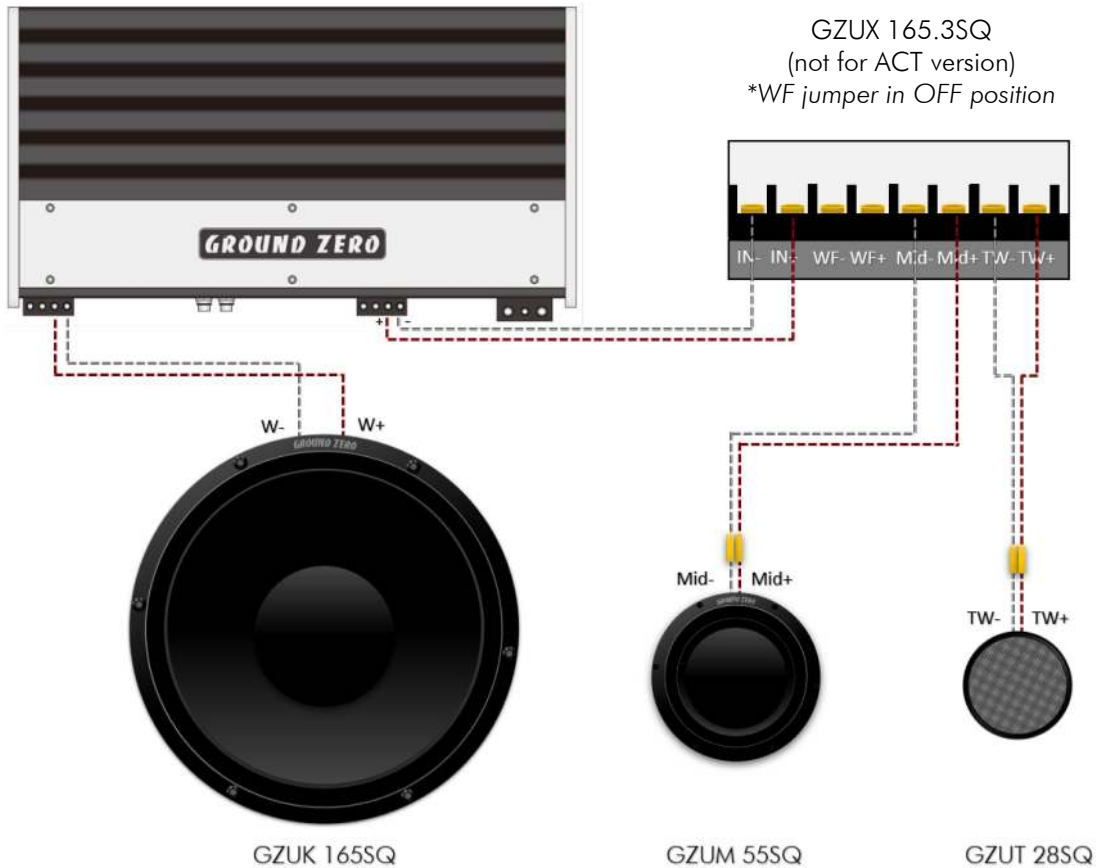
GROUND ZERO GZUC 165.3SQ / SQ-ACT

GZUC 165.3SQ Wiring



GZUC 165.3SQ Semi-active wiring*

4-channel amplifier with integrated active crossover



GZUC 165.3SQ-ACT Wiring (example)



Noise damping – Essential basis for high-quality sound experience

Simple or thin surfaces and panels of the car's body and in the vehicle's interior tend by stimulation to vibrations, in particular by vibrations that arise while driving or when playing music with the speaker cones. In order to reduce the resulting booming, the natural resonance, means the frequency at which these surfaces resonate particularly strongly, must be reduced. For this purpose, the insulation of aluminum-butyl requires the largest possible mass. For this purpose, GROUND ZERO offers materials with different properties and basis weight. In addition, the GROUND ZERO range offers other products, such as self-adhesive aluminum plates or sound-absorbing foam mats, which improve the result even more. The bonding of these materials drastically changes the tendency of body parts to oscillate, which significantly reduces the unwanted noise level. A complete door damping set is available with GZDM DOORKIT PRO.

Essential door damping is available as GZDM DOORKIT PRO



Respect the Music



Listening to music can be emotional, impressive, relaxing or enjoyable. At that, it doesn't really matter what kind of music is the personal favorite, whether it's Instrumental, Jazz, Electro, Latin, Classic, Rock or any other music direction. However, audio reproduction quality at each desired volume is elementary. Some music styles require higher levels while others prefer the soft tones. GROUND ZERO considers all the different wishes of customers during the development of new products. Along with this, the target is to create the most realistic sound, to transfer the soul of the music and the intention of the performer. Summarized to one phrase: RESPECT THE MUSIC!

Safety instructions

Safety instructions: Keep all parts of the content and the packaging away from children and pets to avoid accidents and the risk of suffocation. Permanently extreme levels of over 85 dB can lead to irreparable damage to the hearing. Music systems with high amplifier output power can reach levels of 130 dB or more. Extreme levels can also hinder the perception of important traffic noises and distract from what is happening on the road. Ground Zero GmbH and its sales partners expressly assume no responsibility for hearing damage, physical damage or any damage to property or consequential damage resulting from improper or careless use or improper installation of its products. In particular, any claims are forfeited through the use under competitive conditions.

Manufacturer's declaration: Hereby, Ground Zero GmbH declares that this product conforms to the rules of the following EU directives (including all applicable changes): 2011/65 / EU RoHS2 and 2001/95 / EC directive on general product safety. The full text of the EU declaration of conformity is available at www.ground-zero-audio.com. Loudspeakers contain magnetized metals and some valuable raw materials and must not be disposed of with normal household waste. Please leave defective or no longer required components to a local recycling facility at the end of their practical use.



GROUND ZERO products are engineered in Germany
GROUND ZERO - international sponsor of



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