



**GROUND ZERO**  
Mobile Entertainment

## *Amplifier*

Owners Manual

*Uranium -SQ*  
*Sound-Quality Level*

GZUA 2125SQ  
GZUA 2225SQ  
GZUA 4125SQ




**GROUND ZERO**  
Mobile Entertainment

## Please read before Installation

Thank you for selecting a Ground Zero SQ (Sound Quality) Amplifier.

We are providing a helpful hints list which should keep you from experiencing unnecessary shut down.

### Features

-  Burr-Brown Products  
from Texas Instruments Sound Quality Level with high quality parts
- 2 $\Omega$  stabil Stereo GZUA 4125SQ, GZUA 2125SQ
- 1 $\Omega$  stabil stereo GZUA 2225SQ
- FULL MOS-FET Technology
- Adjustable Low-pass filter 20Hz-400Hz / 200-4000Hz
- Adjustable High-pass filter 20Hz-400Hz / 200-4000Hz
- Band-pass filter function adjustable with LPF/HPF
- Adjustable Input Sensitivity
- Gold plated RCA Cinch Inputs
- RCA Cinch output (mono) for other subwoofer amplifiers
- Q-Faktor adjustable
- Bass Boost Remote control GZUA 2225SQ

## Introduction

Amplifiers provide high-performance sound reinforcement for your mobile audio equipment. It's versatility enables compatibility with optional Equalizer, Frequency Dividing Network Crossovers and other audio processors in a customized system. The Multi-Mode bridging capabilities allow flexibility in hosting several different speaker configurations.

To achieve optimum performance, it is highly recommended that you read this Owner's manual before the installation.

## Tools and materials you need

- Screwdriver
- Electric drill, 3mm
- Mounting screws
- Power wire min. 20mm<sup>2</sup>
- Ground wire min 20mm<sup>2</sup>
- Speaker wire min. 2 x 1,5 mm<sup>2</sup>

## Attention

- As a precaution; it is advisable to disconnect the vehicle's battery before making connection to the +12 Volts supply wiring (see owner's manual of your car for further information!)
- Do not drill holes into the tank, the brake pipe, wires or other important parts of the vehicle
- Never pass wires over sharp angles. It is recommended to buffer the power supply of the amplifier with an capacitor min. 1 Farad.

## WARNING

**High powered audio systems in a vehicle are capable of generating „Live Concert“ high levels of sound pressure. Continued exposure to excessively high volume sound levels may cause hearing loss or damage. Also, operation of a motor vehicle while listening to audio equipment at high volume levels may impair your ability to hear external sound such as; horns, warning signals, or emergency vehicles, thus constituting to a potential traffic hazard. In the interest of safety, Consumer Electronics recommends listening at lower volume levels while driving.**

## Planning your System

### Before beginning the installation, consider the following:

- a) If you plan to expand your system by adding other components sometime in the future, ensure adequate space is left, and cooling requirements are met.
- b) If your radio/source is equipped with Pre-Amp outputs, it is recommended to utilize them to drive the amplifier
- c) Are your components matched? The peak power rating of your speakers must be greater than the Amplifiers. They also must be 2-8 Ohms impedance (This information is normally printed on the speaker magnet) Consider both the length of your leads, and routing when choosing the mounting location. Pre-Amp input jacks require a length of high quality shielded male to male RCA patch cord.

## Mounting your amplifier

- a) Select a suitable location that is convenient for mounting, accessible for wiring and has enough room for air circulation and cooling.
- b) Use the amplifier as a template to mark the mounting holes, remove the amplifier and drill 4 holes, use extreme caution, inspect underneath surface before drilling.

## Wiring connection

### Attention!

min. 20mm<sup>2</sup> wires are necessary for power connection

- 1.) Ground:** Ground connection should be passed directly to the car body as short as possible (max. 1m)
- 2.) +12 Volt:** Power connection should be passed directly to the battery. Please pay attention on a correct fuse protection of the installation with an Inline device with a max. wire length to the battery of 30 cm.
- 3.) Remote turn on:** This connection is getting connected with the remote control line of the radio. It is used for turning on and off the amplifier.

## Warning

Investigate the layout of your automobile thoroughly before drilling or cutting any holes. Take care when you work near the tanks, lines, or hydraulic lines, and electrical wiring. Don't mount this system so that wire connections are unprotected or are subject to pinching or damage from nearby objects.

The +12 Volt DC power wire must be fused at the battery positive terminal connection. Before making or breaking power connections at this system power terminals, disconnect the +12 Volt wire at the battery end. Confirm your radio / cassette player and / or other equipment, mount is turned off while connecting the input jacks and speaker terminals.

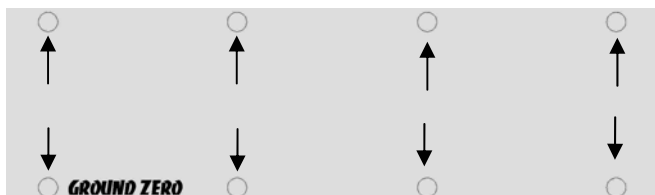
If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the system. Using a fuse of different type or rating may result in damage to this system which isn't covered by the warranty.

## Connections and adjustments

### Adjustments:

All adjustments of the **GROUND ZERO SQ-SERIE** are located under the upper aluminium cover in the middle.

All screws have to be released.



## Connections and adjustments

### GZUA 4125SQ, GZUA 2125SQ, GZUA 2225SQ Adjustments

**GAIN**..... here, the Input Level Sensitivity 250mV - 8V is adjusted

**HPF FREQ**..... X-over ( you hear everything **from** e.g. 20 Hz up)

**LPF FREQ**..... X-over (you hear everything **till** e.g. 200Hz down)

**BPF**.....Band-pass filter for a certain area of frequency **from-to**  
(you hear everything **from** 100 Hz **to** 2000 Hz)

**Q-Factor**..... adjusting the Q of the filter

**SUBSONIC**..... Filter for the lowest, not hearable frequencies

**FLAT**.....switch setting for recording every Frequenc

**X1** .....switch setting the filter HPF/LPF x1 20 Hz – 400 Hz range

**X10**.....switch setting the filter HPF/LPF x10 200 Hz – 4 KHz range

## Balanced / Unbalanced Functionality

The **GROUND ZERO SQ SERIES** have the possibility to clear disturbing noises, that creep on the wire to the amplifier (dynamo-whistling, etc). A especial technology, is used for this.

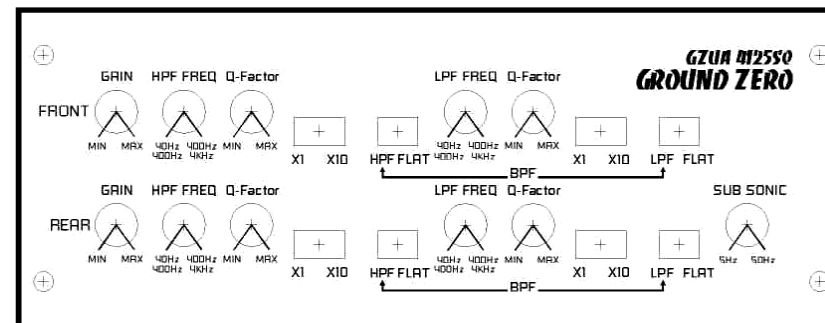
The optional circuit of the Cinch inputs is symmetric and asymmetric.

### Application BAL / UNBAL

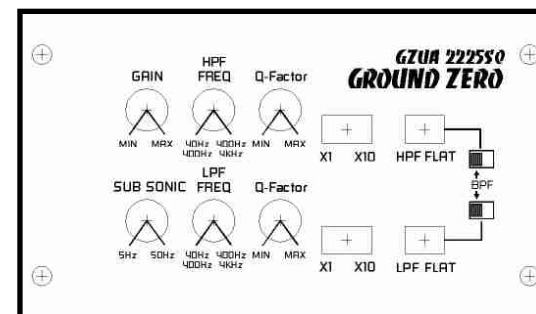
All switches are switched symmetricly on „BAL“ in the delivery status. If there are disturbances after the installation, you can turn the switches to „UNBAL“ to clear the disturbances. If there are still disturbances, please contact your dealer.

## Connections and adjustments

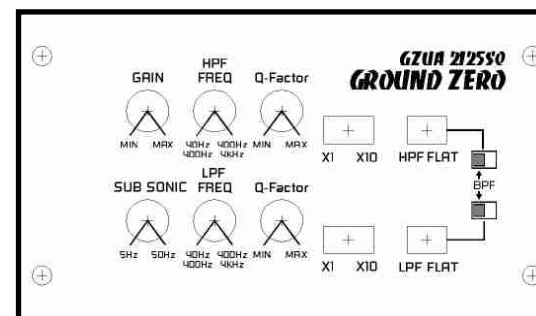
### GZUA 4215SQ



### GZUA 2225SQ

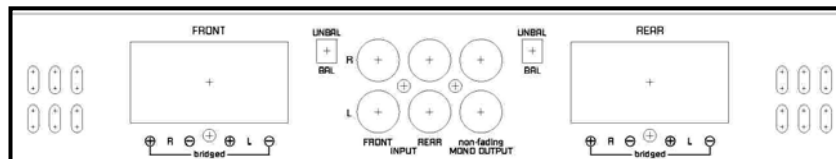


### GZUA 2125SQ

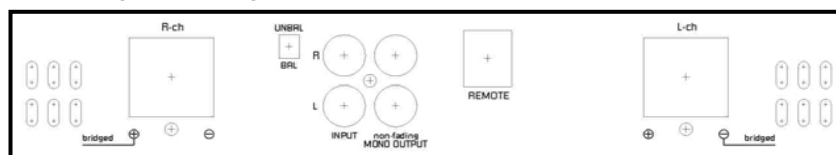


## Connections and adjustments

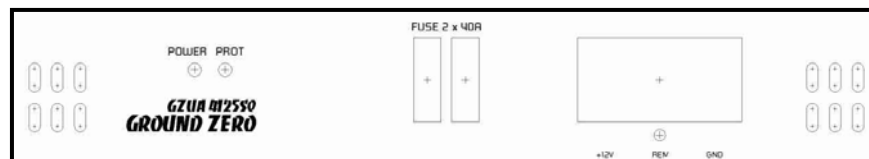
**FRONT INPUT**.....Cinch connection for Front Input  
**REAR INPUT**.....Cinch connection for Rear Input  
**MONO OUTPUT**.....Cinch connection for Mono Output (e.g. for more subwoofer amplifiers)  
**UNBAL**.....Switch for asymmetrical Input  
**BAL**.....Switch for symmetrical Input  
**FRONT / R-ch**..... Speaker Front Output / Right channel  
**REAR / L-ch**.....Speaker Rear Output / Left channel  
**REMOTE**..... bass remote control connection(GZUA 2225SQ)  
**GZUA 4125SQ**



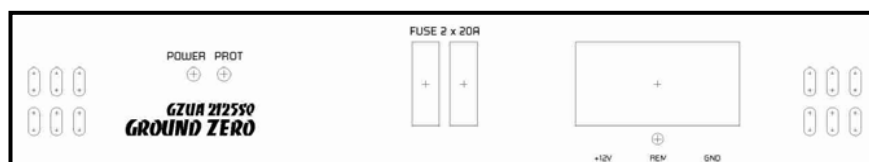
## GZUA 2125SQ / GZUA 2250SQ



**POWER**..... Operation Blue – Device is turned ON  
**PROT**..... Protection Red – Device is in protection circuit  
**FUSE**.....Fuse holder amp fuse  
**+12V**..... + 12 Volt Connection Connection for the power wire from the battery  
**REM**..... + Remote Connection Connection for the remote wire from car radio  
**GND**..... Ground Connection Connection for Ground wire  
**GZUA 4125SQ**



## GZUA 2125SQ GZUA 2250SQ



## Adjustment and Tuning

The amplifier automatically turns on a few seconds after you turn your vehicle's ignitions switch to ACC or ON or turn on your auto sound system, depending on how you wired the system.

Your amplifier temporarily shuts down if it gets too hot, then restarts automatically once it cools down.

For the best performance of the amplifier, the Input level sensitivity has to be adjusted correctly (8V-250V)

## Adjustment of the GAIN Input Level sensitivity (8V-250mV)

For the best performance, you must set LEVEL(MIN/MAX) on the Top of the amplifier to adjust the level of the audio signals.

1. Use a screwdriver to turn LEVEL(MIN/MAX) fully to MIN
2. Turn the auto sound system's volume control to about two-third of its full range.
3. Adjust LEVEL(MIN/MAX) to a comfortable listening level
4. Turn up the auto sound system's volume control until the sound begins to distort. Then immediately turn the volume down to a point just before where the distortion began.  
Caution: Never up turn the auto sound system's volume control more than needed to adjust the audio level, more than thirds of its maximum volume.
5. Adjust LEVEL(MIN/MAX) until the sound is at the maximum level you want the amplifier to produce.
6. Adjust the auto sound system's volume control to a comfortable listening level.

Attention!

Please note that the gage on a CD, that reproduces music with a higher dynamic is essential higher as on Radio reception.

With the bass remote control, you can readjust the Bass gain from the driver's seat. (GZUA 2225SQ).

## If something doesn't work

Problem	Control	Help
No Sound	Is the PWR LED on?	Check fuse Check remote wire Check +12Volt Check ground
No Sound	Is the PROT LED on?	Short circuit on speaker Device overheated Device defective
No Sound	No voltage on Remote	Check fuse Check +12Volt Check ground
Amplifier is turning off at higher volume	Check speaker Impedance	Check if the on LS terminal in min of 2Ω resistance(GZUA 4125SQ, 2125SQ) Check if the resistor on LS terminal 1Ω (GZUA 2225SQ) .
No sound at one channel	Check cinch / speaker wire	Wire/ connector damaged

Specifications

Model	GZUA 4125SQ	GZUA 2125SQ	GZUA 2225SQ
<b>Power RMS @ 4 Ω</b>	4 x 135	2 x 100	2 x 225
<b>Power RMS @ 2 Ω</b>	4 x 225	2 x 175	2 x 375
<b>Power RMS @ 1 Ω</b>	-	-	2 x 550
<b>Power Mono @ 4 Ω</b>	2 x 450	1 x 350	1 x 750
<b>Power Mono @ 2 Ω</b>	-	-	1 x 1100
<b>Max. Power</b>	1000	400	1200
<b>Input Level Sensitivity</b>	250 mV – 8 Volt	250 mV – 8 Volt	250 mV – 8 Volt
<b>Frequency range</b>	5-30000 Hz	5-30000 Hz	5-30000 Hz
<b>Lowpass LPF x 1</b>	20 Hz – 400 Hz	20 Hz – 400 Hz	20 Hz – 400 Hz
<b>Lowpass LPF x 10</b>	200 Hz - 4 Khz	200 Hz - 4 Khz	200 Hz - 4 Khz
<b>Highpass HPF x 1</b>	20 Hz – 400 Hz	20 Hz – 400 Hz	20 Hz – 400 Hz
<b>Highpass HPF x 10</b>	200 Hz - 4 Khz	200 Hz - 4 Khz	200 Hz - 4 Khz
<b>THD</b>	<0,008%	<0,008%	<0,008%
<b>SNR Signal-to-noise ratio</b>	>96 dB/A	>96 dB/A	>96 dB/A
<b>Damping Factor</b>	>400	>400	>800
<b>Impedance Min.</b>	2 Ω	2 Ω	1Ω
<b>Fuse</b>	2 x 40 A	2 x 20 A	3 x 40 A
<b>Dimension: W X D X H (mm) W x D x H (Inches)</b>	350 x 280 x 49 13.9" x 11.1" x 1.9"	300 x 280 x 49 11.9" x 11.1" x 1.9"	350 x 280 x 49 13.9" x 11.1" x 1.9"

Die Gewährleistung aller von Ground Zero gelieferten Produkte entspricht der gesetzlichen Regelung. Eine Rücksendung kann nur nach vorheriger Absprache und in der Originalverpackung erfolgen. Bitte unbedingt einen maschinell erstellten Kaufbeleg und eine Fehlerbeschreibung beilegen. Von der Gewährleistung ausgeschlossen sind Defekte, die durch Überlastung oder unsachgemäße Behandlung entstanden sind.

For warranty matters please contact your dealer./

En cas de défaut couvert par la presente garantie merci de contacter votre revendeur

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