## GROUND ZERO® GERMAN ENGINEERING

# RADIOACTIVE-SERIES AMPLIFIER

### OWNER'S MANUAL

### GZRA 2255X

#### Features

- 4 Ohm / 2 Ohm stable stereo
- Mosfet power supply
- Status LED
- Up to 12 dB adjustable bass boost (@45 Hz)
- Adjustable high-pass filter
- Adjustable low-pass filter
- Adjustable input sensitivity
- Soft delayed remote turn on
- Bass remote control
- Thermal / short circuit / overload protection

#### Recommended wiring

	GZRA 2255X	
Speaker wires	xer wires min 1.5 mm <sup>2</sup> / 15 AWG	
Power supply wires	min 16.0 mm <sup>2</sup> / 5 AWG	
High-level input wires	min 1.00 mm <sup>2</sup> / 18 AWG	
Remote wire	min 0.75 mm <sup>2</sup> / 20 AWG	

#### Mounting instructions

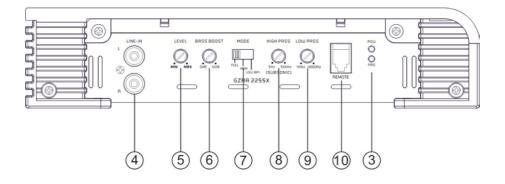
- As a precaution, it is recommended to disconnect the vehicles battery before mounting (also note the vehicles manual!)
- The power supply wire (+12 V) has to be protected within max. 20 cm / 8" by a main fuse holder with matching fuse value (Main fuse value has to be equal to the sum of values of the fuses of each connected device)
- If necessary, replace a defective fuse with the identical value only
- Never drill a hole to the vehicles gas tank or brake lines, to wirings or any other important vehicle part!
- Never pass wires over sharp edges or vehicle parts
- Keep the wiring away from the antenna and electronic devices contributing to radio reception
- Lay the power supply wiring always separated from speaker wiring
- The amplifier contains a temperature protection circuit that turns the device off in case of overheating. After a cooling time, it will turn on again automatically. To avoid heat buildup, sufficient air supply for cooling must be provided. Never cover the surface of the heatsink entirely.
- The amplifier should not be mounted on a strongly vibrating part or surface (e.g. subwoofer enclosure)
- If a pre-amplified output (RCA) is available ( at the head unit), it is recommended to make use of them

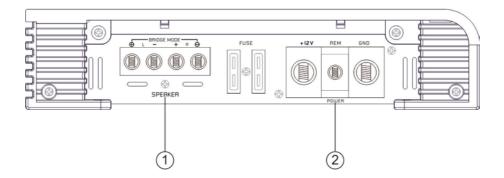
#### WARNING !

Powerful car audio systems are able to create extremely high SPL similar to real live concert levels. Permanent exposure to excessively high sound levels may cause damage to or loss of the hearing.

Furthermore, operation of a motor vehicle while listening to audio equipment at high volume levels may impair your ability to concentrate on road traffic and external sounds such as horns, warning signals or emergency vehicles. In the interest of general and own safety, it is recommended to listen to music at appropriately low volume levels while driving.

#### Controls & Features – GZRA 2255X

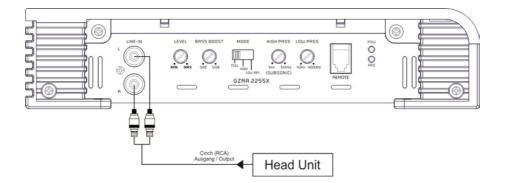




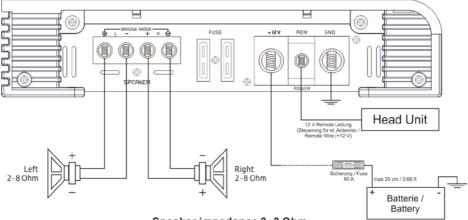
#### Controls & Features GZRA 2255X

1		Construction of the second s	
	SPEAKER terminal	Speaker connection	
2	POWER supply terminal	GROUND -> ground terminal	
		REM -> remote wire	
		BATT+ -> +12 Volt wire from battery terminal	
3	Status LEDa	POW -> green -> ok (correct operation)	
3	Status LEDs	PROT -> red -> error / protection	
	INPUT (RCA input)	Input sockets to connect RCA wires - to avoid any malfunction, it is recommended to use	
4		only high quality RCA cables	
		Cable recommendation: GCZZ X-TP series (available lengths 0.57 / 1.14 / 3.14 / 5.49 m)	
5	GAIN control	Controller to adjust the input sensitivity	
6	BASS BOOST control	Controller to adjust the bass boost level ( 0 to +12 dB at 45 Hz)	
	X-OVER / MODE switch	To setup the crossover for the required use of the amplifier	
		FULL – entire frequency range will be reproduced	
7		HIGH (SUBS) – only mid/high frequencies are reproduced according the control (8)	
		LOW (BP)* – only low frequencies are reproduced according the control (9)	
		*: Set to LOW filter, the high-pass filter (SUBSONIC) will be activated simultaneously	
		resulting in a band-pass filter (5 Hz 4000 Hz)	
		To adjust the required crossover point. Frequencies below the selected crossover point will be	
8	HIGH PASS (HPF) control	filtered (5 Hz to 500 Hz).	
-	(SUBSONIC)	This control will also be activated at MODE switch set to LOW (7)	
9	LOW PASS (LPF) control	To adjust the required crossover point. Frequencies above the selected crossover point will	
9	(BANDPASS)	be filtered (40 Hz to 4000 Hz)	
10	REMOTE socket	To connect the bass remote control	

#### Stereo RCA input wiring – GZRA2255X

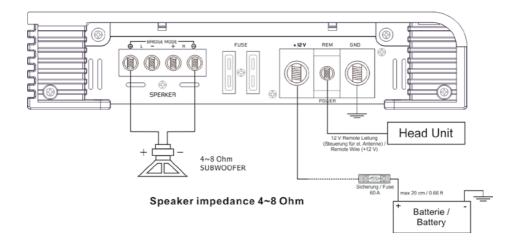


#### STEREO output wiring - GZRA 2255X





#### BRIDGE MODE output wiring - GZRA 2255X



Model	GZRA 2255X	
Amplifier type	2 channel class A/B	
RMS Power @ 4 Ω CEA Standard CEA-2006-A	2x 150 W (1% THD+N)	
RMS Power @ 2 Ω CEA Standard CEA-2006-A	2x 250 W (1% THD+N)	
RMS Power @4 Ω bridged CEA Standard CEA-2006-A	1x 500 W (1% THD+N) 1x 600 W (10% THD+N)	
Damping factor	> 100	
Low pass filter	40 Hz – 4000 Hz (12 dB/Oct)	
High pass filter	5 Hz – 500 Hz (12 dB/Oct)	
Band pass filter	5 Hz – 4000 Hz (12 dB/Oct)	
Bass boost	$0 \sim +12 \text{ dB} (45 \text{ Hz})$	
Frequency response	5 Hz – 38 KHz (± 1 dB)	
Input sensitivity	500 mV – 9 V (± 5%)	
Bass remote	✓	
Fuse(s)	2x 30A	
Dimensions w x h x l (mm)	230 x 53 x 395	
Dimensions w x h x l (inch)	9.04″ x 2.09″ x 15.55″	

#### Trouble shooting guide

Symptoms	Check / Cause	Action
No audible sound	Does the POW LED turn to green?	Check protection fuse(s) of the amplifier Check remote wire connection (RCA input mode) Check + 12 Volt power supply wire connection Check ground wire connection
	Did the PRO LED turned to red?	Check for speaker short or amplifier overheating
Device does not turn on	Power supply of the amplifier?	Check power wire or connections
Device does not turn on	Remote wire powered? (RCA input mode)	Check remote wire connection to the head unit
	Speaker wiring undamaged?	Check for short circuit or open connections
No sound on one channel	Input signal on both RCA leads?	Reverse left and right RCA inputs to check the audio input signal
Device turns off at medium / high volume	Load impedance of each speaker correct?	Check if each speaker load impedance matches the technical specifications of the amplifier
Status LED turned on red	Temperature protection circuit active	Decrease head units volume / wait for cooling
Sidios LED forned on red	Speaker wires short / speaker damaged	Check speaker / wires and insulate if necessary

Terms of warranty

The limited warranty for this product is covered by Ground Zero´s local distribution partners and their terms and conditions. For further information contact your local retailer or distributor.

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