

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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# RADIOACTIVE SERIES

## Amplifier

### Owner´s manual

# GZRA MICRO ONE

# GZRA MICRO FOUR

#### Features

- High-efficient class D operation
- Variable crossover
- Adjustable input sensitivity
- Turn on soft delay
- High-level input (with auto-on function)
- Thermal / short / overload protection

#### GZRA MICRO ONE

- 1-channel subwoofer class D operation
- 1 ohm stable
- Variable bass boost (@ 45 Hz)
- Variable phase shift (0 - 180°)
- Variable subsonic filter 15 - 25 Hz
- Variable low pass filter 40 - 400 Hz
- 1x stereo RCA input

#### GZRA MICRO FOUR

- 4-channel full range class D operation
- 2 ohms stable
- 4 ohms stable in bridged mode
- Variable high pass filter 30 - 400 Hz
- Variable low pass filter 30 - 400 Hz
- 2x stereo RCA input

## Recommended wiring and fuse value

Model	GZRA MICRO ONE	GZRA MICRO FOUR
Speaker wire	min 2.5 mm <sup>2</sup> / 14 AWG	min 1.5 mm <sup>2</sup> / 16 AWG
Power supply wire	min 10.0 mm <sup>2</sup> / 8 AWG	min 6.0 mm <sup>2</sup> / 10 AWG
Remote wire	min 0.75 mm <sup>2</sup> / 20 AWG	
Recommended main fuse value	30 A	25 A

### Please note

- As a precaution, it is recommended to disconnect the vehicles battery before mounting the amplifier.  
(Note: For new vehicles, disconnecting the battery might cause various errors in your vehicle's electric system that can be cleared only by authorized service partners of your vehicle's manufacturer!  
Please ask your service partner first before disconnecting the battery!)
- The power supply wire (+12 V) has to be protected within max. 20 cm / 8" by a main fuse holder with a fuse value matching the recommendation for your amplifier  
(Note: If there is more than one amplifier connected using this power wire, the main fuse value must be equal to the sum of the recommended fuses of all connected devices. However, make sure the diameter of your power wire will be sufficient for the required current!)
- If necessary, replace a defective fuse by a fuse with identical quality and value
- Never drill a hole to the vehicles 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
- The amplifier contains a temperature protection circuit that turns the device off in case of overheating. After a certain cooling time, it will turn on automatically. To avoid heat build-up, sufficient air supply for cooling must be provided. Never cover the surface of the amplifier's heatsink entirely
- The amplifier should **NEVER** be mounted onto a vibrating part or surface such as a subwoofer enclosure. This might lead to malfunction due to loose electrical parts inside the amplifier.
- Some amplifiers offer a high-level input option, however if a pre-amplified output (RCA) is available (at the head unit), it is strongly recommended to make use of them.

#### WARNING!

Powerful car audio systems are capable to create an extremely high SPL level comparable to 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.

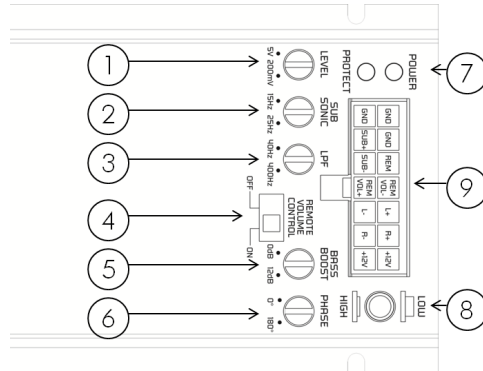
## Amplifier connection

- The GZRA MICRO amplifiers come with one power and one signal connector cable. For a reliable connection we strongly recommend use the delivered spade connections or to solder the joints.

## Adjusting the correct gain level (input sensitivity)

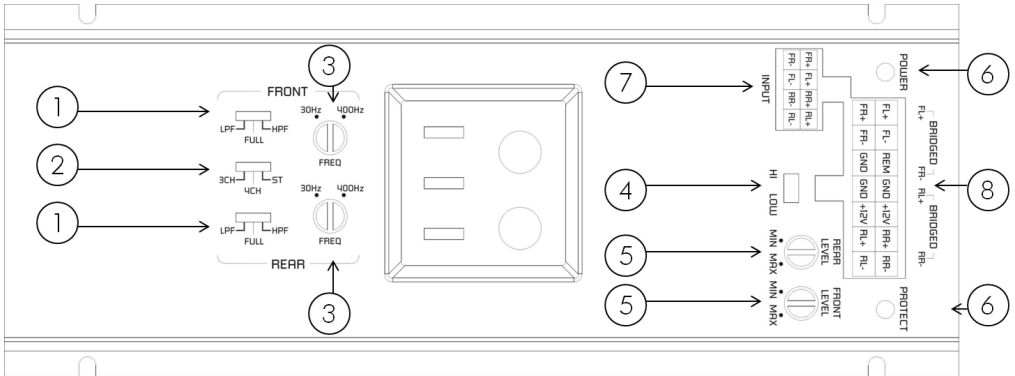
1. First, set the gain control of the amplifier to the MIN position (at the very left)
2. Power on the head unit (use high quality music material) and set the control to about 80% of the maximum (Set all EQ, Bass and Treble controls to normal level and switch off loudness and similar functions)
3. Increase the gain level of the amplifier unless distortion is audible, or your desired music level is attained

## GZRA MICRO ONE - Controls and functions



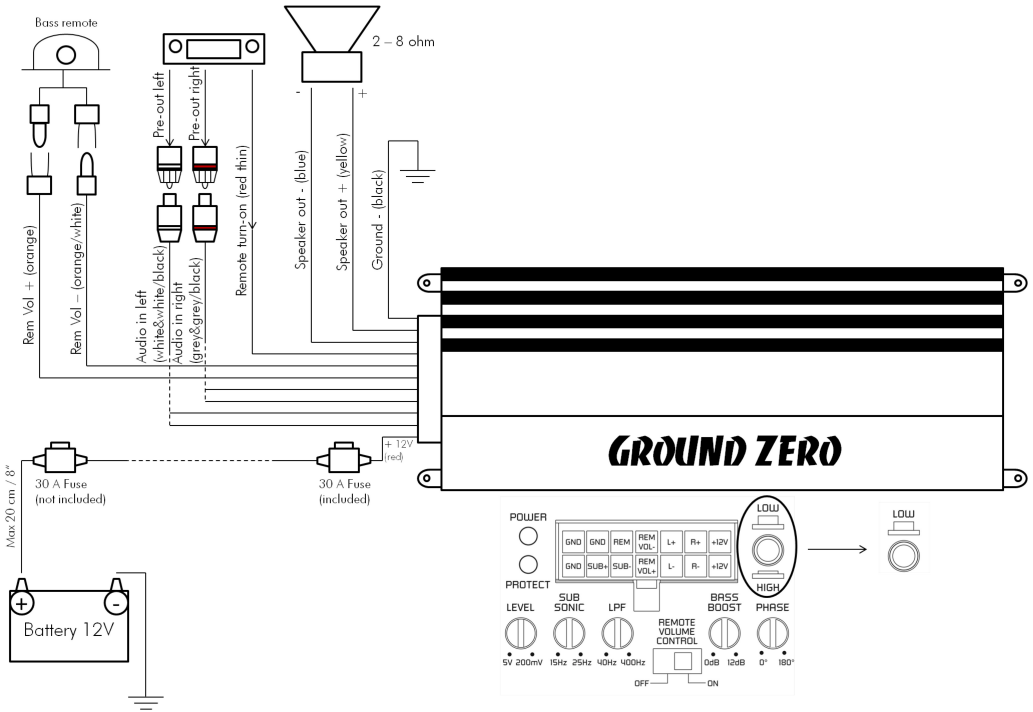
1	<b>Input level controller</b>	To adjust the input sensitivity
2	<b>Subsonic controller</b>	To adjust the variable frequency
3	<b>Low pass controller</b>	To adjust the variable frequency
4	<b>Remote volume control</b>	On – If the bass remote controller is connected Off – If the bass remote controller is not connected
5	<b>Bass boost controller</b>	To adjust the bass boost level (0 to +12 dB)
6	<b>Phase shift controller</b>	To adjust the phase shift
7	<b>Status indication</b>	Green LED – operation mode Red LED – protection mode
8	<b>High / Low input switch</b>	RCA input or speaker wire input
9	<b>Main connector</b>	Power input and speaker output

## GZRA MICRO FOUR - Controls and functions

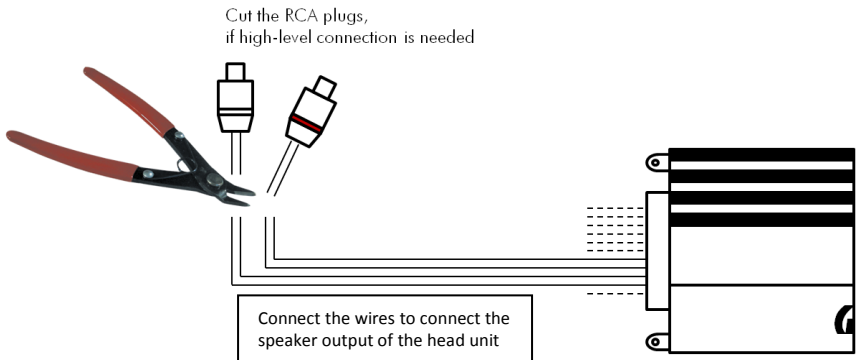


1	<b>Mode switch</b>	To adjust the crossover LPF – Only lower frequencies will be reproduced FULL – Full range operation HPF – Only higher frequencies will be reproduced
2	<b>Input mode</b>	To adjust the input mode (check wiring diagram)
3	<b>Filter controller</b>	To adjust the variable frequency
4	<b>High / Low input switch</b>	To choose between high level or low level (RCA) input.
5	<b>Input level controller</b>	To adjust the input sensitivity
6	<b>Status indication</b>	Green LED – operation mode Red LED – protection mode
7	<b>Input connector</b>	RCA input or speaker wire input
8	<b>Main connector</b>	Power input and speaker output

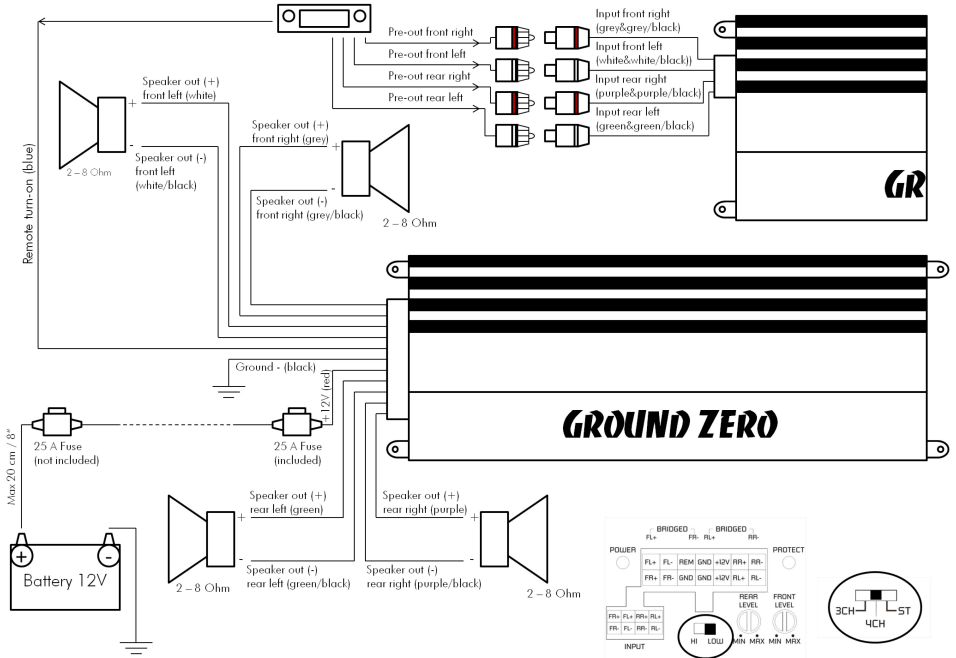
## GZRA MICRO ONE - RCA (low level) wiring



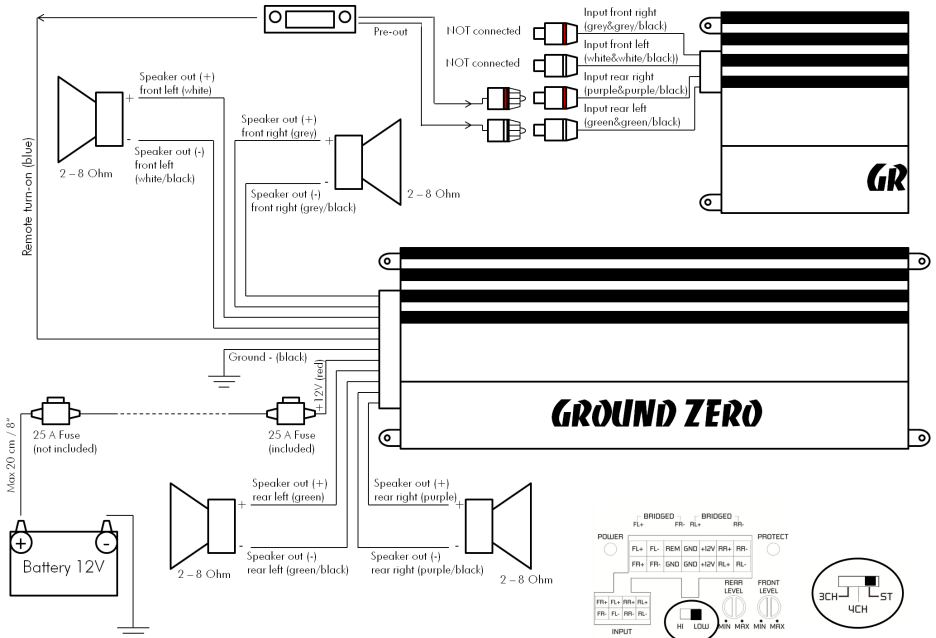
## GZRA MICRO ONE - High-level wiring



## GZRA MICRO FOUR - RCA (low level) wiring 4-channel in / 4-channel out

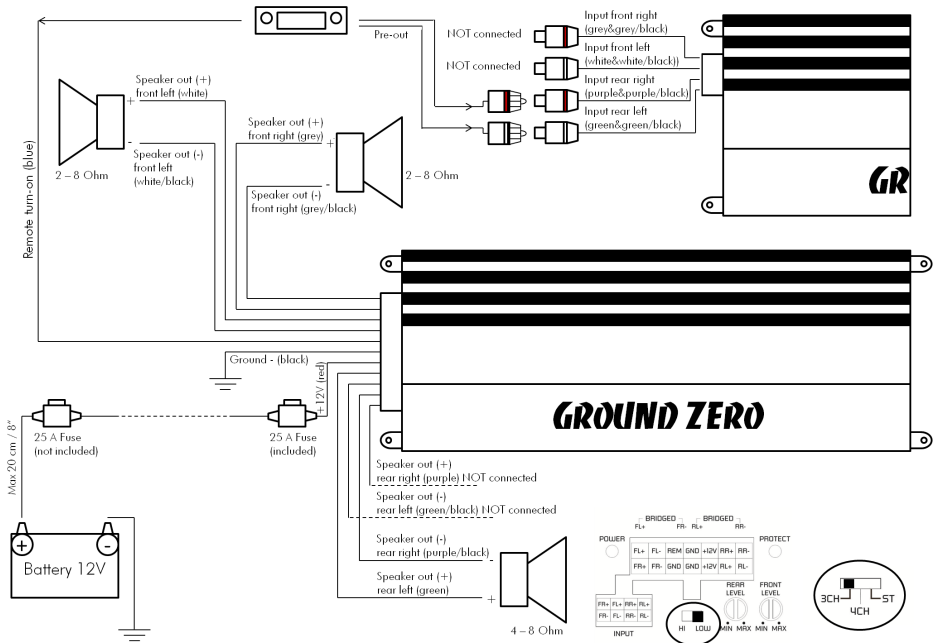


## GZRA MICRO ONE - RCA (low level) wiring 2-channel in / 4-channel out

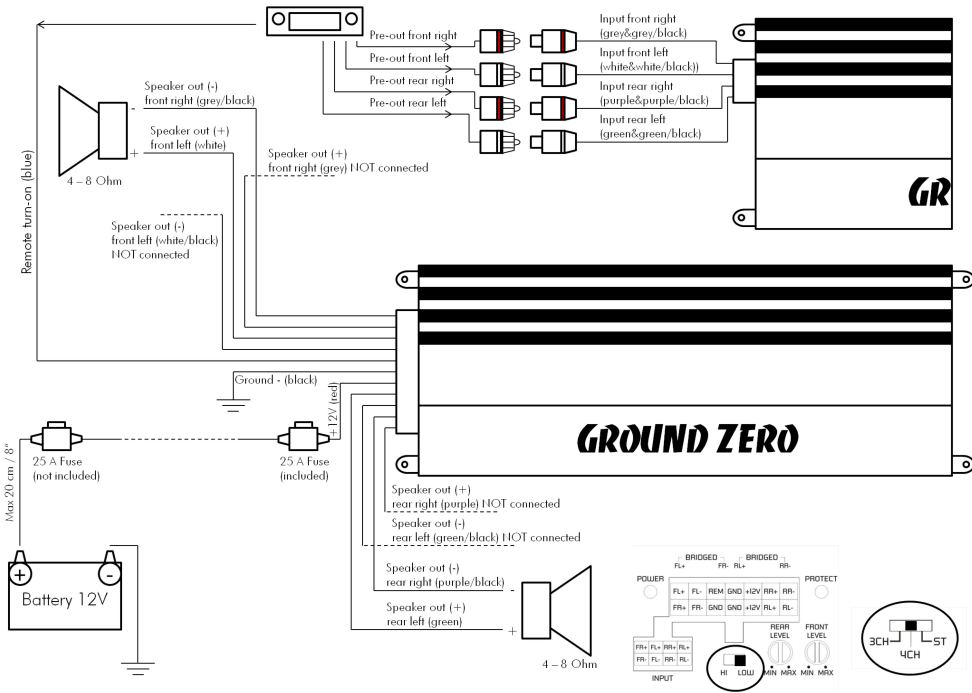




## GZRA MICRO FOUR - RCA (low level) wiring 2-channel in / 3-channel out



## GZRA MICRO FOUR - RCA (low level) wiring 4-channel in / 2-channel out





## Specifications

Model	GZRA MICRO ONE	GZRA MICRO FOUR
Type	1-channel subwoofer class D	4-channel full range class D
RMS Power @ 4 / 2 $\Omega$ CEA Standard CEA-2006-A	1 x 220 W (1% THD+N) 1 x 270 W (10% THD+N)	4 x 60 W / 4 x 100 W (1% THD+N)
RMS Power @ 4 $\Omega$ bridge mode CEA Standard CEA-2006-A	1 x 350 W (1% THD+N) 1 x 400 W (10% THD+N)	2 x 200 W (1% THD+N) 2 x 250 W (10% THD+N)
Damping factor	> 100	> 100
Low pass	40 Hz – 400 Hz	30 Hz – 400 Hz
High pass / Subsonic	15 Hz – 25 Hz	30 Hz – 400 Hz
Frequency response	15 Hz – 400 Hz ( $\pm$ 1 dB)	5 Hz – 25 kHz ( $\pm$ 1 dB)
Input sensitivity	200 mV – 5 V ( $\pm$ 5%)	200 mV – 5 V ( $\pm$ 5%)
Fuse	30 A	25A
Min Power and GND Wire	10 mm <sup>2</sup> / 8 AWG	6 mm <sup>2</sup> / 10 AWG
Dimensions W x H x L mm	75 x 44 x 190	75 x 44 x 190
Dimensions W x H x L inch	2.95" x 1.73" x 7.48"	2.95" x 1.73" x 7.48"

## Trouble shooting guide

Symptoms	Check Points	Cure
No sound	Is the POWER LED illuminated?	Check fuses in amplifier. Be sure remote lead is connected. Check signal leads. Check again control. Check tuner/deck volume level.
	Is the diagnostic LED illuminated?	Check for speaker short or amplifier overheating
Amp not switching on	No power to the amplifier	Check power wire or connections
	No power to remote wire with receiver on	Check connections to radio
No sound in one channel	Check speaker leads	Inspect for short circuit or an open connection
	Check audio leads	Reverse left and right RCA inputs to determine if it is occurring before the amp
Amp turning off at medium / high volume	Check speaker load impedance	Check the nominal load impedance at the amplifier is equal to or greater than 2 ohms. (If you use an ohm meter to check speaker resistance, please remember that DC resistance and AC impedance may not be the same.)
Protection LED is on	Temperature shut down	Turn radio volume down
	Speaker wires short	Separate speaker wires and insulate