

# GROUND ZERO<sup>®</sup>

## GERMAN ENGINEERING

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# COMPETITION SERIES AMPLIFIER

## OWNER'S MANUAL

# GZCA 35K-SPL

### Features

- Pure competition amplifier
- 1 Ohm stable low frequency amplifier
- High efficient class D technology
- Status LED monitoring
- Illuminated GZ logo as power on indication
- Adjustable input sensitivity
- Link mode option
- Thermal / short circuit / overload protection

## Recommended wiring

	GZCA 35.0K-SPL
<b>Speaker wires</b>	Max possible
<b>Power supply wires</b>	According to competition rules / max possible
<b>Remote wire</b>	min 0.75 mm <sup>2</sup> / 20 AWG

## Mounting instructions

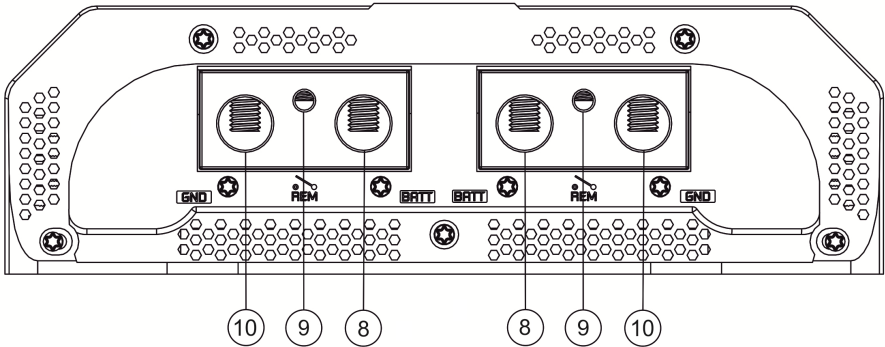
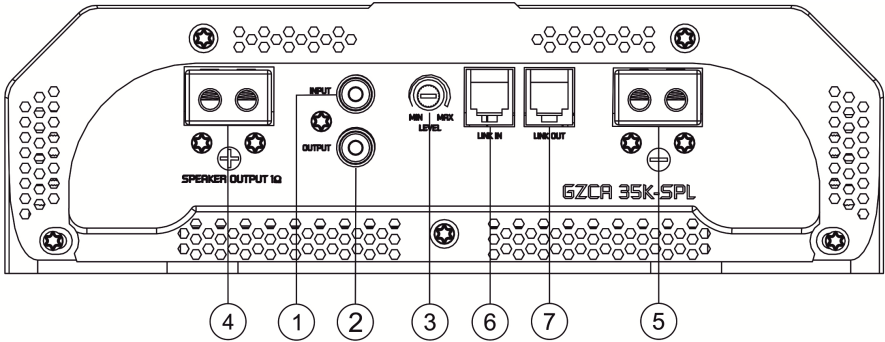
- As a precaution, it is recommended to disconnect the vehicles battery before mounting (also note the vehicles manual)
- The power supply wire (+12 V) has to be protected within max. 20 cm / 8" by a main fuse holder with matching fuse value (Main fuse value has to be equal to the sum of the recommended fuses of all connected devices to the power wire)
- 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 build-up, 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)
- 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 I

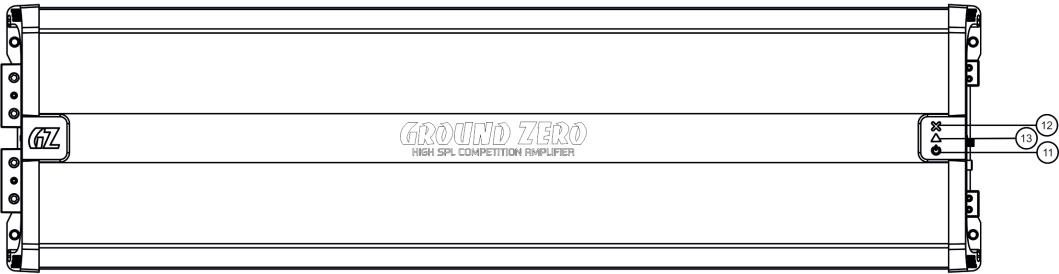
Powerful car audio systems are able to create extremely high SPL similar to real live concert levels. Permanent exposure to excessively high sound levels may cause damage to or loss of the hearing.

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 – GZCA 35K-SPL



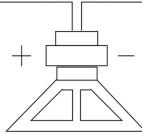
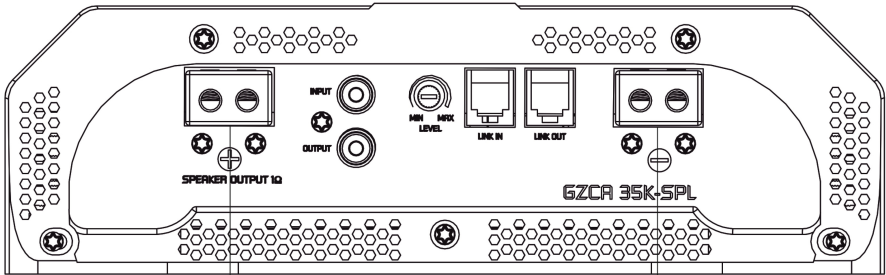
## Controls & Features – GZCA 35K-SPL



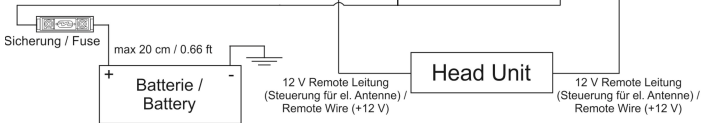
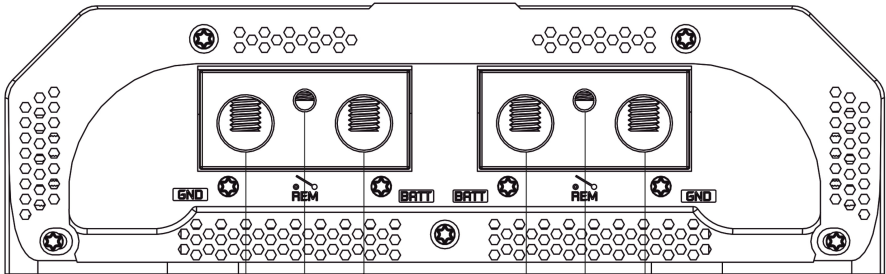
1	<b>INPUT socket</b>	to connect RCA wire from the audio source / head unit
2	<b>OUTPUT socket</b>	to connect another amplifier /provides the original audio signal
3	<b>LEVEL control</b>	to adjust the input sensitivity
4	<b>OUTPUT terminal</b>	(+) positive speaker wire connection
5		(-) negative speaker wire connection
6	<b>LINK IN socket</b>	input signal from the previous GZCA 35K-SPL in link mode
7	<b>LINK OUT socket</b>	output signal for the next GZCA 35K-SPL in link mode
8	<b>POWER supply terminal</b>	+BAT -> to the battery connection / +12 V
9		REM -> to the remote output of the head unit
10		GND -> to the ground connection
11	<b>STATUS signs</b>	⊖ POWER indication sign
12		✖ PROTECTION indication sign
13		▲ CLIPPING indication sign

\* To avoid any kind of malfunction, it is strongly recommended to use high quality RCA wires!

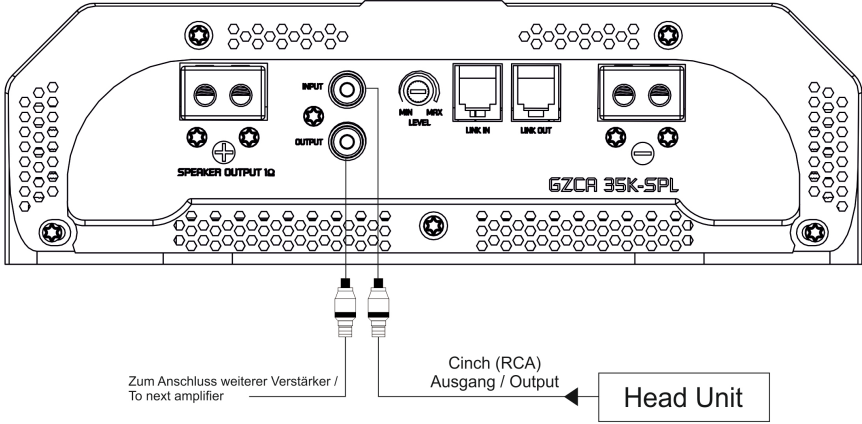
# Input & Output wiring – GZCA 35K-SPL



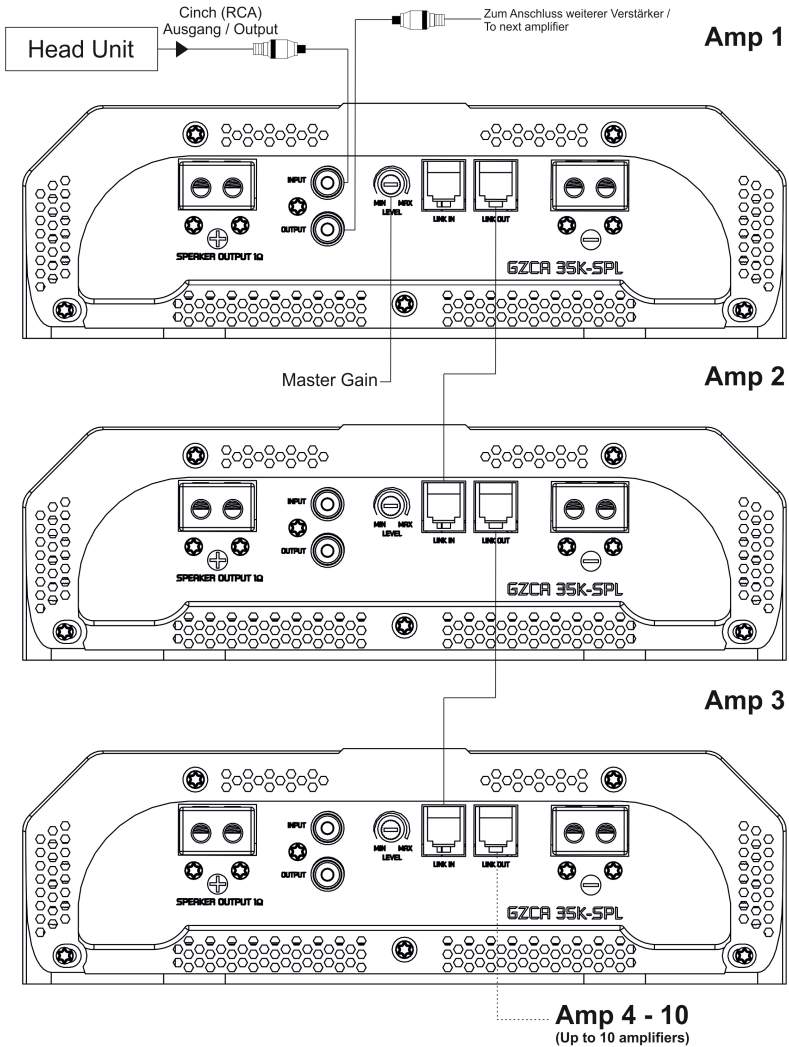
Speaker Load 1-4 Ohm



## Signal Input wiring – GZCA 35K-SPL



## Link Mode – GZCA 35K-SPL












This amplifier offers an exclusive feature enabling to connect a vast amount of speakers to up to 10 amplifiers controlled by only one (master) of them. Separate signal wiring is not necessary. To receive the maximum output power of each amplifier in the line of linked units, it's recommended to spread the amount of speakers evenly to all amplifiers and to decrease the load for each amplifier to 1 Ohm by connecting the speakers in series and/or parallel.

## Specifications

<b>Model</b>	<b>GZCA 35K-SPL</b>
<b>Amplifier type</b>	Mono low frequency class D
<b>RMS Power @ 1 <math>\Omega</math> measured @ 12.6 V</b>	35000 W (0.1% THD+N)
<b>Input sensitivity</b>	500 mV ~ 6 V
<b>Operation voltage</b>	9 V ~ 18 V
<b>Fuse</b>	According to competition rules
<b>Dimensions w x h x l (mm)</b>	225 x 68 x 836
<b>Dimensions w x h x l (inch)</b>	8.85 x 2.67 x 32.91
<b>Weight</b>	13 kg / 28,66 lbs



## Trouble shooting guide

Symptoms	Check / Cause	Action
No audible sound	Does the  sign turn to yellow? No? Probably there is no power supply	Check the power line fuse(s) Check remote wire connection to the head unit Check +12 Volt power supply wire connection Check ground wire connection
	Does the  sign blink 10 times? Yes? The battery voltage is too high or too low	The operation voltage must be 9 to 16 V
	Does the  sign blink 10 times? Yes? Load at the speaker terminal is below 1 Ohm	Speaker wires may be shorted (short circuit) Check the wiring and the speakers
	Probably no input signal	Check the RCA wiring to the head unit
	Does the  sign light up red? Yes? Amplifier turned off due to high temperature	Turn off the amplifier until it cools down
	Does the  sign blink permanently red? Yes? The amplifier is seriously damaged	Device has to be sent to our service department
Device does not turn on	Does the  sign turn to yellow? No? Probably there is no power supply	Check the power line fuse(s) Check remote wire connection to the head unit Check +12 Volt power supply wire connection Check ground wire connection
	Does the  sign blink permanently red? Yes? The amplifier is probably damaged	Device has to be sent to the service department
Distorted audio signal	Does the  sign turn red? Yes? The output signal is distorted	Decrease the amplifier gain (Level) or Decrease the volume level of the head unit
Amplifier is working, but...	Does the  sign blink frequently red? Yes? The battery voltage is below 9.5 V	Check and load the battery

### 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.

## Ground Zero GmbH

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