

Ground Zero GZCS A-4.80 – a micro amplifier to boost your sound

Sound upgrade made easy

► How do you get better sound into your car as easily as possible? Ideally, with a precisely fitting solution that can be installed in the vehicle without any major changes. Ground Zero has come up with an interesting concept for this.

Many people want a sound upgrade for their car, but not every sound enthusiast is willing to have their car modified at great expense. Therefore, there are now solutions on the market that offer a powerful sound upgrade yet don't require cutting a single cable in your vehicle. Ground Zero has also put some thought into this, and the result is not just a product, but an entire series of something best described as construction kits. Now we are going to look closely at a four-channel power amplifier GZCS A-4.80, which can then be expanded into a full package with suitable speakers, subwoofers, installation adapters and cable sets. The GZCS A-4.80

is a tiny power amplifier. The box dimensions are just 8 x 15 cm, and, as with many micro power amplifiers, there is no space for usual connectors. Signal input and output as well as power supply are distributed over two Molex plug connections. Two cable harnesses are included for the inputs, one with RCA sockets and one for speaker strips. A wiring harness docks on the opposite side, which contains the loudspeaker outputs, the doubled plus and minus cables and the remote. So you can start immediately and „knit“ the connections into the cabling. If that is too much work for you, a universal ISO cable set, compatible with many different cars, is available as an

accessory. As a special treat, there are also ready-made cable sets for Quadlock vehicles, and vehicle-specific cable sets for BMW and Mercedes. Combined with the suitable loudspeakers for the doors and the underseat or footwell subwoofers, it composes a small hi-fi system that can be built in quickly and does not take up any space. The small GZCS A-4.80 can easily be placed in the dashboard area or under the seat. The compact design is of course made possible by Class D technology, as well as by SMD assembly with tiny components. And the board is full of it, especially since the driver stages are integrated in a four-channel chip. Only the MOSFETs for the



A tightly packed SMD layout, the four-channel Class D driver can be seen at the bottom half right

final amplification are still present as „macroscopic“ transistors on the sides of the heat sink.

Measurements and sound

In the lab, the GZCS A-4.80 is received with clear approval. With its 4 x 57 watts at 4 ohms, it performs just like a full-blown analog power amplifier. Distortion is not record-breaking low, but it remains okay at all times. The crossovers run up to 300 Hz as a high or low pass, enough to cross door loudspeakers or subwoofers. It is also worth mentioning that the small power station does not affect the radio signal reception. We could not detect any difference there when the Ground Zero was silent or running at full capacity. In the audio check, this small device stands out due to its lively, vibrant sound. The sound from the loudspeakers is quite dynamic and rich. In the sensitive middle area, the GZCS A-4.80 remains balanced and neutral, and we have no complaints here. A three-dimensional stage with accurate positioning of the musical actors is also commendable. Just the passage in the (deep) bass could be a bit more brisk, here it becomes noticeable that the GZCS A-4.80 is a rather small retrofit power amplifier. Overall, however, the Ground Zero makes a huge sound improvement compared to a standard factory system, so the investment is definitely worthwhile.

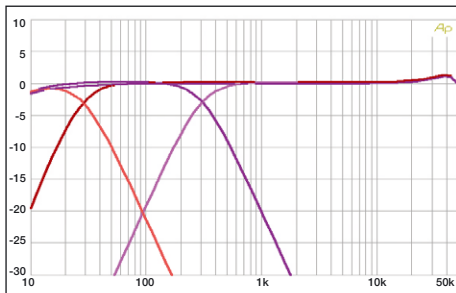


In the GZCS signal input is facilitated via Molex connector and simple crossover equipment.

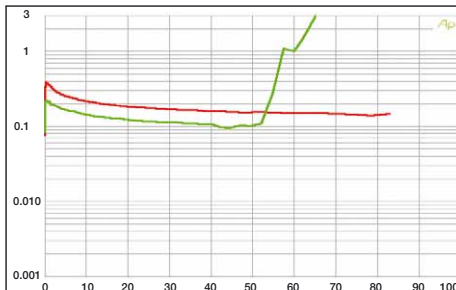
Conclusion

The GZCS A-4.80 is a very versatile, compact and smart power amplifier. Together with a suitable cable set for a specific vehicle and the matching speakers, it makes a great plug & play retrofit kit.

Elmar Michels



The frequency response of the GZCS A-4.80 only ends beyond 50 kHz, the onset of the low-pass filter can be clearly recognized. The crossovers run up to 300 Hz.



With distortion between 0.1 and 0.2%, the performance of GZCS A-4.80 is good, but not flawless. At 2 ohms (red), the protective circuit cuts the output at just under 85 watts.



Vehicle-specific cable sets enabling the connection via plug & play are available for VW, BMW and Mercedes.

BEST VALUE
Upper Class
CAR & HiFi 1/2022

Best EMC
Undisturbed FM reception
CAR & HiFi 1/2022

Ground Zero GZCS A-4.80

Price 250 Euro
Distributor Ground Zero, Egmatung
Hotline 08095-873830
Internet www.ground-zero-audio.com

Rating

Sound	40 %	1,2	■■■■■
Bass foundation	8 %	2,0	■■■■■
Neutrality	8 %	1,0	■■■■■
Transparency	8 %	1,0	■■■■■
Spatial imaging	8 %	1,0	■■■■■
Dynamics	8 %	1,0	■■■■■
Lab	35 %	1,9	■■■■■
Power	20 %	2,0	■■■■■
Damping factor	—	—	■■■■■
SNR	5 %	1,5	■■■■■
Distortion	10 %	2,0	■■■■■
Practice	25 %	1,5	■■■■■
Features	15 %	1,5	■■■■■
Build quality electronics	5 %	1,5	■■■■■
Build quality mechanics	5 %	1,5	■■■■■

Specifications

Channels	4
Power 4 ohms	57
Power 2 ohms	83
Power 1 ohms	0
Bridged power 4 ohms	166
Bridged power 2 ohms	0
Sensitivity max. mV	200
Sensitivity min. V	6,0
THD+N (<22 kHz) 5 W	0,170
THD+N (<22 kHz) Half Power	0,116
Signal-to-noise ratio dB(A)	87
Damping factor 20 Hz	—
Damping factor 80 Hz	—
Damping factor 400 Hz	—
Damping factor 1 kHz	—
Damping factor 8 kHz	—
Damping factor 16 kHz	—

Features

Low pass	30 – 300 Hz
High pass	30 – 300 Hz
Band pass	—
Bassanhebung	—
Subsonic filter	—
Phase shift	—
High-level inputs	•
Automatic switchon (Autosense)	•, DC
RCA outputs	—
Start/stop capable	• (7,5 V)
Dimensions (L x B x H in mm)	151 x 82 x 35
Others	2 oder 4CH In, ISO and vehicle specific harnesses available

Ground Zero GZCS A-4.80

Upper Class **1,5**

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Price-Performance: very good

„Tiny power pack as a clever retrofit concept.“