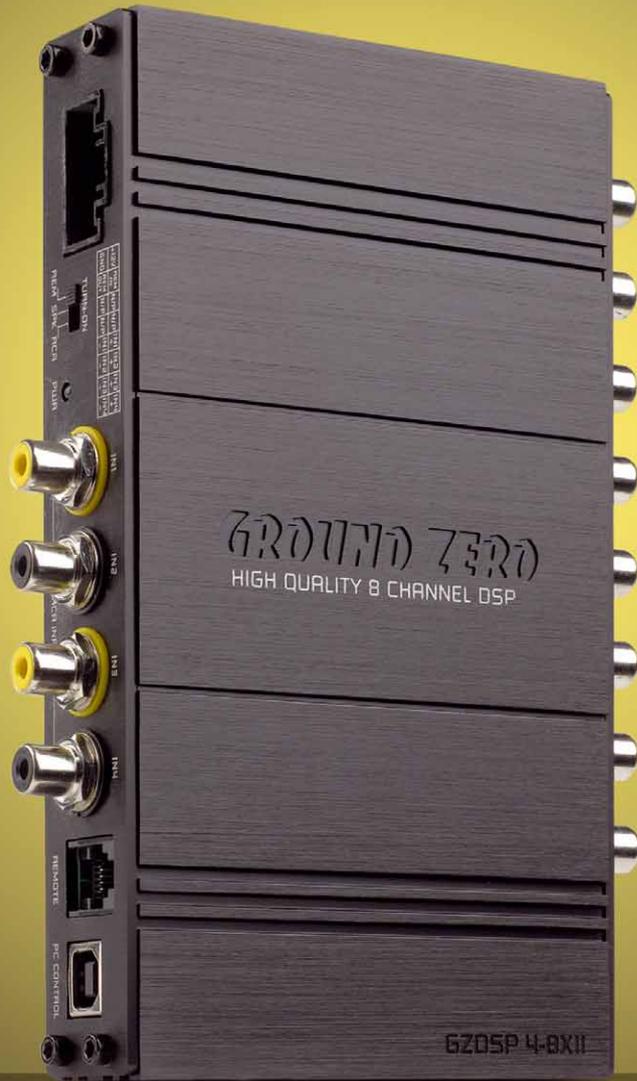


## GZDSP 4-8XII — a 8-Channel DSP from Ground Zero

# Mandatory equipment

**BEST VALUE**  
**Soundprocessor**  
**CAR & HiFi** 5/2020



customer's system. The GZDSP 4-8XII offers eight output channels, which can be used to control very decent systems, for example the active front plus rearfill plus subwoofer. The GZDSP features four inputs, which is enough for the standard systems. The inputs are available in low and high level options, and an automatic turn-on for both cases is also on board, so that the remote cable can be left out. The hardware makes a more than neat impression, we have a nice aluminum housing with carefully attached RCA sockets. There is also a switch for automatic power-on, a USB socket for the PC connection, a LAN socket for the remote control and a second USB port for the Bluetooth stick. This is available as an accessory and is highly re-

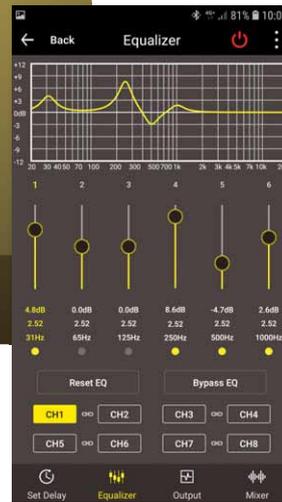


The GZDSP features rock solid RCA sockets. Voltage supply and hi level inputs can be found in the special socket

With the GZDSP 4-8XII, Ground Zero is launching a new signal processor that captivates the customers with attractive features available at an attractive price. We tested it.

The idea behind the GZDSP 4-8XII is making the step towards a processor-controlled car audio installation as easy as possible. If you want something more than a pure entry-

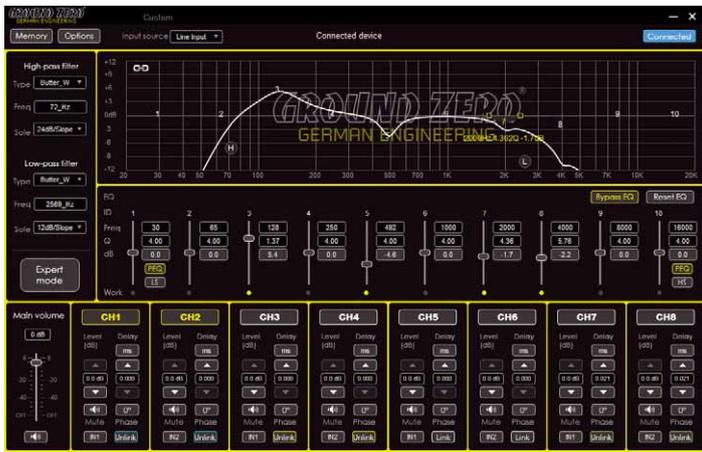
level system, you should definitely stick to DSP. A cheap DSP is also a perfect way for the specialized dealers to enhance the sound of a



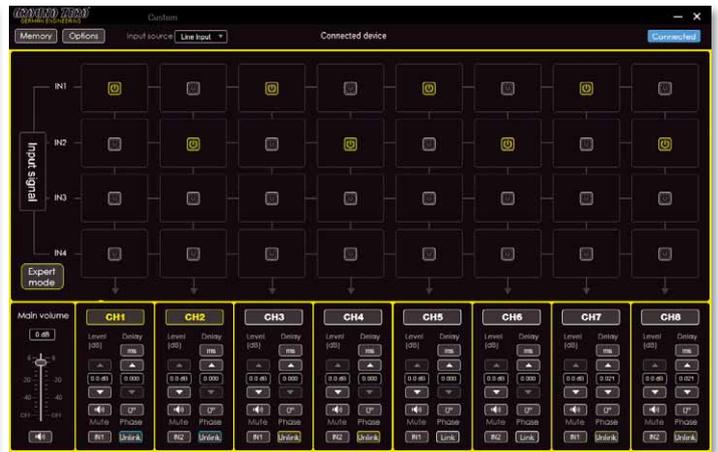
All functions of the PC software can be operated in the app. Here we have the equalizer



The app provides a comprehensive diagram for time alignment

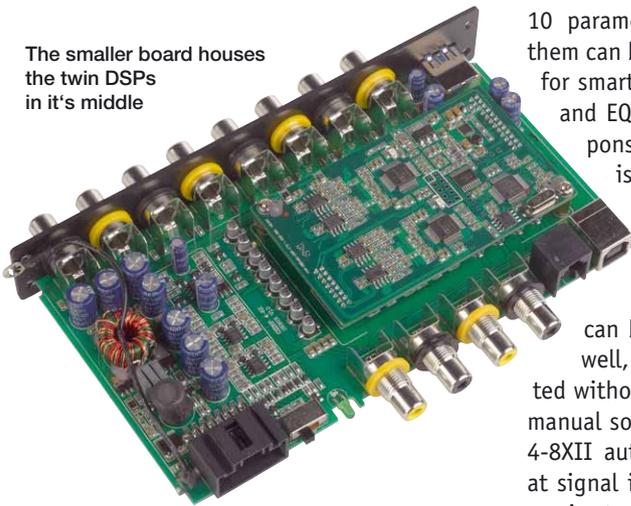


Everything essential takes place on the main screen

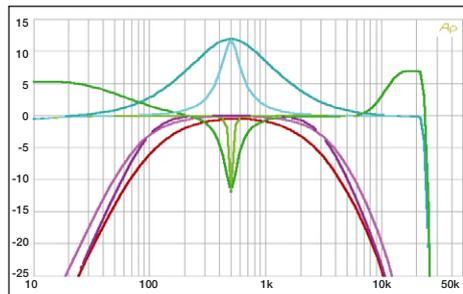


The mixer allows free routing and summing of the four inputs to each of the eight outputs

The smaller board houses the twin DSPs in its middle



10 parametric bands per channel, two of them can be used as low-shelf and high-shelf for smart sound adjustments. The switches and EQs can be set in the frequency response display by drag'n'drop — which is very practical. And of course there is also a time alignment, which works accurately and according to the sampling rate of 48 kHz in 7 millimeter steps. Everything can be operated in the Control App as well, so that the DSP can also be adjusted without a wire or on the go. There is no manual source selection, because the GZDSP 4-8XII automatically switches to Bluetooth at signal input and switches back when the music stops.



The edge at 22 kHz appears due to the sampling rate of 48 kHz, crossovers can be Butterworth, Bessel and Linkwitz



The accessories include a remote control and Bluetooth

## Conclusion

The GZDSP 4-8XII is a really good DSP and has an affordable price. If you just need audio functions, here you get a great chance for a fuss-free sound upgrade.

*Elmar Michels*

## Ground Zero GZDSP 4-8XII

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

## Specifications

Dimensions 168 x 114 x 27 mm

### Inputs

- 4 channel high level incl. autosense
- 4 channel RCA incl. autosense

### Outputs

- 8 channell RCA
- Remote-out

### DSP-Software (V 1.08)

#### Equalizer

- Outputs: param. EQ, 10 bands per channel
- 20 – 20k Hz, 1 Hz increments
- +12 – -12 dB, Q 0,4 – 29
- 2 x Shelf to 1k Hz, 6 oder 12 dB/Okt.

#### Crossovers

- 20 – 20k Hz, Butterworth, Bessel, Linkwitz, 1 Hz increments
- Slope 6 - 24 dB/Okt.

#### Time and level

- Samplerate 48 kHz, 512 samples
- Output: 0 – 272 cm (8,0 ms), 7 mm increments (0,02 ms)
- Phase 0, 180°
- Level increments 0,5 dB increments, Mute

#### Features

- 6 Presets
- free mixing of in- and output ports
- Wired remote (master, sub, presets, sources)

#### Optional accessories

- Bluetooth dongle and remote (audio streaming and DSP programming)

**CAR & HiFi**

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„DSP for money savers.“

commended, as it enables music streaming in addition to a full-featured app programming. This is, of course, a great feat with such an affordable device. A look inside reveals a clean structure, the analog input section of the GZDSP 4-8XII has been redesigned to improve the signal quality. Still, the input takes up to 8 volts, which is nothing extraordinary and is just enough for a factory radio. Signal processing is done with a duo known from other affordable designs. Two ADAU1701 from Analog Devices are in use, these are not high-end chips, but their 28 bits deliver it just fine. And the converters are already included in the DSPs, so no external ADCs or DACs are required.

## Software and App

The clearly designed desktop interface gives you no puzzles. Everything can be found on one display, except for the routing matrix, which is accessible via a button. Here we got crossovers up to 24 dB/oct. in the characteristics Butterworth, Bessel and Linkwitz and of course a channel equalizer. There are