

GROUND ZERO®

GERMAN ENGINEERING

DSP SERIES

SIGNAL PROCESSOR

MANUAL

GZDSP 6-8X

Feature list

- 8-channel signal processor (DSP) - Cirrus Logic single core 32-bit/192 kHz
- 6-channel line input (RCA)
- 6-channel high-level input (with auto-on function)
- AUX input (3.5 mm socket)
- TOSLINK input (sampling rate up to 24-bit/96kHz)
- 8-channel line output (RCA)
- Simple handling, one page graphical user interface (Windows compatible)
- Realtime setup of all functions (via PC)
- Channel separated parametric equalizer (6x 31 band / 2x 11band)
- Channel separated time alignment (0-15 ms / 0-510 cm)
- Adjustable crossover (HPF / LPF / BPF) in the range of 20 Hz to 20 kHz
- Selectable crossover slope (6 to 48 dB/Oct)
- Selectable phase shift for each channel (0° or 180°)
- Time alignment – adjustable range 0 - 15 ms / 0 - 510 cm
- Adjustable filters (Butterworth) HPF / LPF / BPF with a slope of 6 – 48 dB/Oct.
- Selectable phase shift on each channel (0° or 180°)
- Memory for 10 user presets (selectable with optional remote control)
- Optional remote-control unit available (GZDSP Remote) to adjust main and subwoofer level, select the preset and input mode
- LED power indicator

Package contents

- 1 x GZDSP 6-8X digital signal processor
- 1 x USB cable (A- to Mini-B connector) 5 m
- 1 x 6-channel high-level input harness
- 1 x Power supply harness
- 1 x CD-ROM incl. PC software and driver package (for Windows)
- 1 x Owner's manual (German and English)
- 1 x Fastening kit
- Optionally available:
- Remote-control unit GZDSP Remote with LED display incl. connection wire

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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 unit should not be mounted on a heavily vibrating part or surface (e.g. subwoofer enclosure)
- If a pre-amplified output (RCA) is available (at the head unit), it is recommended to use it for input wiring

Required parts and tools for the installation

- screwdriver
- electric drill - 3 mm / 0.12" carbide drill bit
- power and ground wiring (min. 1.0 mm² / 17 AWG)

WARNING!

High powered audio systems in a vehicle can generate "Live Concert" levels of sound pressure. Continued exposure to excessively high-volume sound levels may cause hearing loss or damage. Also, operation of a motor vehicle while listening to audio equipment at high volume levels may impair your ability to hear external sounds such as horns, warning signals or emergency vehicles! This may lead to potential traffic hazards. In the interest of safety, consumer electronics recommends listening at lower volume levels while driving.

Selecting a mounting position

Before starting to install the unit, please consider the following:

- if you are planning to expand your system by adding other components in the future, ensure enough space is left and cooling requirements are met.
- if your head-unit is equipped with pre-amplified outputs (RCA), we recommend using them.

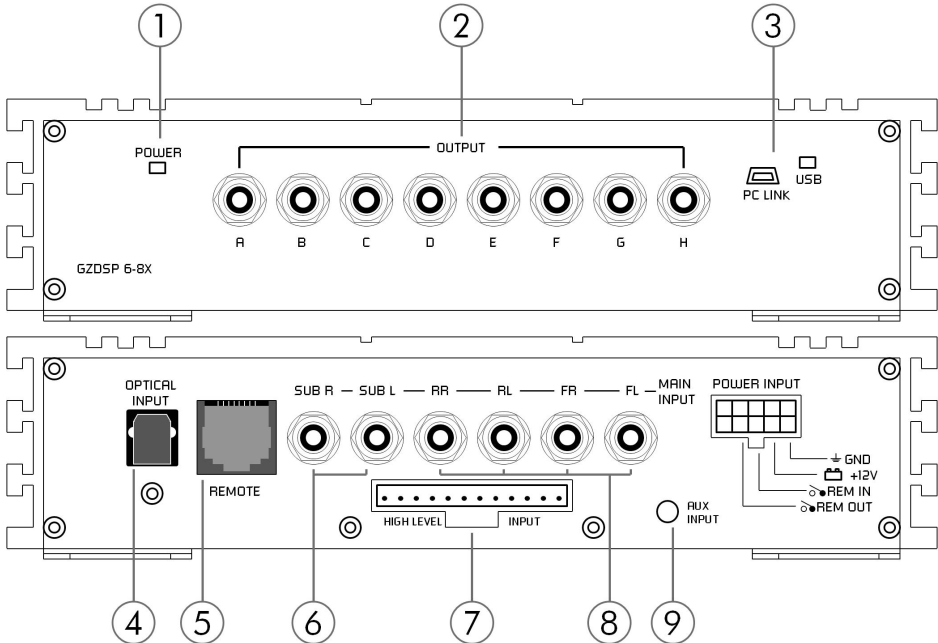
Mounting the Unit

You may use the unit as a template to mark the mounting holes, then remove it and drill the marked holes. Finally mount the unit with the mounting screws.

Caution

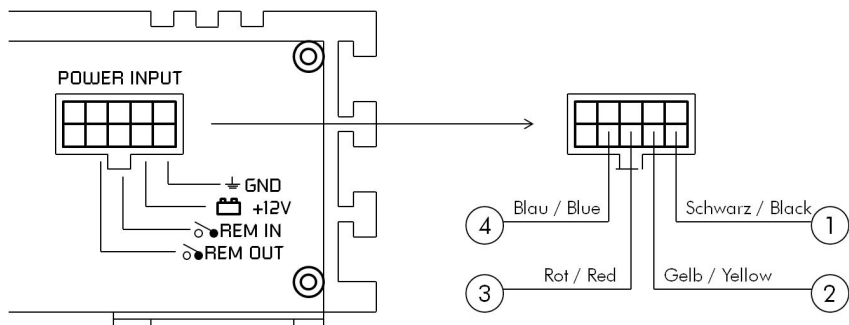
Choose a mounting position where all electric wires are protected from being damaged by sharp edges, heat or other conditions. +12 Volt DC electrical connections must be fused on the battery side. Make sure your head-unit and all other devices will remain turned off while connecting parts of the system. If it is necessary to replace any fuse make sure to use only an equivalent one. Using inferior fuses may cause serious damage to your unit, system or even your cars wiring. Any kind of damage traced back on disregard of these notes will not be covered by the warranty!

Audio Connection



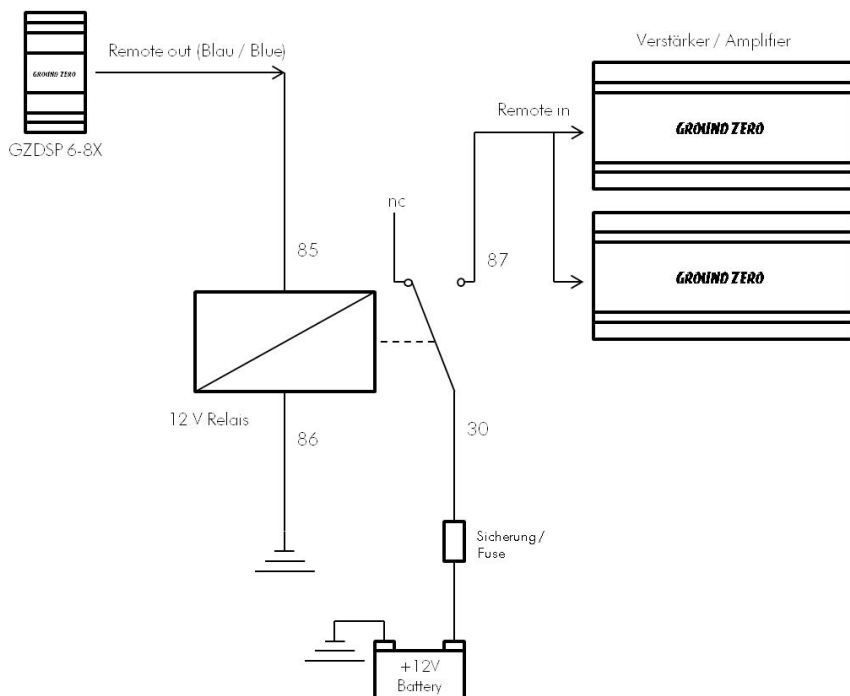
1	POWER indicator	LED lights up - unit is ready and working
2	OUTPUT	Line output for amplifier(s) providing an adjustable audio signal using the PC software.
3	PC LINK	Connect the unit with the supplied cable to your PC to be able to operate the user interface and to make changes on the setup of the DSP. Make sure to have installed the PC software previously. The unit may be disconnected after the setup is done. We don't recommend using any extension cord with the supplied USB wire, as the proper function can't be ensured. If the enclosed wire is too short, we recommend a suitable USB wire with an integrated repeater. The LED next to the USB port will light up blue as soon as the DSP unit has been connected to the PC.
4	OPTICAL INPUT (TOSLINK)	Audio sources offering an optical SP/DIF signal (Stereo PCM) may be connected to this port using a suitable TOSLINK wire. Please note: If the audio source offers no variable volume level, it is absolutely necessary to use the optional remote-control unit (GZDSP Remote)
5	REMOTE socket	To connect one of the optionally available remote-control units GZDSP Remote or GZDSP Touch-Remote
6	SUB INPUT (RCA)	Connect the subwoofer line out of the head-unit (if available)
7	HIGH LEVEL INPUT	The High-Level Input must be used if there's no pre-amplified output at the head-unit, nor offering a SP/DIF signal. In this case the head-unit speaker output wires must be connected to the high-level input harness. By using the high-level input, the DSP unit will turn on automatically recognizing the DC level. It's not necessary to connect the Remote-In wire to the power terminal. Caution: The high-level input and the line input(s) cannot be used simultaneously. This may lead to malfunction and cause serious damage to the DSP unit.
8	MAIN INPUT (RCA)	Connect the pre-amplified head-unit output (RCA) for front and rear signals (if available)
9	AUX INPUT	The 3.5 mm socket can be connected to an additional source unit. AUX can be selected as audio source using the PC software or one of the available remote-control units.

POWER INPUT



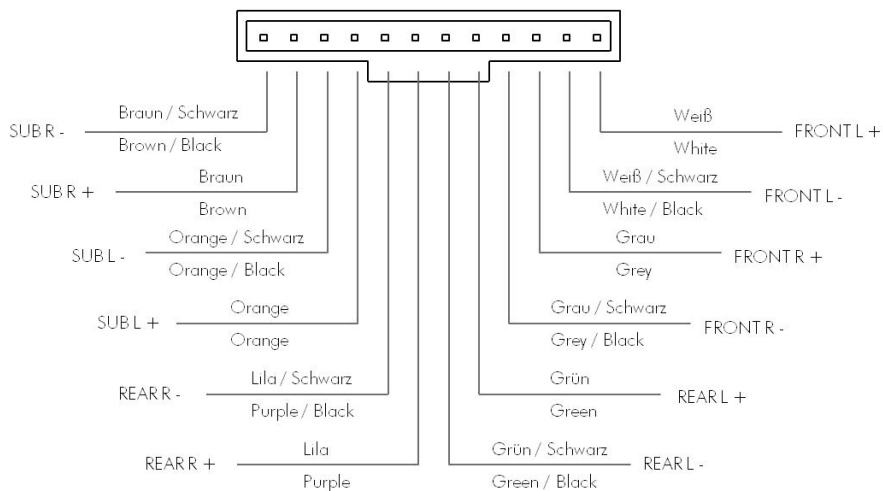
1	GND	Connect the unit to a suitable ground terminal on the vehicles body. The ground wire should be as short as possible and be mounted to an unvarnished metal part. Ensure that this part has an unlimited electrical connection to the ground pole of the battery (negative earth). Use adequate wiring (not less than 1.0 mm ² / 17 AWG). The ground wire (-) and power wire (+) should have an identical diameter.
2	+ 12 V	Connect the unit to the positive pole (+) of the vehicles battery. Use adequate wiring gauge (not less than 1.0 mm ² / 17 AWG) with an additional fuse holder (2 A fuse) not further than 30 cm / 12" away from the terminal of the battery. Plug in the fuse at the end of the installation.
3	REM IN	Remote turn-on signal. Connect the head-unit's remote out wire (REM) or the electric if the RCA input (MAIN) or the optical connector (TOSLINK) is used. Use adequate wiring gauge (not less than 0.5 mm ² / 20 AWG) Please note: Auto Turn-On (activates the DSP unit) Using the high-level input, the DSP unit turns on automatically when DC-On voltage is recognized. In this case, it's not necessary to connect a remote wire. Some head-units may not be capable to send the DC-On signal. In that case the remote wire connection is necessary.
4	REM OUT	To be used with additional system equipment like amplifiers. If connected to the amplifiers remote input terminal, the amplifier turns on or off together with the DSP unit. Use adequate wiring gauge (not less than 0.5 mm ² / 20 AW). The current should not exceed 130 mA - higher demands require the installation of a relay.

Relay circuit when using multiple amplifiers at the REMOTE OUT terminal

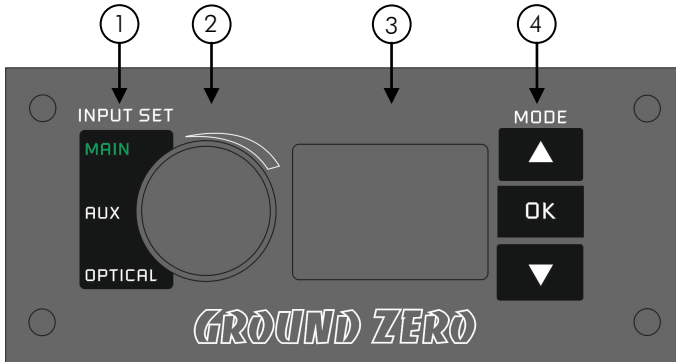


Relais ist nicht im Lieferumfang enthalten / Relay is not included in the package content

High-Level Connector Pin Assignment



GZDSP Remote (available optionally)



1	INPUT SET	Selects the Input Mode in shown sequence (MAIN/AUX-IN/OPTICAL)
2	LEVEL Controller	The controller sets the main volume level of the DSP unit. Subwoofer level (SUB OUT G/H) can be adjusted after pushing and holding the button for approximately 3 seconds.
3	Display	The LED display will show the present volume level or the chosen preset
4	MODE (Preset)	Pushing the two Mode buttons (UP/DOWN) will choose one of the previously saved presets. The OK button will confirm the selection and sets the DSP to this preset

Installing the PC software

In order to install and use the PC software, a Windows™ XP (SP3) operating system (or later) and a USB port is required. The installation will need about 25 MB free memory space. We recommend to use a laptop for easier handling. Insert the enclosed CD-ROM into the CD drive of your PC. If there is no CD drive available, the software can be downloaded from the following link: <http://ground-zero-audio.com/de/downloads/dsp-software.html>
Run the setup.exe, the installation wizard will install the software for the DSP the usual way. We recommend to create a desktop icon. The drivers will be installed automatically during the DSP software installation. Restart the PC after the installation has been finished.

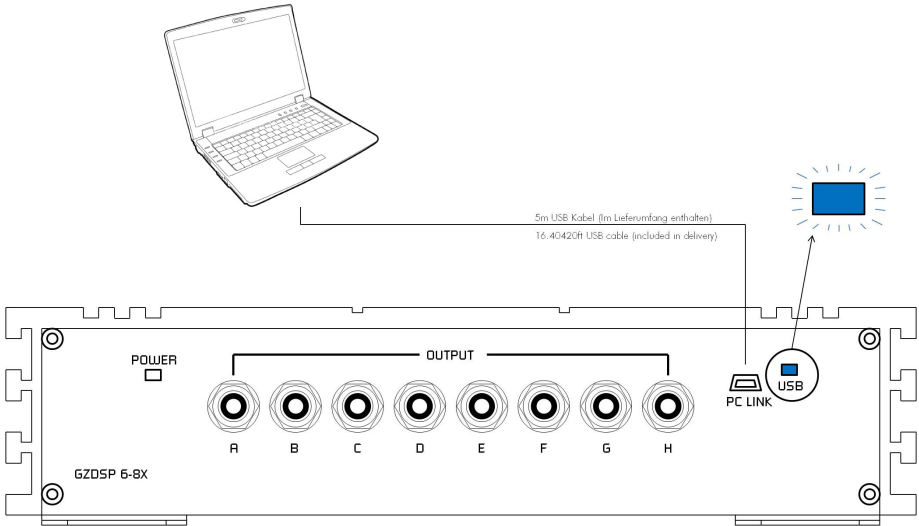
Important note for 64 bit operating systems:

It may be necessary to install a 64 bit driver manually. The driver can be found on the CD-ROM or:
<http://ground-zero-audio.com/de/downloads/dsp-software.html>

Software update:

Please note that you should always use the latest DSP-Software. Here you can download all software versions:
<http://ground-zero-audio.com/de/downloads/dsp-software.html>

Connecting the DSP to the PC



In order to configure the DSP, the GZDSP 6-8X must be connected to a PC with the DSP software installed using the included USB wire. The head unit and the DSP unit must be turned on before opening the software. The software starts by double-click the desktop icon. The start screen appears and GZDSP 6-8X should be selected as device (Select Device).

The latest software version can be downloaded from this page:
<http://ground-zero-audio.com/en/download/dsp-softwareen.html>



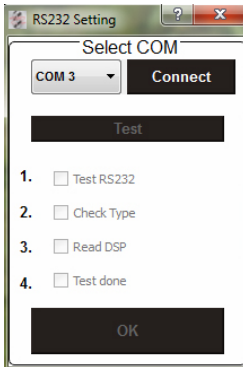
Demo Mode (Offline Mode):

It's possible to use the software in offline mode without having the GZDSP 6-8X connected to the PC to become familiar with most of the features and to create sample setups.

Important Note:

We don't recommend using any passive extension cord with the supplied USB wire, as proper function can't be ensured.

USB port selection

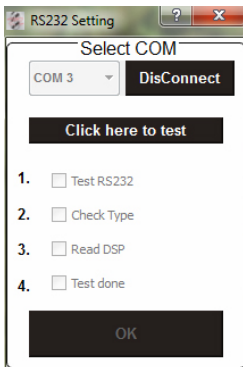


After the DSP unit has been selected at the „**Select Device**“ menu, the „**RS232 Setting**“ window will appear. Usually the correct COM port will be selected automatically and varies depending on the computers environment.

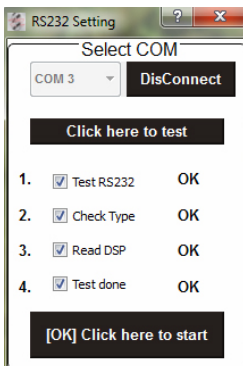
By clicking the „**Connect**“ button the GZDSP 6-8X will be connected automatically to the PC.

Note:

The COM port will be assigned automatically by the Windows™ operating system. Please note that this may be one of the COM1 to COM9 ports. If any problem remains, the description on the following page has to be noticed



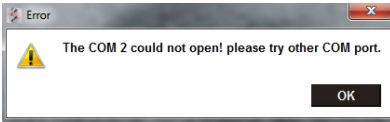
Now the „**Click here to test**“ button should be chosen.



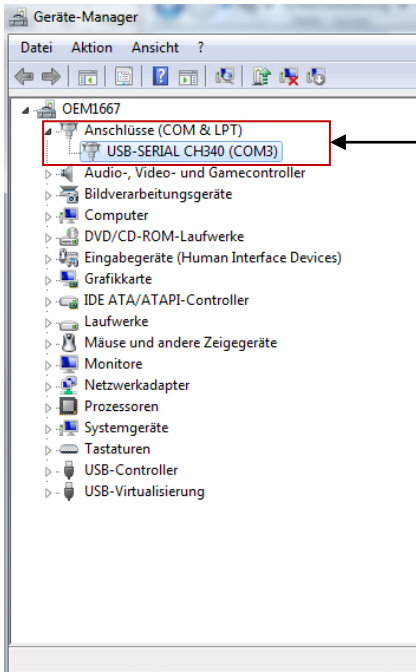
All 4 points should be checked.

By clicking the „**[OK] Click here to start**“ button will open the “Channel Matrix”

Wrong COM-Port error message

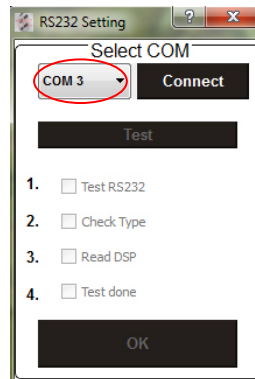


If this message will appear, the operating system assigned the wrong COM port or it was not possible to assign one of the COM1 to COM9 ports due to environmental issues of the PC. The COM port assignment may be checked with the operating systems device manager.



In this case the correct COM port would be number 3

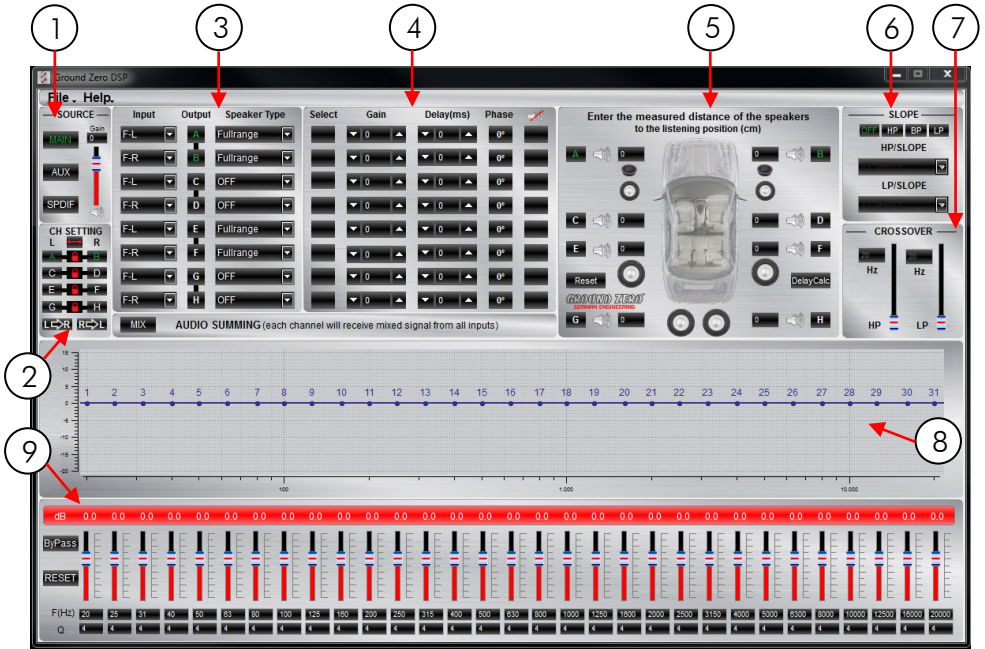
Close the pop-up window by clicking „OK“, now it is possible to select the correct COM port at the „Select COM“ window.



Important note:

If the assigned COM port will be COM10 or even higher, one of the unused COM ports 1 to 9 has to be deleted in order to change the previously automatically assigned COM port for the „USB-SERIAL CH340“ device to the one that has been deleted now.

Software user interface



1 SOURCE

Input selection



- MAIN** - RCA line or high-level input
- AUX** - 3.5 mm input socket
- SPDIF** - Optical input (TOSLINK socket)

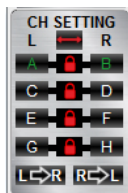
Main volume control


Gain - Main volume (-40dB to +12dB).

Caution: The controls have to be used carefully to avoid damaging the speakers.

② CH SETTING

Channel selection




Clicking the -Icon will link the relevant pair of channels allowing function adjustments simultaneously (Crossover / Slope / Equalizer) for both channels.




Simultaneous adjustment of channel A and B



Independent adjustment of channel A and B

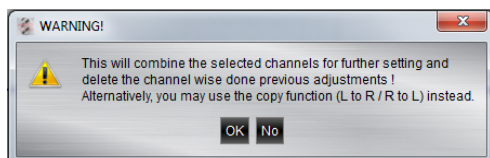
Clicking  will copy the current adjustment of the left channel to the right channel.



Clicking  will copy the current adjustment of the right channel to the left channel.

Clicking the -Icon will invert the left and right inputs.

Warning

Trying to synchronize (link) two channels, which have already been adjusted separately, will cause a pop-up warning.



Confirming this with OK will reset all channel wise done previous adjustments. This cannot be revoke. Therefore, either a separate adjustment is recommended or alternatively the copy-functions  or  can be used.

3 CHANNEL MATRIX

Configuration of in- and outputs

Input	Output	Speaker Type
F-L	A	OFF
F-R	B	OFF
F-L	C	OFF
F-R	D	OFF
F-L	E	OFF
F-R	F	OFF
F-L	G	OFF
F-R	H	OFF

Input – Assignment of the corresponding input channel to the respective output A – H.

The following input options are available:

- Channel A/B: F-L (Front-L) and F-R (Front-R)
- Channel C/D/E/F: F-L (Front-L) and F-R (Front-R)
or R-L (Rear-L) and R-R (Rear-R)
- Channel G/H: F-L (Front-L) and F-R (Front-R)
or R-L (Rear-L) and R-R (Rear-R)
or F-L+R (sum of Front-L and Front-R)
or R-L+R (sum of Rear-L and Rear-R)
or F+R-L (sum of Front-L and Rear-L)
or F+R-R (sum of Front-R and Rear-R)
SUB-L and SUB-R
SUB-L+R (sum of SUB-L and SUB-R)

MIX AUDIO SUMMING (each channel will receive mixed signal from all inputs)

Input-MIX – Input summing of filtered signals

This setup should be chosen if the head unit has filtered (HPF/LPF/BPF) speaker output channels. All 4 high level input channels will be summed to a full-range audio signal.

Outputs A+C+E+G receive a summed audio signal from the input channels FL+RL
Outputs B+D+F+H receive a summed audio signal from the input channels FR+RR

We recommend connecting the input channels as follows

Front left and Front right: Highpass filtered audio signal

Rear left and Rear right: Bandpass filtered audio signal

Output:

Clicking the corresponding channel will allow adjustments of crossover, slope and equalizer functions. Same as CH Setting (2) function.

Input	Output	Speaker Type
F-L	A	Tweeter
F-R	B	Tweeter
F-L	C	Fullrange
F-R	D	Fullrange
F-L	E	OFF
F-R	F	OFF
F-L	G	OFF
F-R	H	OFF

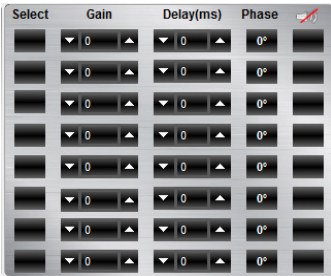
The mentioned information to channel A, B, C and D refer to the speaker output of the GZDSP 4.80AMP. The signal of channel E, F, G and H will be available at the RCA line output (via line out harness).

Speaker Type: Pre-selection of the connected speakers.

3 different options can be chosen.

- OFF – Channel deactivated
- Fullrange – All filters deactivated! (individually selectable)
- Tweeter (A/B) – Highpass filter preset 3000 Hz (12 dB/oct)
- Midrange (C/D) – Bandpass filter preset 250 / 3000 Hz (12 dB/oct)
- Kickwoofer (E/F) – Bandpass filter preset 80 / 250 Hz (12 dB/oct)
- Subwoofer (G/H) – Bandpass filter preset 20 / 80 Hz (12 dB/oct)

4 GAIN & DELAY



Channel configuration (level adjustments and time alignment)

Select:

Marking the channel as **Selected** allows grouping the respective channels together for combined adjustments of **Gain** and **Delay**.

Gain:

To adjust the output level of the respective channel

Delay(ms):

To adjust the time alignment of the respective channel.
Will be displayed in milliseconds.

Warning:

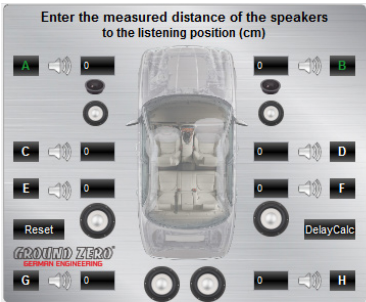
It is recommended to fill in the measured distances of the speakers to the listening position first **(5)** and realize detailed fine-tuning later at the **Delay(ms)**

Phase – 0 / 180° Phase inversion of the respective channel



– Mute of the respective channel

5 SPEAKER DISTANCE

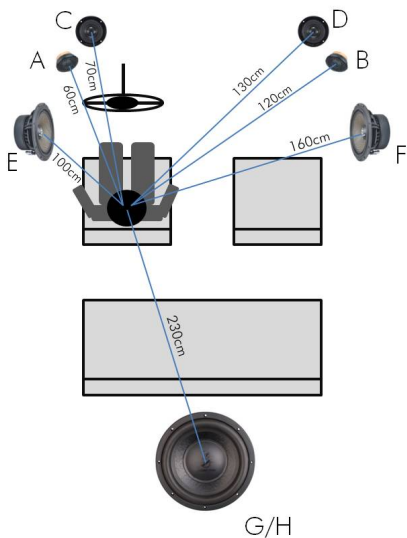


Speaker distance entry

Before realizing the fine-tuning of each speakers time alignment in window 4 **Delay(ms)**, the measured distances of all connected speakers should be added to the graphic.

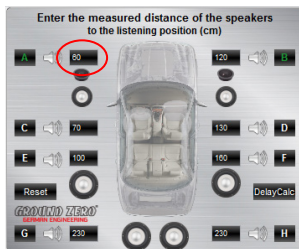
The exact distance between listening position (head) and cone center of each speaker must be measured.

The explanation of a correct implementation on the following page can be used as an application example.



Application example (time alignment)

All measured distances (cm) must be added to the graphic.



DelayCalc

Clicking the button will cause the calculation of the respective time alignment and transfer the data to the **Delay(ms)** list.

Select	Gain	Delay(ms)	Phase
	0	5.08	0°
	0	3.29	0°
	0	4.78	0°
	0	2.99	0°
	0	3.88	0°
	0	2.09	0°
	0		0°
	0		0°

Further adjustments can be edited to either the time alignment list or to the distance window.

Reset

The Reset button will delete all settings of the time alignment. Other DSP settings remain.

6 SLOPE



Adjustment of the crossover

Important:

Before choosing the filter, a **Speaker Type** must be defined in window 3.

When the setup consists of a front system connected to channel A/B and a rear speaker system connected to channel C/D, the **Fullrange** entry should be selected. According to the speakers and listeners request a high pass filter (HP) can be activated at the **Slope** window.

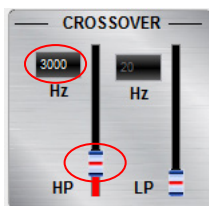
High pass (**HP**) / Bandpass (**BP**) and low pass (**LP**) can be chosen at the **Slope** window for the selected channel(s).

A slope of 6 to 48 dB/oct can be selected at the drop down menu.

Note:

The higher the selected value the steeper the slope starting at the crossover frequency.

7 CROSSOVER



Adjusting the cutoff frequency

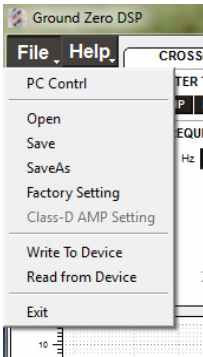
The filters can be adjusted continuously from 20 – 20000 Hz.

The controls can only be used if a filter (Slope/6) has been selected first.

Note: If a filter has been selected, it is possible to adjust the crossover frequency directly with the cursor at the frequency chart (8). Click and hold the red (HPF) or blue (LPF) dot with the cursor and move it to the desired point on the frequency chart.

Hint: Instead of using the crossover control, it is possible to adjust the crossover point by typing the required value directly into the box above and confirm with >ENTER< or by using the up/down cursor buttons.

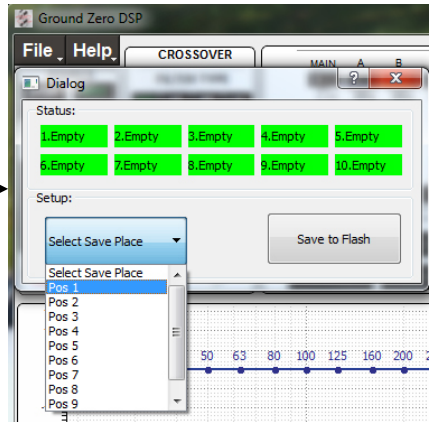
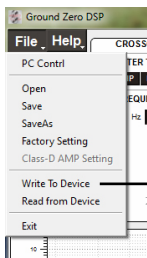
FILE dropdown menu



PC Contrl	Opens the „Select COM“ window (page 9)
Open	Opens a setup file that has been saved previously to the PC memory or an external drive
Save	Saves the current setup as a file to the PC with unmodified filename. If no filename has been selected yet, the dialogue will ask for the input.
Save as	Saves a setup file with a certain filename.
Factory setting	Sets the unit to default settings
Class-D AMP Setting	No function
Write to Device*	Saves the current setting to the preset memory of the GZDSP 6-8X unit. At the following window, the preset number can be selected.
Read from Device*	Opens one of the available presets from the memory of the GZDSP 6-8X. The preset can be selected from the following window. The blue frame indicates the actually selected preset number.
Exit	Closes the DSP software

***Important:** The 10 presets can be used if the optional remote control GZDSP Remote is connected. Without the remote-control unit, it is only possible to use and edit the last preset that has been saved.

Preset memory saving



Click „Select Save Place“ and choose one of the presets.

Confirm by clicking „Save to Flash“

***Note:** All presets must be covered in numerical order (Pos 1 > Pos 2 > Pos 3 > ...) without skipping a position, otherwise it will not be possible to access the following presets.

***Important:** The 10 presets can be used if the optional remote control GZDSP Remote is connected. Without the remote-control unit, it is only possible to use and edit the last preset that has been saved.

Application examples

GZDSP 6-8X offers various system configurations. Here is a description of the two most common applications:

		3-way front system + subwoofer (full active)	2-way front system (active) + 2-way or coaxial rear system (passive) + subwoofer
Input Mode		4 channel input (4CH)	6 channel input (6CH)
Output Mode		Output Mode 5	Output Mode 1
Channel	A/B	Tweeter Highpass filter HP: 2500 – 6000 Hz	Tweeter Highpass filter HP: 2500 – 4500 Hz
	C/D	Midrange Bandpass filter HP: 150 – 300 Hz LP: 2500 – 6000 Hz	Midwoofer Bandpass filter HP: 60 – 80 Hz LP: 2500 – 4500 Hz
	E /F	Woofer Bandpass filter HP: 60 – 80 Hz LP: 150 – 300 Hz	Rear system Highpass filter HP: 60 – 80 Hz
	G/H	Subwoofer Bandpass filter HP: 10 – 30 Hz LP: 50 – 100 Hz	Subwoofer Bandpass filter HP: 10 – 30 Hz LP: 50 – 100 Hz

Note: The final crossover points depend on the speaker's capacity that have been installed. The technical specifications of the speakers will supply more information about possible applications and suggested crossover points.

Above, these are just noncommittal examples. Ground Zero will not be legally responsible for any kind of damage of speakers or other components caused by wrong settings.

Technical Specifications

Model	GZDSP 6-8X
Type	8 channel DSP unit
Frequency Response	5 Hz – 20 KHz (-3 dB)
Signal to noise ratio	>110 dB
Channel separation	>60 dB
Harmonic distortion	0.05%
Processor	Cirrus Logic Single Core 32 bit, 8 channel, 192 kHz
Input sensitivity	High level: 2 – 15 V RMS Low level: 0.6 – 5 V RMS Aux input: 0.6 – 5 V RMS
Input impedance	>47 kOhm
Output	8 x RCA audio socket
Input	Main: 6 x RCA audio socket / 6 x high-level Aux: 3.5 mm / 1/8" stereo jack Digital: TOSLINK optical 12 - 96 kHz stereo
Remote out	Max 130mA
Recommended fusing	2 A
Dimensions (heatsink) W x H x L mm / inch	96 x 39 x 185 / 3.78" x 1.54" x 7.28"
Dimensions (total) W x H x L mm / inch	132 x 42 x 185 / 5.2" x 1.65" x 7.28"
Software compatibility	Microsoft Windows™ XP SP3, Vista, 7, 8, 8.1, 10
Presets	10 Individual presets – storing/calling via optional remote control GZDSP Remote
Gain bandwidth	-40 ~ + 12dB
Equalizer	6 x 31 bands on each channel (A-F) (20-20000Hz) -18 to +12dB, Q 0.5 - 9 2 x 11 bands on subwoofer channels (G/H) (20-200Hz), -18 to +12dB, Q 0.5 - 9
Time alignment	0 - 15ms / 0 - 510cm per channel
Crossover	6 / 12 / 18 / 24 / 30 / 36 / 42 / 48 dB/Oct. BPF / LPF / HPF Butterworth 20 - 20000Hz
Phase switch	selectable (0° / 180°) per channel
Optional remote control (GZDSP Remote)	Main level, subwoofer level, input mode, preset selection

Error diagnosis

Error	Control	Help / Solution
No function	PWR LED on?	<ul style="list-style-type: none"> -check the fusing -check the remote wire -check the +12 Volt connection and wire -check the ground connection and wire
No sound (PWR LED on)	signal wire no contact or broken	-check the contact or replace the wire
	no audio signal from the head-unit	-check the audio output signal of the head-unit
	amplifier not switched on	-check the remote out of the DSP (page 5)
	non operational source selected	-check the amplifiers power supply
	activated >MUTE< function (User Interface)	-check the setting (page 15)
Single channels with no function	adjusted level on optional remote control unit too low	-check the setting (page 7)
	signal wire no contact or broken	-check the contact or replace the wire
	no audio signal from the head-unit	-check the audio output signal of the head-unit
	balance or fader control of the head-unit not in center position	-check the setting of the head-unit
	wrong setup of input and output mode	-check the setting (pages 11~14)
Impure sound, incorrect stereo reproduction	>GAIN< level too low or >Mute< function (user interface) active	-check the setting (page 15)
	inverted phase of one or more speakers	<ul style="list-style-type: none"> -check the polarity of the speaker connection -check the polarity of the high-level input (page 6) -check the >PHASE< setting (page 15) -check the >TIME ALIGNMENT< adjustment (page 16)
	speaker overload	<ul style="list-style-type: none"> -reduce the volume level -check the highpass filter and slope (page 15)
	DSP input override (distortion)	<ul style="list-style-type: none"> -select the correct input mode -pay attention to the input sensitivity of the DSP unit (page 18)
	head-unit output override (distortion)	<ul style="list-style-type: none"> -reduce the volume level of the head-unit -set the sound controls of the head-unit to center position -deactivate the >Loudness< function of the head-unit
Distorted sound quality	amplifier override (clipping)	<ul style="list-style-type: none"> -check the amplifiers input sensitivity -reduce the level
	>GAIN< level too high	-reduce the >GAIN< level (page 15)
	head-unit creates noise	<ul style="list-style-type: none"> -select a superior quality head-unit -use the optical output (if available) -let the audio store or manufacturer check the head-unit
	diverse power supplies or ground connection	-the head-unit, the DSP and each amplifier should be wired up to a common ground and +12 Volt connection
	signal wire no contact or broken	-check the contact or replace the wire
Car specific interferences audible through the audio system	head-unit defective	-let the audio store or manufacturer check the head-unit
	amplifier defective	-let the audio store or manufacturer check the amplifier
	DSP unit or amplifier mounted close to an automotive control unit	-choose another mounting position
	analog output of an OEM MOST head-unit connected	-connect the digital MOST audio signal directly to the DSP unit*

***Note:**

Use an optional car specific interface to connect the digital MOST audio signal directly to the digital input of the GZDSP 6-8X

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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