

GROUND ZERO[®]

GERMAN ENGINEERING

PARAMETRIC EQUALIZER

ANLEITUNG / OWNER'S MANUAL

GZEQ 4.7X

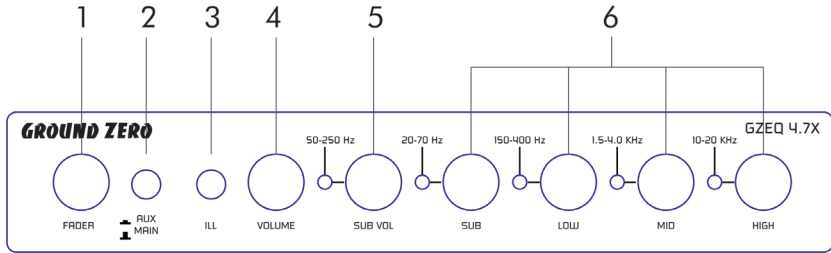
Features

- Pre amplifier with adjustable input sensitivity
- Up to 7 Volts RMS output
- Individual left and right sensitivity control for Main & Aux
- Four band parametric equalizer with 16 dB boost cut
- Specific boost frequency for each band
- Low noise BI-FET op-amp for low distortion
- Subwoofer output and level controls
- Front & Rear fader
- Subwoofer LPF adjustable (50 Hz ~ 250 Hz)
- Universal Half-DIN chassis for ease of installation
- Main/Aux (Radio/CD) input selector

Technical data

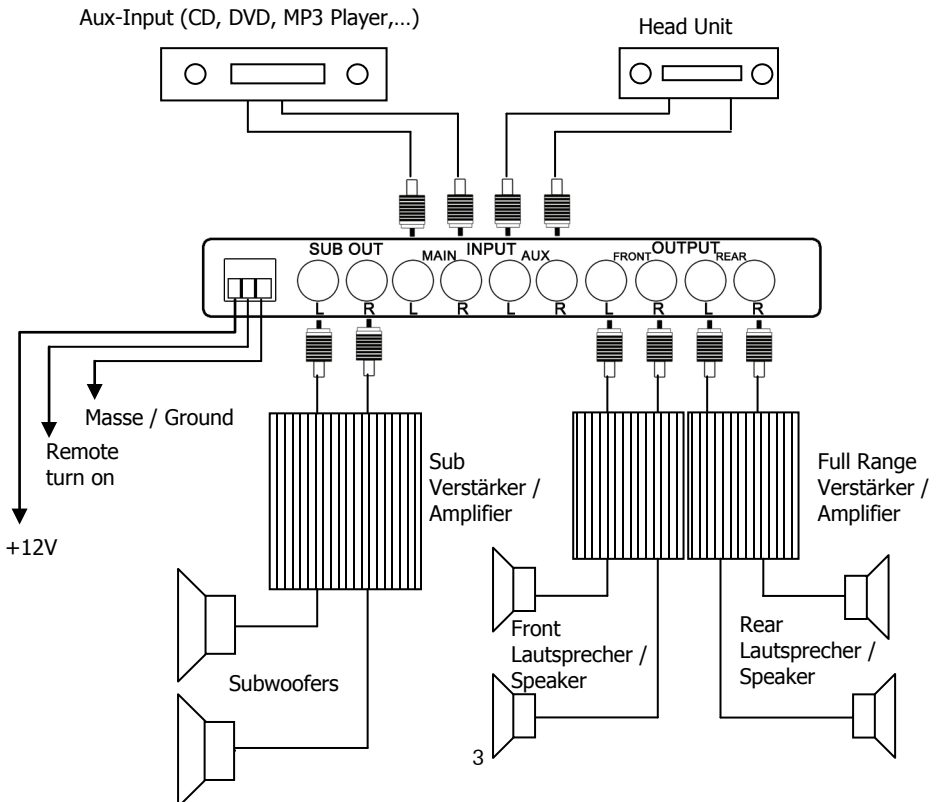
Parametric range	
Sub	20 - 70 Hz
Low	150 - 400 Hz
Mid	1.5 - 4 kHz
High	10 - 20 kHz
Boost cut	-16 -> +16 dB
Bandwidth	Specific to each band-hi shelving
Signal to noise ratio	90 dB Ref 1V input
Frequency response	5 Hz - 30 kHz +/- 1 dB
Sub Level LPF	50Hz ~ 250 Hz (12 dB slope)
Output impedance	50 K Ohm
Max. output voltage	7 V RMS
THD	0,05 %
Input sensitivity	Adjustable 50 mV ~ 3 V RMS
Input impedance	15 k Ohm
Stereo separation	82 dB / 1 KHz
Operating voltage	11-15 V Negative Ground
Dimensions Width x Height x Depth	175 x 25 x 95 mm 6.89" x 0.98" x 3.74"

Controls



1	Fader control	This control adjusts the volume between the front and rear output
2	Input selector switch	This switch selects the AUX or MAIN input.
3	Illumination switch	Red / Blue color back light select switch.
4	Master volume control	Main control to adjust the output level.
5	Subwoofer output volume	This control adjusts output level of subwoofer RCA output. By using a small screwdriver you can also adjust the cut off frequency of the subwoofer output between 50 and 250 Hz.
6	Parametric Equalizer controls	To control the boost level. By using a small screwdriver you can also adjust the boost frequency.

Wiring



Set-up adjustment

We recommend to use an oscilloscope for an adequate adjustment. With that tool you can detect the maximum possible, distortion-free output-level of the head unit and the GZEQ 4.7X by using a sine wave signal.

In case you do not have the possibility to proceed as per above description, please follow the instruction below:

Before turn on:

- Turn the master volume of the GZEQ 4.7X fully counter- clockwise to MIN position
- Turn the L + R input gains on top of the GZEQ 4.7X fully counter- clockwise to MIN position
- Turn the head unit volume to minimum.
- Set all EQ controls to flat (12 o'clock).

System turn on:

- After completing all wiring and signal connections you can turn the system on.

Adjust:

- Turn the input sensitivity of the connected amplifiers between min and $\frac{1}{4}$.
- Turn the main volume of the GZEQ 4.7X to maximum.
- Adjust left and right input gains of the GZEQ 4.7X to middle position
- Gradually increase head unit volume until clipping. Use a high quality signal (high resolution CD! No compressed audio files!) Set back all sound affecting adjustments of the head unit.
- Start carefully increasing input gains of the GZEQ 4.7X until distortion is audible, then reduce slightly.

Make sure that the head unit volume should be set between $\frac{1}{2}$ and $\frac{3}{4}$. Always use the GZEQ 4.7X volume control as a master (main) volume control.

To avoid any defect and realize the maximum performance, we anyhow recommend to ask your dealer for assistance.

Warning

High powered audio systems in a vehicle are capable of generating "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, thus constituting to a potential traffic hazard. In the interest of safety, Consumer Electronics recommends listening at lower volume levels while driving.

Troubleshooting

Symptom	Possible remedy
Signal processor dies not turn on	- No remote turn-on wire
	- +12V wire is not connected
	- Ground wire is properly connected
Level of sound is low	- Wiring is not loose or cables misconnected / disconnected
	- RCA cables are faulty
Background noise is too high.	- Wiring is not loose or cables are misconnected / disconnected
	- Ground wire is properly connected
	- RCA cables are faulty

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