

IRIDIUM SERIES

Mono Class A/B Amplifier

GZIA 1.700

Owner's manual

(AWV2.0)

Features

- High-quality class A/B amplifier
- 1 ohm stable
- Variable high pass filter
- Variable low pass filter
- High-level input with auto-on function
- Adjustable input sensitivity
- Turn-on delay
- Thermal protection
- Short protection
- Overload protection
- Bass level remote control included

GROUND ZERO GZIA 1.700

General mounting instructions

- As a precaution, it is recommended to disconnect the vehicles battery before mounting the amplifier.
 Note: For new vehicles, disconnecting the battery might cause various errors in your vehicle's electric system that can be cleared only by authorized service partners of your vehicle's manufacturer! Please ask your service partner first before disconnecting the battery!
- The power supply wire (+12 V) has to be protected within max. 20 cm / 8" by a main fuse holder with a fuse value matching the recommendation for your amplifier. Note: If there is more than one amplifier connected using this power wire, the main fuse value must be equal to the sum of the recommended fuses of all connected devices. However, make sure the diameter of your power wire will be enough for the required current!
- If necessary, replace a defective fuse by a fuse with identical quality and value
- Never drill holes to the vehicle's gas tank, brake lines, to wirings or any other important vehicle parts!
- Never pass wires over sharp edges or vehicle parts due avoid any kind of damage
- Keep the wiring away from the antenna and electronic devices contributing to radio reception
- Lay the power supply wiring always separated from speaker wiring to avoid disturbance
- The amplifier contains a temperature protection circuit that turns the device off in case of overheating. After a certain cooling time, it will turn on automatically. To avoid heat build-up, enough air supply for cooling must be provided. Never cover the surface of the amplifier's heatsink entirely
- The amplifier should NEVER be mounted onto a vibrating part or surface such as a subwoofer enclosure. This might lead to malfunction due to loosened electrical parts inside the amplifier.
- 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.

Specifications

Model	GZIA 1.700
Amplifier type	Mono class A/B
RMS Power @ 4 Ω CEA Standard CEA-2006-A (@ 1 kHz)	230 W (1% THD+N)
RMS Power @ 2 Ω CEA Standard CEA-2006-A (@ 1 kHz)	400 W (1% THD+N)
RMS Power @ 1 Ω CEA Standard CEA-2006-A (@ 1 kHz)	630 W (1% THD+N)
Max. Power @ 1 Ω CEA Standard CEA-2006-A (@ 1 kHz)	700 W (10% THD+N)
Low pass filter	30 Hz – 250 Hz (12 dB/oct)
High pass filter	40 Hz – 3000 Hz (12 dB/oct)
Frequency response	$10 \text{ Hz} - 30 \text{ kHz} \ (\pm \ 3 \text{ dB})$
Signal to noise ratio (SNR)	> 97 dB
Total harmonic distortion (THD+N)	< 0.02%
Damping factor	> 150
Input sensitivity	200 mV – 6 V
Rec. speaker wire	$\geq 2.5 \text{ mm}^2 / 14 \text{ AWG}$
Rec. power wire	\geq 20 mm ² / 4 AWG
Fuse(s)	2x 30A
Dimensions w x h x l (heatsink / overall)	192 x 49 x 332/360 mm
Dimensions w x h x l (heatsink / overall)	7.56 x 1.93 x 13.07/14.17"

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Controls & Features

1	Speaker terminal	To connect the speaker wires - min. load 1 ohm	
2	Power terminal	+ 12V To be connected to the positive terminal of the battery REM To be connected to the remote output of the head unit* (*not required in high-level mode) GND To be connected to the vehicle's ground (or directly to the negative terminal of the battery)	
3	Fuse(s)	If necessary to replace a defective fuse, its strongly recommended to use a fuse with the identical value	
4	Low pass filter (Band pass filter)	To adjust the required crossover point. Frequencies above the selected crossover point will be filtered (40 Hz to 4000 Hz)	
5	Mode switch	To setup the crossover for the required use of the amplifier FLAT entire frequency range will be reproduced HPF only mid/high frequencies will be reproduced LPF (BP) only low frequencies will be reproduced. The HPF is activated simultaneously resulting in a band pass filter	
6	High pass filter (Subsonic filter)	To adjust the required crossover point. Frequencies below the selected crossover point will be filtered (5 Hz to 500 Hz)	
7	Sensitivity control	Controller to adjust the input sensitivity	
8	Line input (RCA)	Input sockets to connect RCA wires Important note: High-level and RCA inputs should never be used simultaneously! This may cause serious damage to the amplifier	
9	High-level input	Head units without RCA pre-amplifier output signal, can be connected using the high-level input to connect the speaker output of the head unit directly. If used, the amplifier turns on automatically (auto-on feature) The remote input of the power supply terminal remains unused Important note: High-level and RCA inputs should never be used simultaneously! This may cause serious damage to the amplifier	
10	Status indication	POWER (green) ok (correct operation) PROTECT (red) error (protection mode)	
11	Remote wire socket	To connect the wired remote control	
12	Bass Boost control	To adjust the bass boost level (0 to +12 dB @ 45 Hz)	

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Trouble shooting guide

Symptoms	Check / Cause	Action
No audible sound	Does the POW LED turn to green?	Check protection fuse(s) of the amplifier (harness) Check remote wire connection (RCA input mode) Check +12 Volt power supply wire connection Check ground wire connection
	Did the PROTECT LED turned to red?	Check for speaker short or amplifier overheating
Device does not	Power supply of the amplifier?	Check power wire or connections
turn on	Remote wire powered? (RCA input mode)	Check remote wire connection to the head unit
No sound on one	Speaker wiring undamaged?	Check for short circuit or open connections
channel	Input signal on each RCA lead?	Reverse left and right RCA inputs to check the audio input signal
Device turns off at medium / high volume	Load impedance of each speaker correct?	Check if each speaker load impedance matches the technical specifications of the amplifier
Status LED turned	Temperature protection circuit active	Decrease head unit's volume / wait for cooling
on red	Speaker wires short / speaker damaged	Check speaker / wires and insulate if necessary

Terms of warranty

The limited warranty for this product is covered by GROUND ZERO's regional distribution partners and their terms and conditions. For further information contact your local retailer or distributor.

Safety instruction / Manufacturer's declaration

Safety Instructions: Do not expose the device to extreme temperatures, fire, high humidity or direct contact with liquids. Do not use the device if it has been damaged or exposed to liquids. Keep the device, packaging and accessories away from children and pets to prevent accidents and suffocation.

Manufacturer's declaration: Herewith Ground Zero GmbH declares that this product complies with the directive 2014/30/EU (EMC) and further declares that this product is in conformity with the rules of the EU directives (including all applicable amendments) 2011/65/EU RoHS2 and 2001/95/EC General Product Safety directive. The full text of the Declaration of Conformity (EU) is available at the following internet address: www.ground-zero-audio.com. Electronic products contain valuable raw materials and must not be disposed of with normal household waste. At the end of its service life, please bring the device to your local recycling facility.



GROUND ZERO products are engineered in Germany GROUND ZERO – international sponsor



Ground Zero GmbH

Erlenweg 25, 85658 Egmating, Germany Tel. +49 (0)8095/873 830 Fax -8310 www.ground-zero-audio.com



