Specifications

Amplifier section

Power at 4Ω:	410W x 2CH
Power at 2Ω:	2000W x 1CH bridged channel pair 660W x 2CH
Power at 1Ω:	1000W x 2CH
THD:	<0.1%
Frequency range (+ 1dB):	20Hz – 20kHz
Signal/noise ratio:	>90dB
Sensitivity:	0.2 – 6V
Dimensions:	310 mm × 234 mm × 74 mm

Address:
Elofssons Försäljnings AB
Gruvgatan 31A
421 30 Västra Frölunda / Göteborg

Features and specifications subject to change and/or improvement without notice

Loud as HELL®

OWNER'S MANUAL

LAH-IN1000.2D

CAR AUDIO SYSTEM

PLEASE READ CAREFULLY BEFORE INSTALLING OR OPERATING THIS UNIT

WARNING

Make sure you choose a suitable place to mount the unit. The position should be completely dry with a good circulation of air, and from a mechanical point of view very stable.

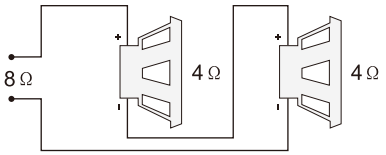
System planning

Proper system planning is the best way to maximize your amplifier performance. By planning your installation carefully you can avoid situations where the performance of the reliability of your system is compromised. Your authorized dealer has been trained to maximize your system's sonic potential. Your dealer is a valuable resource in helping you with your system design and installation.

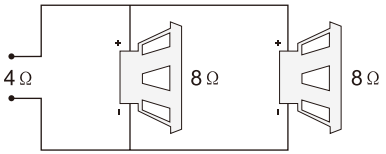
Speaker requirements

Each channel of your amplifier can easily drive 4Ω speaker loads when used in the stereo mode. When a channel-pair is bridged, the recommended minimum load impedance is 3Ω for subwoofer use, and 4Ω for full range operation. Although operation with lower impedances is not likely to cause immediate damage to the internal circuitry, the unit will most likely overheat, causing the thermal protection circuitry to shut down the amplifier. When the chassis cools down, normal operation will resume. Continuing to operate the amplifier under these conditions is not recommended and will reduce its life expectancy.

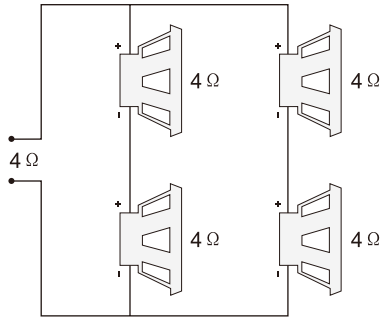
Most speakers designed for car audio operation are 4Ω impedance. Connecting two such speakers in parallel will result in a 2Ω impedance load as seen by the amplifier. Some subwoofer models feature a dual 4Ω voice coil design. Connecting these voice coils in parallel will result in a 2Ω nominal impedance, which is not recommended for use with bridged channels of your amplifier.



Series wiring



Parallel wiring



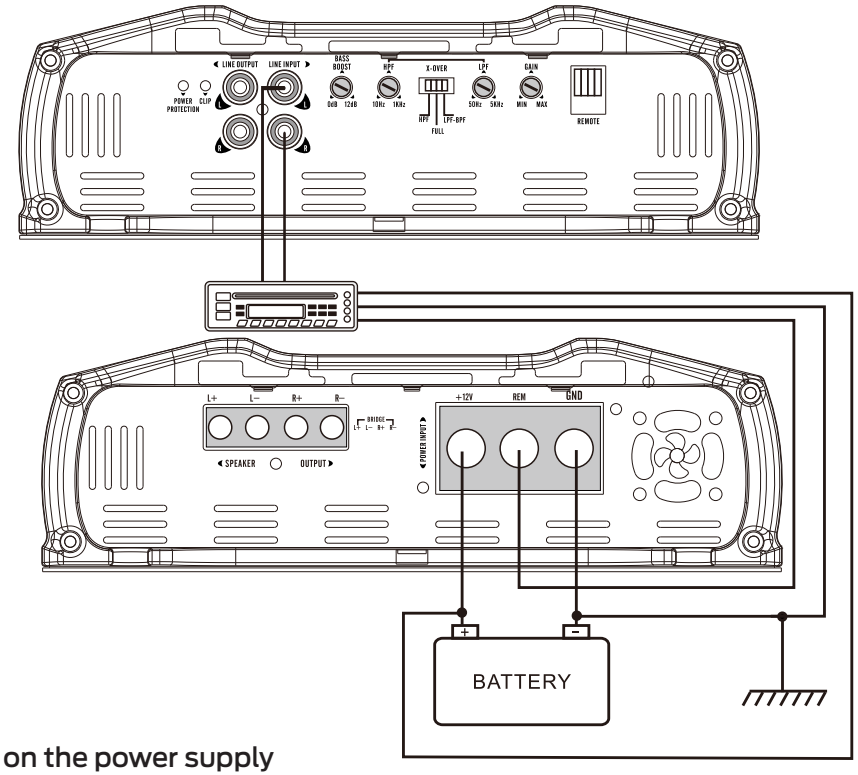
Series/parallel wiring

Symptom	Possible cause	Actions
	Internal crossover filter incorrectly set	Reset crossover filter according to the configuration section of the manual
Distorted output (cont.)	Speakers broken	Check the system with working speakers
Poor bass response	Speakers incorrectly connected (polarity error)	Check the system with working speakers and repair or replace if necessary
	Crossover filter incorrectly set	Reset crossover filter according to the manual
Battery Fuse Blowing	Impedance load to amplifier too low	Check speaker impedance load; if below 1Ω stereo or 2Ω mono, rewire speakers to achieve a higher impedance.
	Short in power wire or incorrect power connections	Check power and ground connections and repair as needed.
	Fuse used is smaller than recommended	Replace with proper fuse size.
Amplifier Fuse Blowing	Too much current being drawn	Check speaker impedance load; if below 1Ω stereo or 2Ω mono, rewire speakers to achieve a higher impedance.
	Fuse used is smaller than recommended	Replace with proper fuse size.

Troubleshooting

Symptom	Possible cause	Actions
No Output	Low or no remote turn-on input	Check remote turn-on voltage output at amplifier and correct as needed.
	Fuse blown	Check power wire integrity and reversed polarity; repair as needed and replace fuse.
	Power wires not connected	Check power wire and ground connections and repair or replace as needed.
	Audio input not connected or no output from source	Check input connections and signal integrity; repair or replace as needed.
	Speaker wires not connected	Check speaker wires and repair or replace as needed.
Audio Cycles On and Off	Speakers are blown	Check system with known working speaker and repair or replace speakers as needed.
	Thermal protection engages when amplifier heatsink temperature exceeds 90°C	Make sure there is proper ventilation for amplifier and improve ventilation as needed.
	Loose or poor audio input	Check input connections and repair or replace as needed.
Distorted Output	Amplifier level sensitivity set too high; exceeding maximum output capability of amplifier	Reset gain referring to the tuning section of the manual for detailed instructions.
	Impedance load to amplifier too low	Check speaker impedance load; if below 1Ω stereo or 2Ω mono, rewire speakers to achieve a higher impedance.
	Shorted speaker wires	Check speaker wire connections and repair or replace as needed.
	Speaker not connected to amplifier properly	Check speaker wiring and repair or replace as needed; refer to the installation section of this manual for detailed instructions.

Power Connection Leads

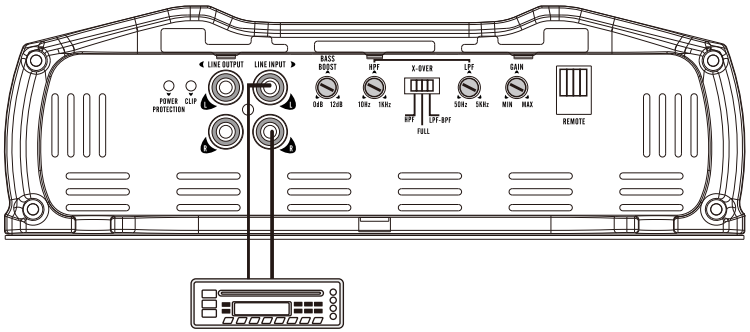


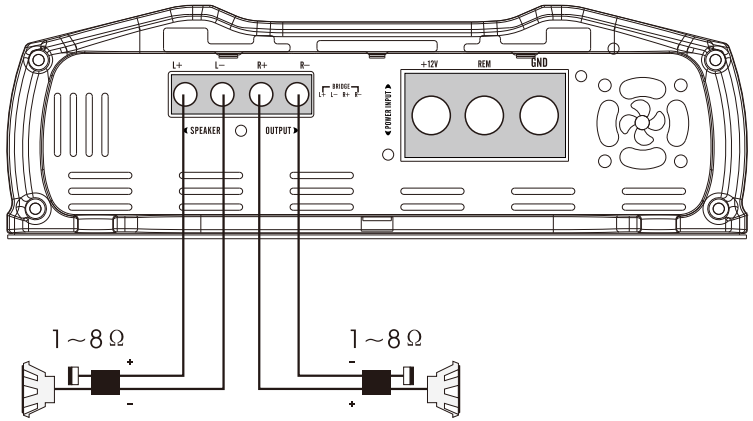
Notes on the power supply

Connect the +12V power input lead only after all other leads have been connected.
Be sure to connect the ground wire of the unit securely to a metal part of the car. A loose connection may cause a malfunction of the amplifier.

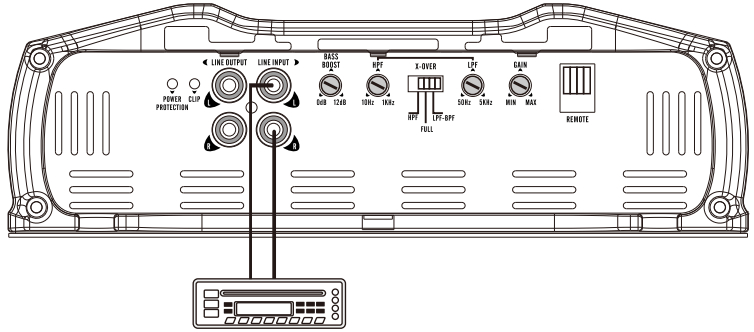
REMOTE:
The unit is turned on by applying +12Volts to this terminal. This terminal does not draw heavy current like the two power terminals, so a thinner connecting wire is acceptable. Standard 1,5 mm² is fine and the standard colour is yellow.
If the radio is equipped with a power antenna control wire, it can drive this terminal. If the power antenna wire is already in use, you can still splice into it. With this method, the unit will turn on automatically with the radio.
Use the power supply lead with a fuse attached whose value is the same as the original fuse.
Place the fuse in the power supply lead as close as possible to the car battery.
During a full power operation, Maximum current will run through the system. Therefore, make sure that the leads to be connected to the +12v and GND terminals of the unit respectively must be larger than 10-Gauge 50mm².

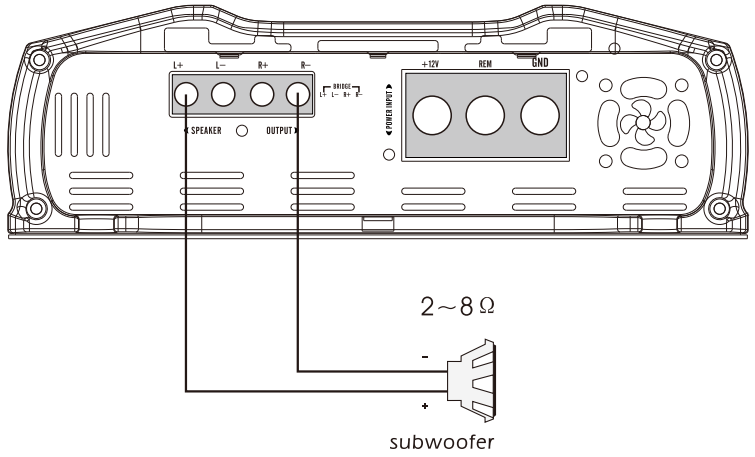
system 1 2 channel mode





system 2 bridged connection subwoofer





subwoofer