

Asylum

Car Audio

OWNER'S MANUAL

CFAM800.1

— 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

Your amplifier can easily drive 1 Ohm speaker loads. 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.

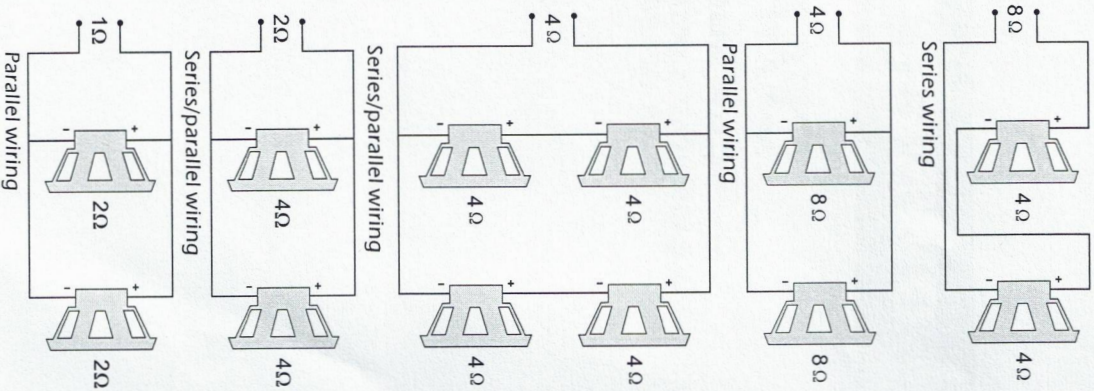
When the chassis cools down, normal operation will resume. Continuing to operate the amplifier under these conditions is not recommended and will reduce its life expectancy.

Most subwoofers designed for car audio operation are 4 Ohm impedance. Connecting two such speakers in parallel will result in a 2 Ohm impedance load as seen by the amplifier. Some subwoofer models feature a dual 4 Ohm voice coil design. Connecting these voice coils in parallel will result in a 2 Ohm nominal impedance.

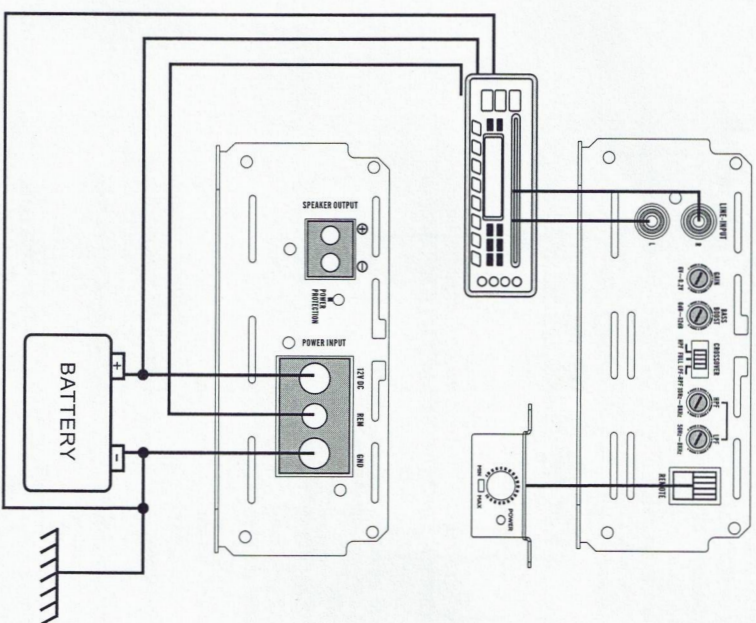
Wiring two 4 Ohm coils in Series (either with two 4 Ohm subs or one dual 4 Ohm sub) will result in an 8 Ohm load.

Other subwoofers designed for car audio operation are 2 Ohm impedance. Connecting two such speakers in parallel will result in a 1 Ohm impedance load as seen by the amplifier. Some subwoofer models feature a dual 2 Ohm voice coil design. Connecting these voice coils in parallel will also result in a 1 Ohm nominal impedance.

Wiring two 2 Ohm coils in Series (either with two 2 Ohm subs or one dual 2 Ohm sub) will result in an 4 Ohm load.



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 BARE metal part of the car (scrape the paint off the spot where you connect the ground).

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 terminal so a thinner connecting wire is acceptable. Standard 18 GAUGE is fine and the standard color is blue. 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.

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 8-Gauge (AWG. 8).

Troubleshooting

symptom
no output

possible cause
low or no remote turn-on input

action to take
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
check speaker wires and repair or replace as needed

speaker wires not connected

check system with known working speaker and repair or replace speakers as needed

audio cycles on and off

speakers are blown

thermal protection engages when amplifier heatsink temperature exceeds 194°F

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
impedance load to amplifier too low

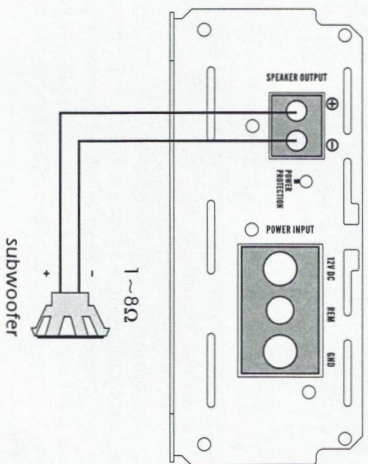
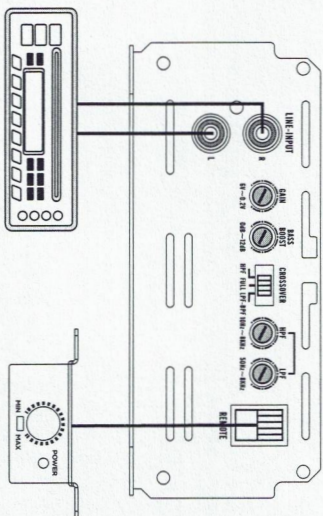
reset gain referring to the tuning section of the manual for detailed instructions
check speaker impedance load if below 1Ohm mono rewire speakers to achieve a higher impedance

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



Symptom	possible cause	action to take
distorted output (cont'd)	internal crossover not set properly for speaker	reset crossovers referring to the multi-cross crossover configuration section of this manual
	speakers are blown	check system with known working speakers and repair or replace as needed
poor bass response	speakers wired wrong polarity causing cancellation at low frequencies	check speaker polarity and repair as needed
	crossover set incorrectly	reset crossovers referring to the multi-cross crossover configuration section of this manual for detailed instructions
battery fuse blowing	impedance load to amplifier too low	check speaker impedance load, if below 1Ω mono rewrite 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
	too much current being drawn	check speaker impedance load, if below 1Ω mono rewrite speakers to achieve a higher impedance
	short in power wire or incorrect	check power and ground connections and repair as needed
amplifier fuse blowing	too much current being drawn	check speaker impedance load, if below 1Ω mono rewrite speakers to achieve a higher impedance and replace with recommended fuse size
	fuse used is smaller than recommended	check power and ground connections and repair as needed replace with proper fuse size

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Specifications

Amplifier section

Power output 4Ω(watts)	300W X 1CH
Power output 2Ω(watts)	530W X 1CH
Power output 1Ω(watts)	800W X 1CH
THD	≤0.2%
frequency response	20Hz~20KHz
signal to noise ratio	>90dB
sensitivity	0.2~6V
dimensions	9.33in X 5.04in X 2.34in

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