

ARC AUDIO

CXL SERIES AMPLIFIERS

Assembled in USA

OWNER'S MANUAL



MODEL

ARC2050CXL

ARC2100CXL

ARC4050CXL

ARC2500CXL

The ARC Audio Amplifiers

Congratulations!

You have purchased an ARC Audio Series Amplifier.

ARC Audio is a high end line of car audio amplifiers and speakers, all designed and assembled in the U.S.A.

The ARC Audio amplifiers are conservatively rated and deliver more power per channel than others in its class. Each model includes features such as built-in variable crossovers with a 10x-range switch for added versatility, bass-boost 45Hz, very high damping factor and extremely low distortion.

There are four models in the ARC CXL Amplifier line-up; 2050CXL, conservatively rated at 2 x 70 watts; 2100CXL, conservatively rated at 2 x 110 watts; 2500CXL, conservatively rated at 2 x 270 watts; 4050CXL, a four-channel amplifier rated at 4 x 55 watts.

Full range dynamics are achieved by our commitment to using only superior audio components housed in ARC Audio's unique "I-BEAM" extruded metal casing.

ARC Audio-Solid Construction for "Sound" Car Audio Systems.

ARC Audio Features

- Built-in Variable Crossover-12 dB Per Octave Crossover
- Crossover Range 50Hz-5.5kHz
- Bass Boost 0-18 dB @ 45Hz
- Short circuit, thermal, reverse voltage, over -voltage and DC offset protection.
- Low radiated noise for clean AM/FM protection.
- Load stability to two ohms.
- Very high damping factor-Low Distortion.
- Three channel capability.
- Optically Isolated Mosfet Power Supply.
- Symmetrical, discrete power amplifier circuitry utilizing Surface Mount Technology.
- Can drive highly reactive loads.
- Designed and Assembled in the U.S.A.

ARC Audio Installation Instructions

The ARC Audio Amplifier is designed for easy installation in your automobile. To ensure proper operation of your new purchase, please follow the suggestions we have listed below:

- The amplifier must be securely mounted to a solid surface. Please select a dry location in the trunk or passenger area only. Do not mount the amplifier to any area that may have excess vibration.
- Position the amplifier in an area that receives sufficient airflow for proper heat dissipation.
- A #10 gauge or larger wire should be used for power and ground connections. We recommend a fuse be installed on the power wire within 18 inches of the battery for safety reasons.
- The ground wire should be connected directly to the chassis of your automobile. Never use seat or seatbelt bolts for grounding.

If, after reading our instructions, you have additional questions, please contact our technical department for assistance.

ARC Audio Technical Assistance:
Phone: 209-341-0374
Fax: 209-341-0378

Specifications

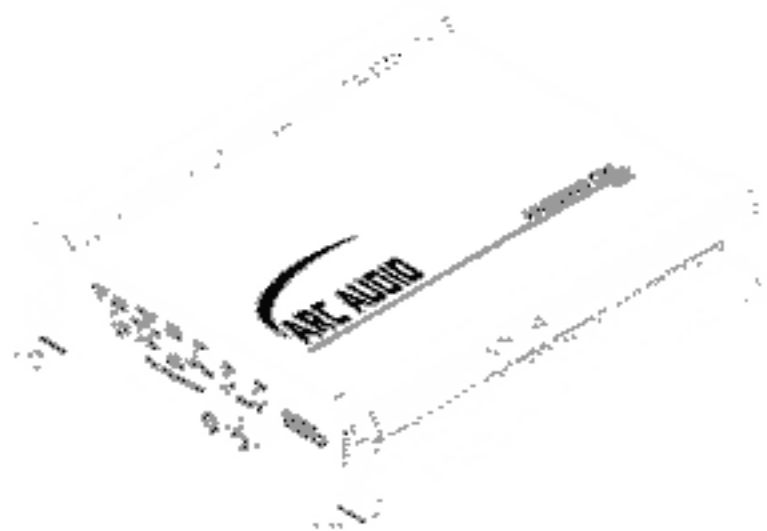
Model	<u>2050-CXL</u>	<u>2100-CXL</u>
Output Power (RMS)		
Stereo @ 4 Ohms	2 x 70 Watts	2 x 110 Watts
Stereo @ 2 Ohms	2 x 110 Watts	2 x 190 Watts
Bridged at 4 Ohms	2 x 230 Watts	1 x 380 Watts
T.H.D.		
4 Ohm:	< .05%	<.05%
2 Ohm:	< .05%	<.05%
Frequency Response:	20Hz-20kHz	20Hz-20kHz
S/N Ratio:	>100 dB	>98 dB
Separation @ 1kHz:	>75 dB	>72 dB
Transient Distortion (100W):	<.01% @ 4 Ohms	<.01% @ 4 Ohms
Input Sensitivity:	250mV - 2.5V	250mV - 2.5V
Bass Boost:	0-18 dB @ 45Hz	0-18 dB @ 45 Hz
Crossover (Butterworth):	50Hz - 5.5kHz	50Hz - 5.5kHz
Input impedance:	33k Ohms	33k Ohms
Max Current Requirements:	28A @ 235 Watts	43A @ 382 Watts
Idle Current:	0.75A	0.93A
Dimensions:	8.75" L x 8" W X 2.35" H	12" L x 8" W x 2.35" H

Specifications

Model	4050CXL	2500CXL
Output Power (RMS)		
Stereo @ 4 Ohms	4 x 55 Watts	2 x 270 Watts
Stereo @ 2 Ohms	4 x 90 Watts	2 x 525 Watts
Bridged at 4 Ohms	2 x 180 Watts	1 x 1050 Watts
T.H.D.		
4 Ohm:	< .05%	<.05%
2 Ohm:	< .05%	<.05%
Frequency Response:	20Hz-20kHz	20Hz-20kHz
S/N Ratio:	>95 dB	>105 dB
Separation @ 1kHz:	>65 dB	>65 dB
Transient Distortion (100W):	<.015% @ 4Ohms	<.005% @ 4Ohms
Input Sensitivity:	250mV - 2.5V	250mV - 2.5V
Bass Boost:	0-18 dB @ 45Hz	0-18 dB @ 45 Hz
Crossover (Butterworth):	50Hz - 5.5kHz	12 / 24dB Stereo 50Hz - 5.5kHz
Input impedance:	33k Ohms	33k Ohms
Max Current Requirements:	46A @ 380 Watts	135A @ 1100Watts
Idle Current:	1.2A	2.42A
Dimensions:	13" L x 8" W x 2.35" H	18" L x 8" W x 2.35" H

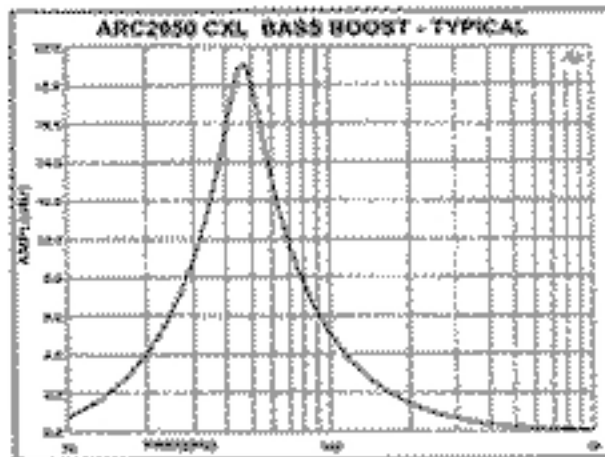
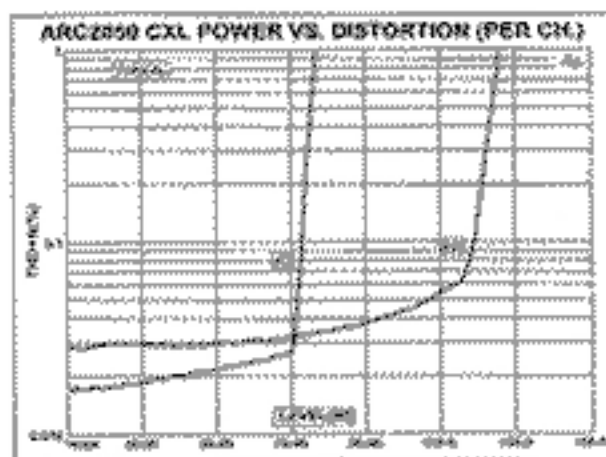
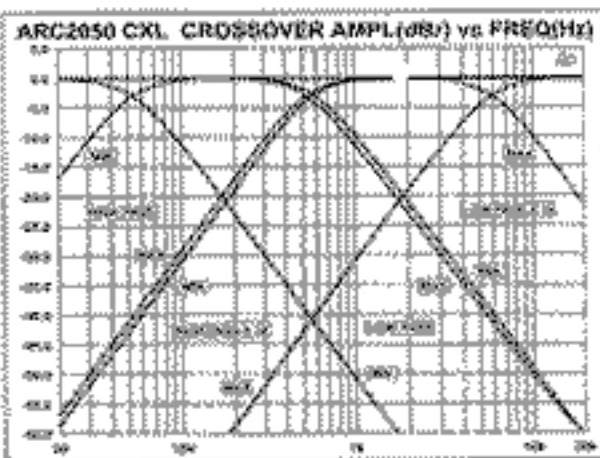
Performance Curves

Model 2050CXL



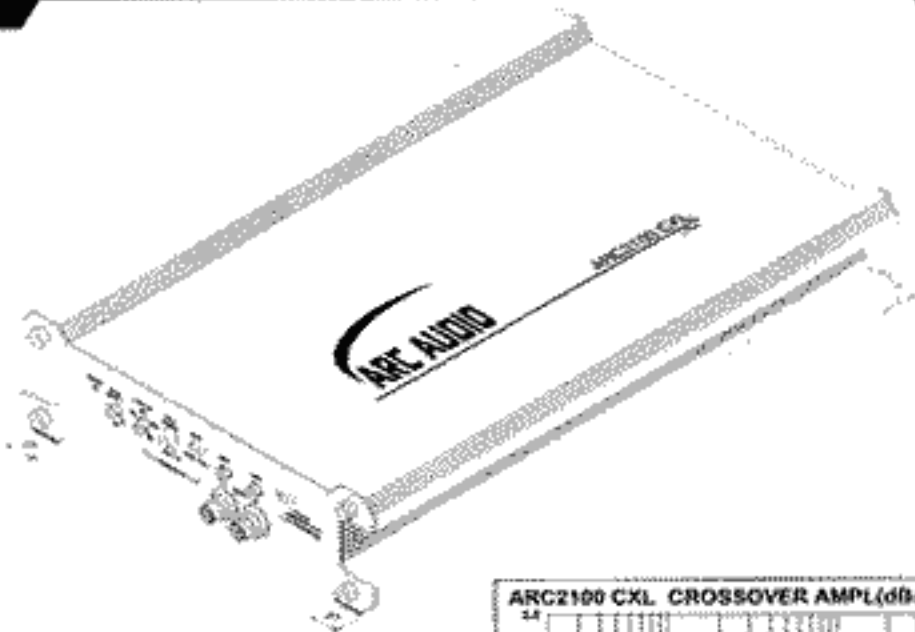
ARC2050 CXL

2 x 70 watts .03% T.H.D. @ 4 ohms typ.
 2 x 110 watts .04% T.H.D. @ 2 ohms typ.
 Built in variable crossover with x 10 range
 18dB variable bass boost



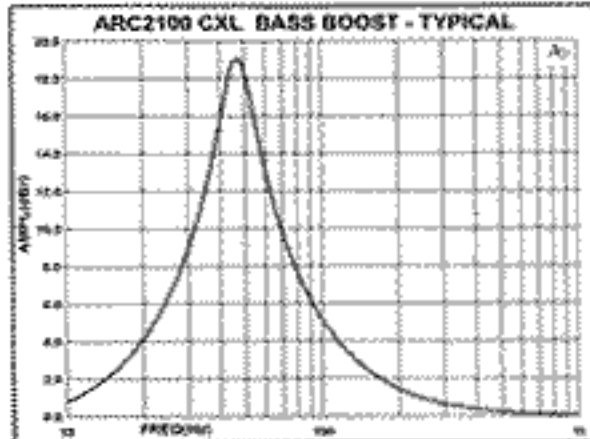
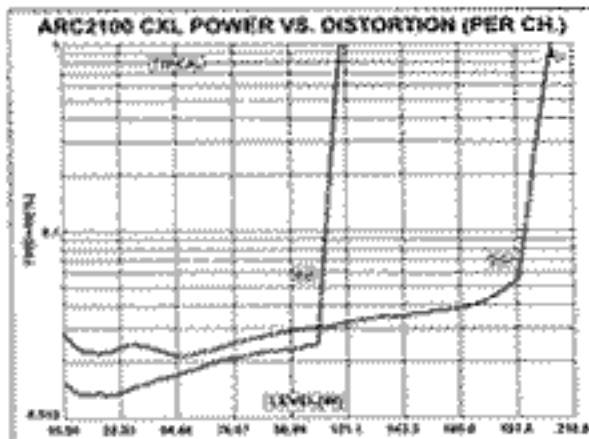
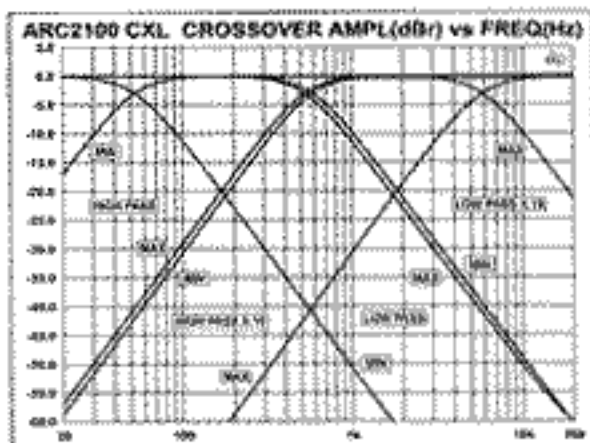
Performance Curves

Model 2100CXL



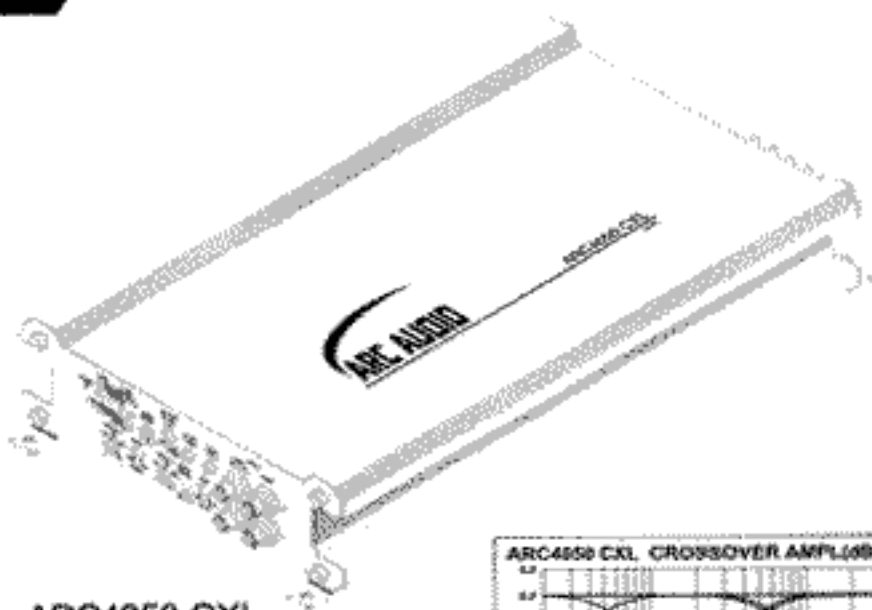
ARC2100 CXL

2 x 110 watts .03% T.H.D. @ 4 ohms typ.
 2 x 190 watts .04% T.H.D. @ 2 ohms typ.
 Built in variable crossover with x 10
 range 18dB variable bass boost



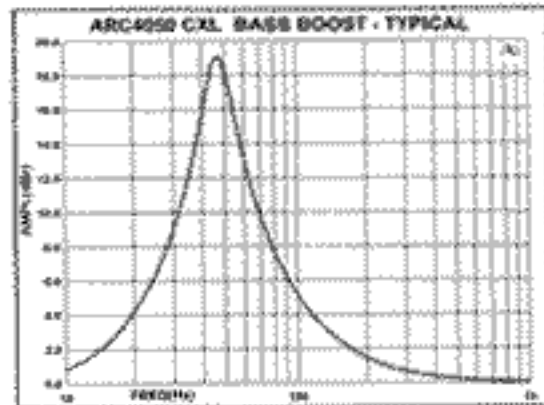
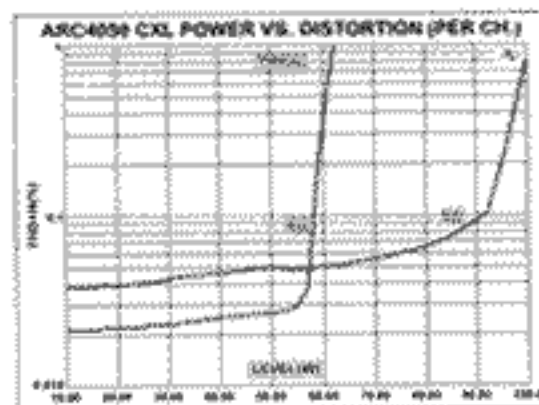
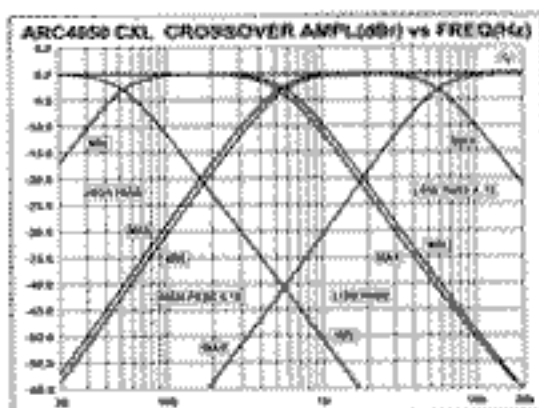
Performance Curves

Model 4050CXL



ARC4050 CXL

4 x 55 watts .03% T.H.D. @ 4 ohms typ.
 4 x 90 watts .04% T.H.D. @ 2 ohms typ.
 Built in variable crossover with x 10 range
 18dB variable bass boost



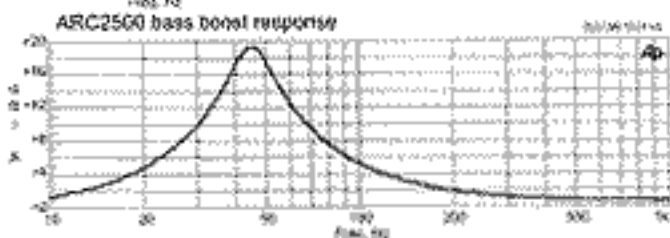
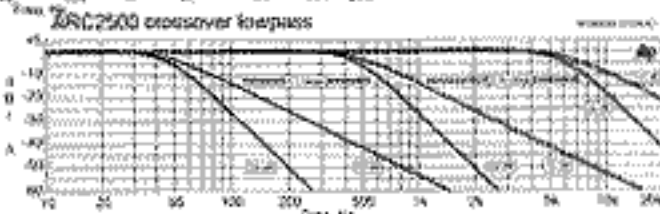
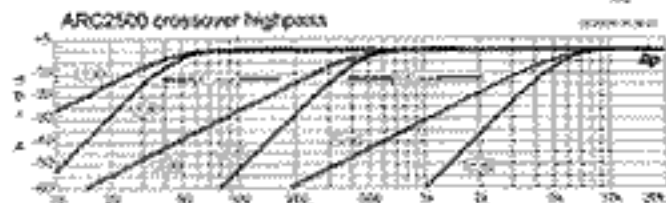
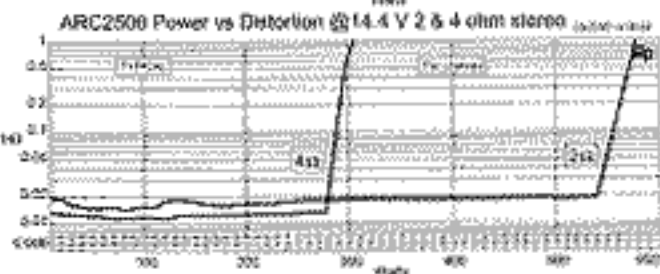
Performance Curves

Model 2500CXL



ARC2500 CXL

2 x 270 watts .03% T.H.D. @ 4 ohms typ.
 2 x 525 watts .04% T.H.D. @ 2 ohms typ.
 Built in variable crossover with x 10 range
 18dB variable bass boost



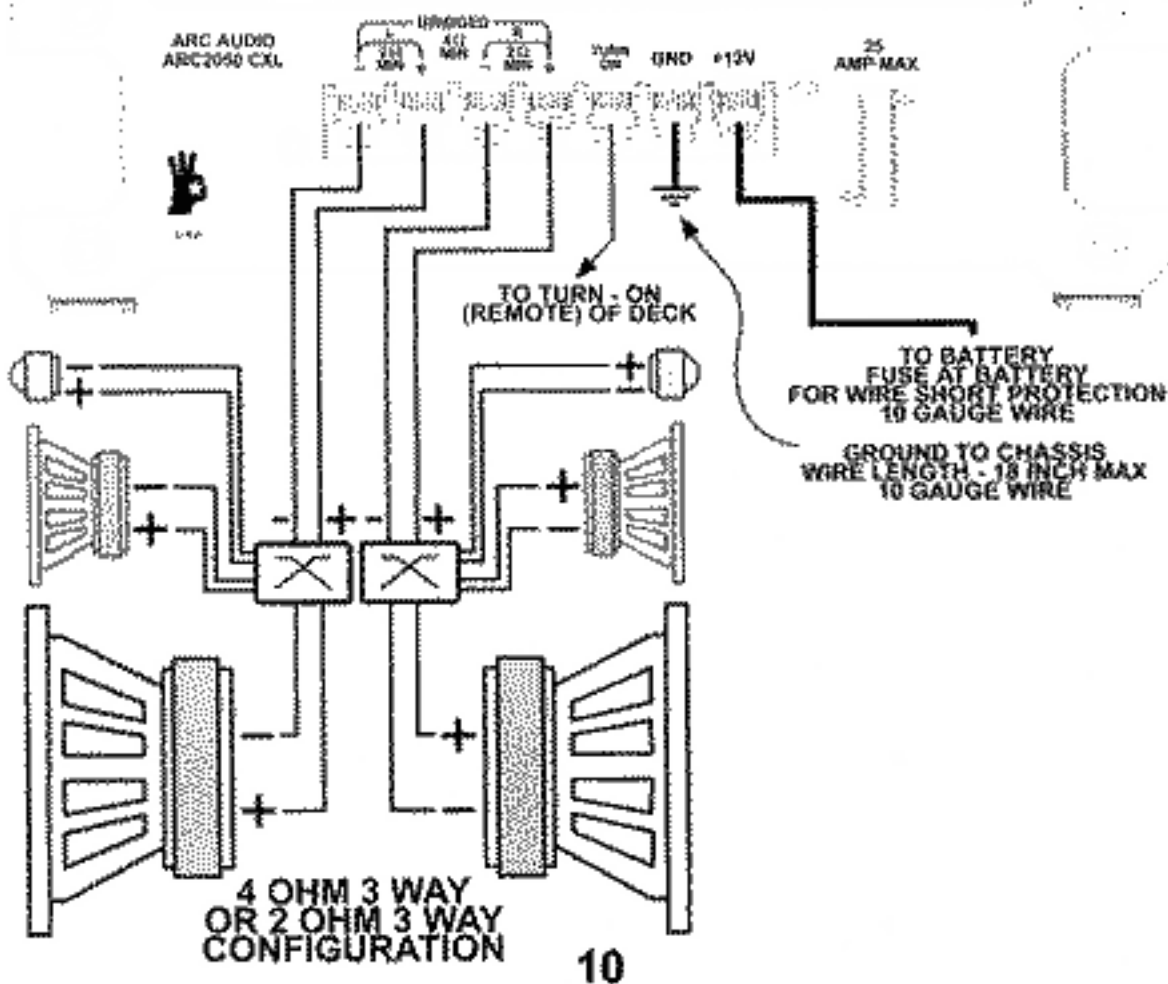
ARC Audio System Configuration #1

SET TO FULL RANGE

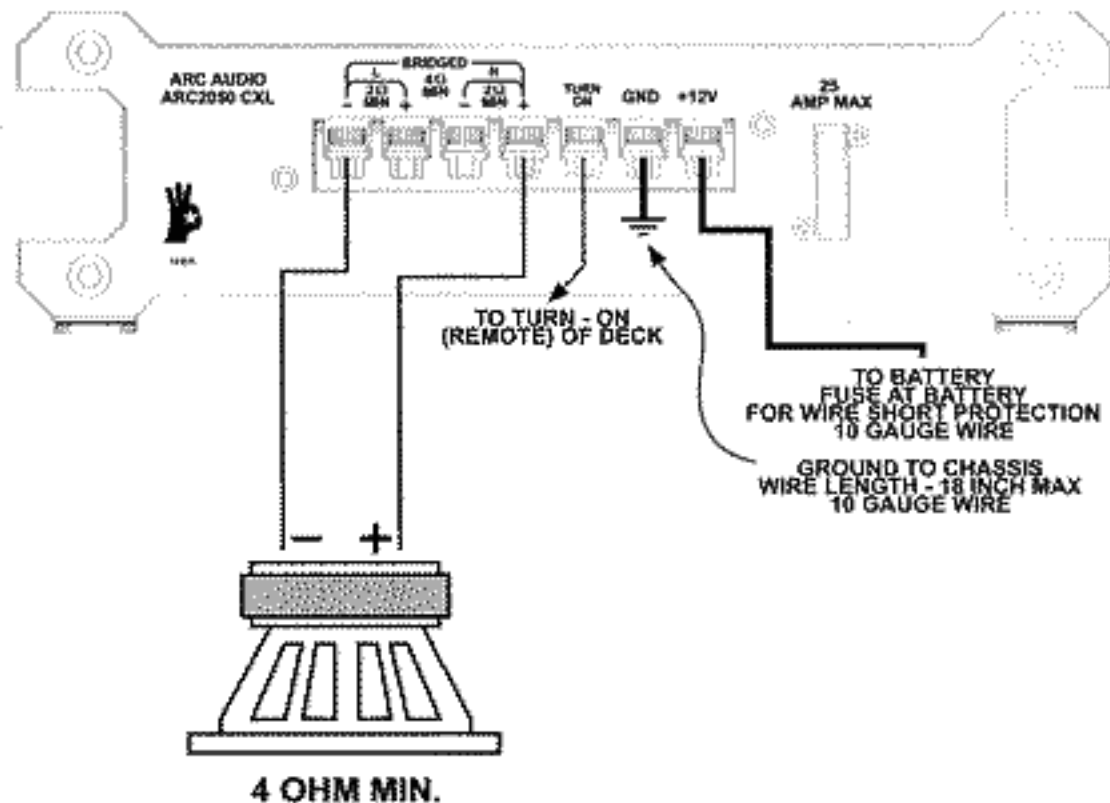
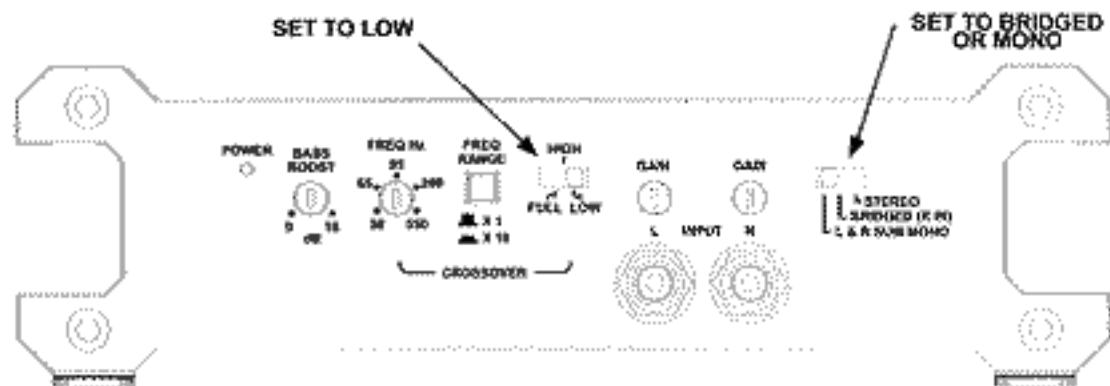
SET TO STEREO



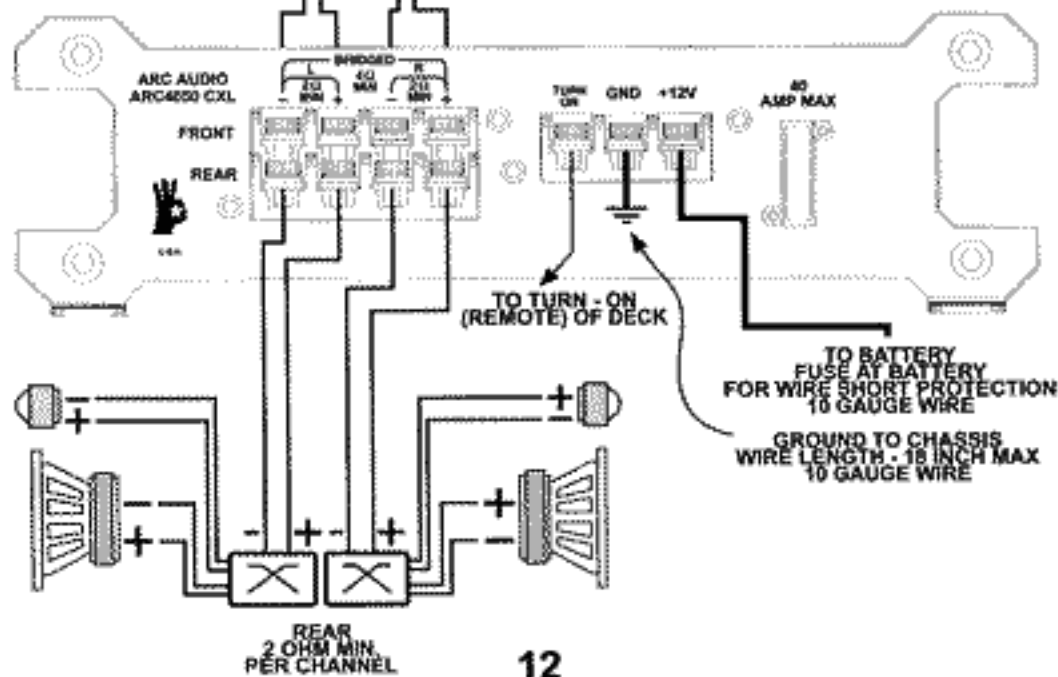
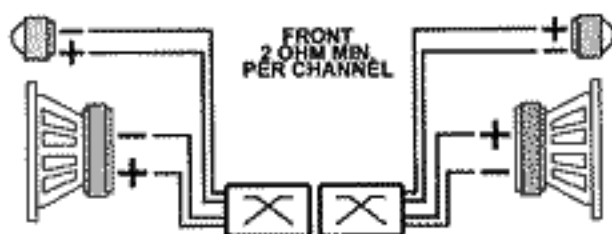
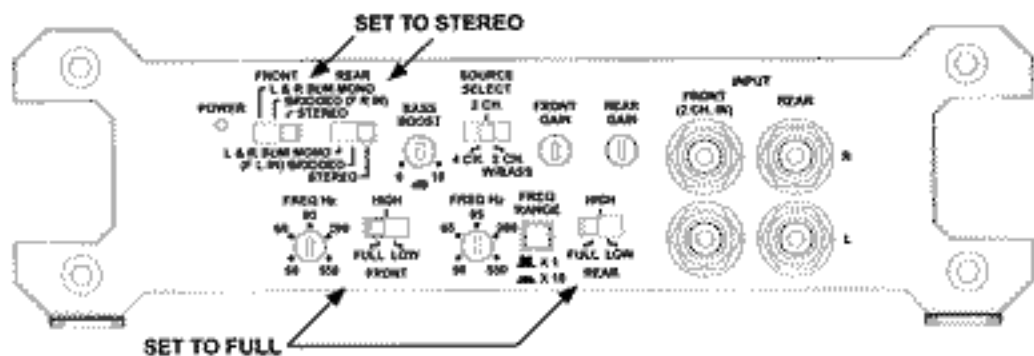
ARC AUDIO
ARC2050 CXL



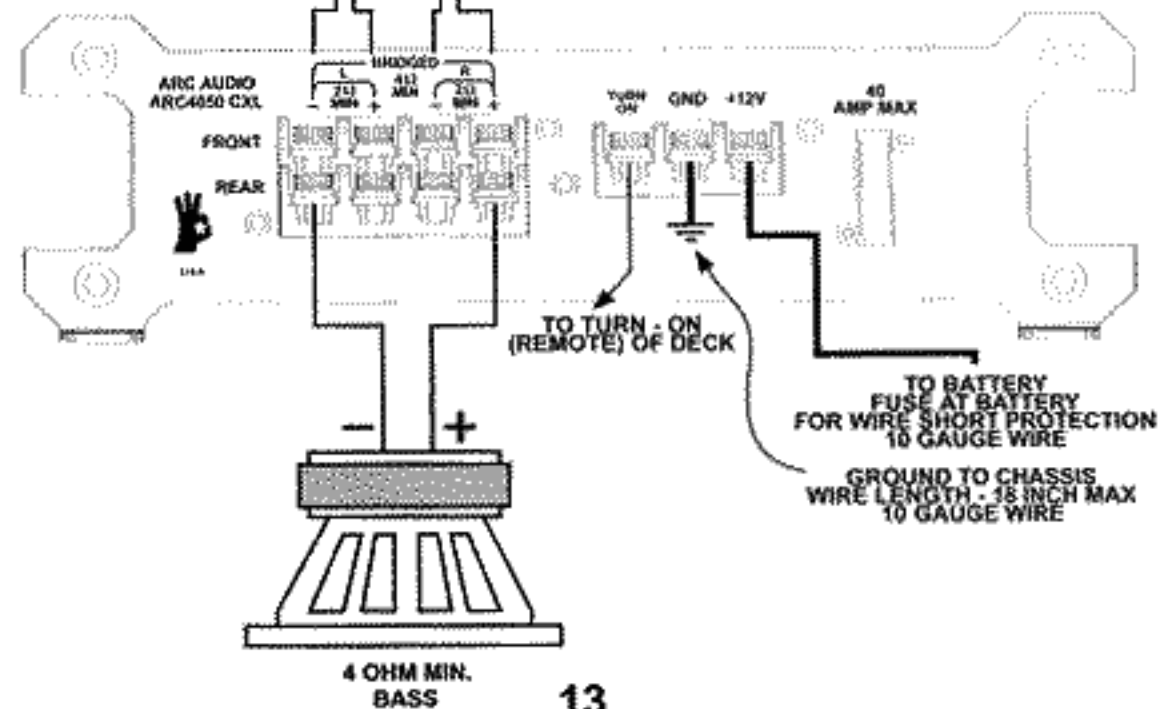
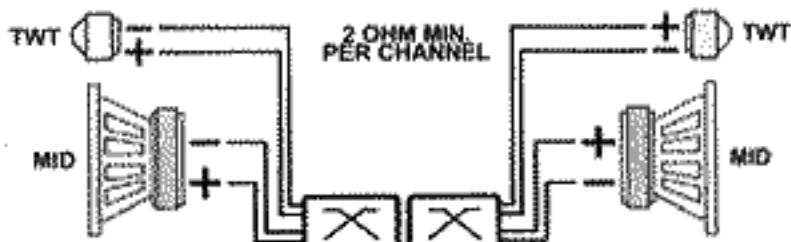
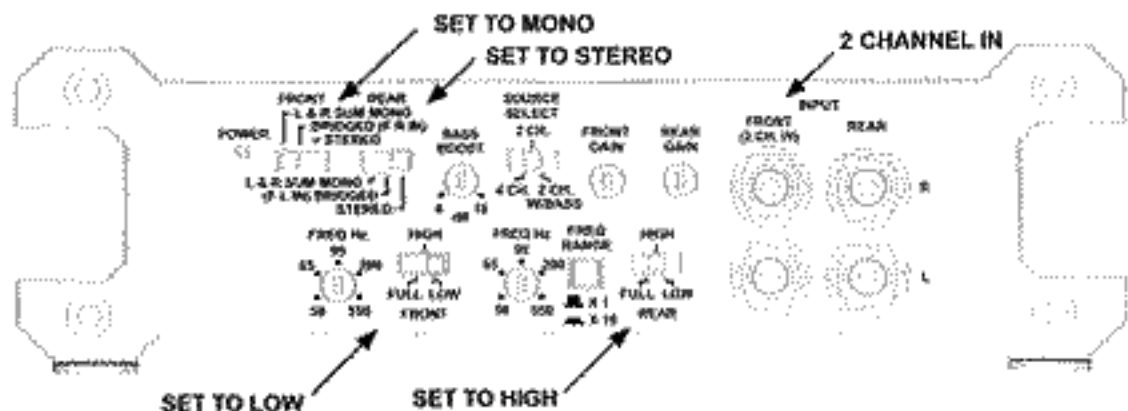
ARC Audio System Configuration #2



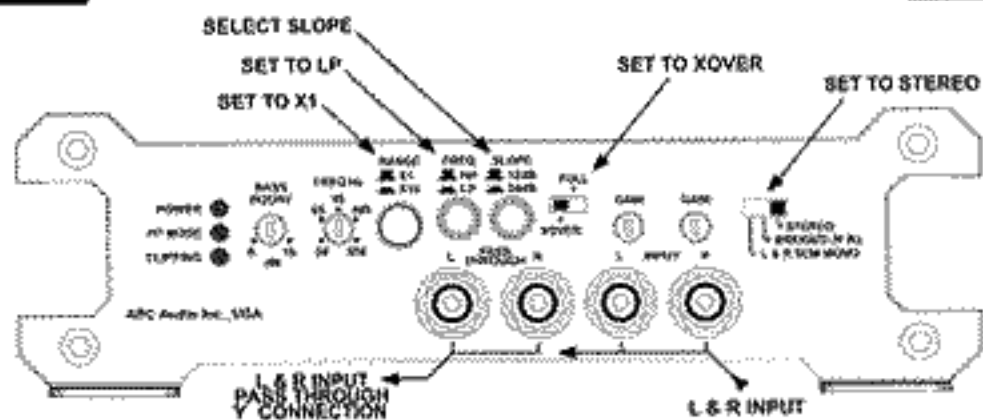
ARC Audio System Configuration #3



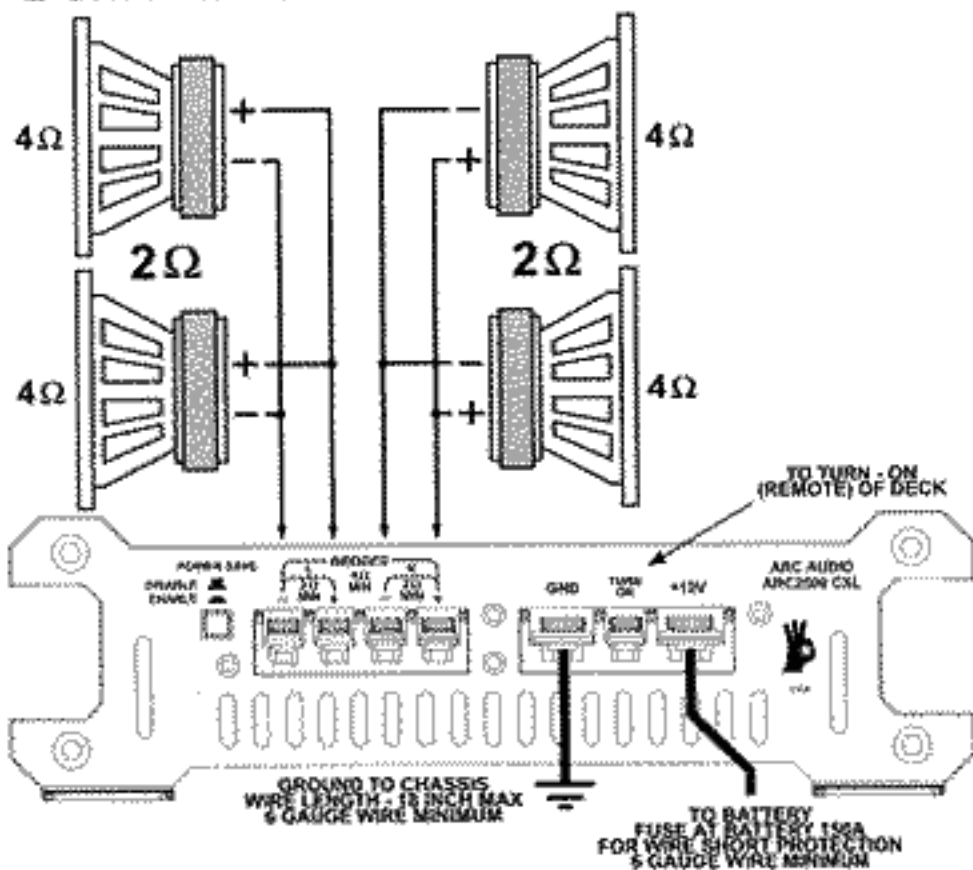
ARC Audio System Configuration #4



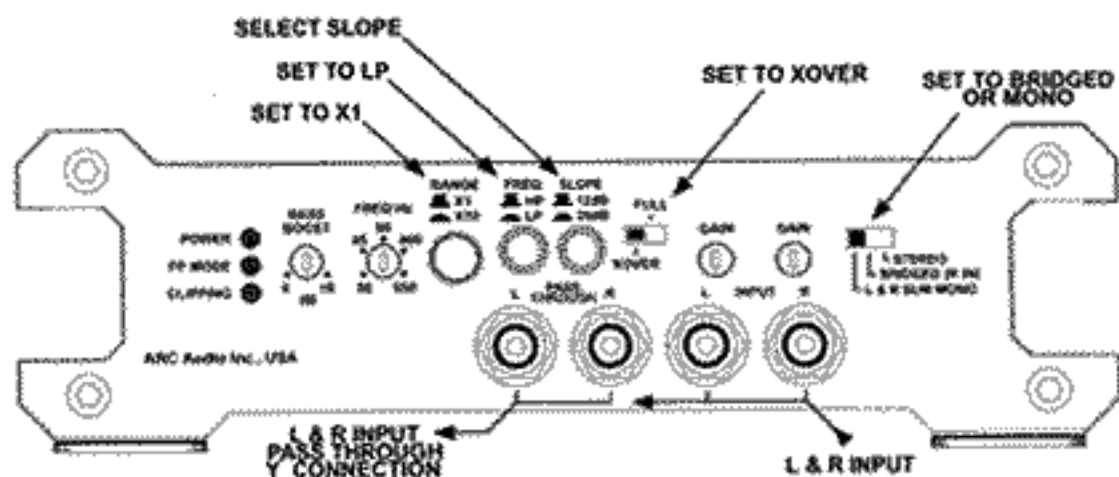
ARC Audio System Configuration #5



2 OHM MINIMUM PER CHANNEL



ARC Audio System Configuration #6

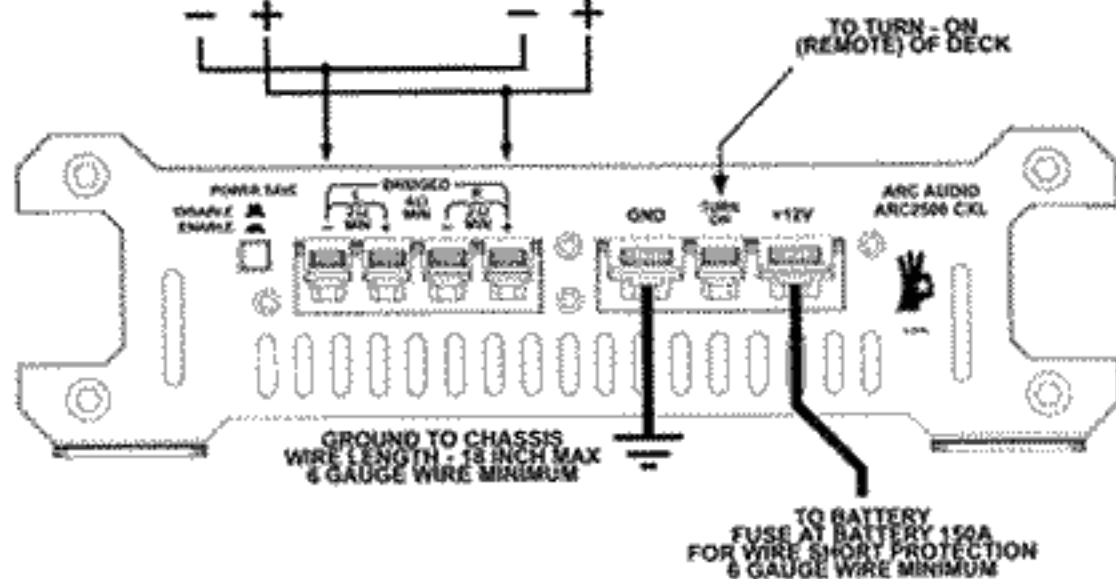


4 OHM MINIMUM

8Ω

8Ω

4Ω



Technical Assistance

The ARC Audio Amplifier line has been thoroughly tested and we feel confident that you will be pleased with your purchase. Should you experience a problem with an ARC Audio Amplifier, please contact your authorized ARC Audio dealer. If your dealer is not able to solve your problem, please contact our technical department.

Phone: 209-341-0374

Fax: 209-341-0378

If, after speaking to our technical department, they have determined that you need to return your product for repair, please return to the following address and include your name, shipping address and a description of the problem you are experiencing.

Repair Shipping Address:

ARC Audio
4213 McHenry Ave. Suite D
Modesto, Ca. 95356

Caution:

ARC Audio recommends that you use common sense when adjusting the volume control on your audio system. Continuous exposure to excessive sound pressure levels may cause permanent hearing loss.



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