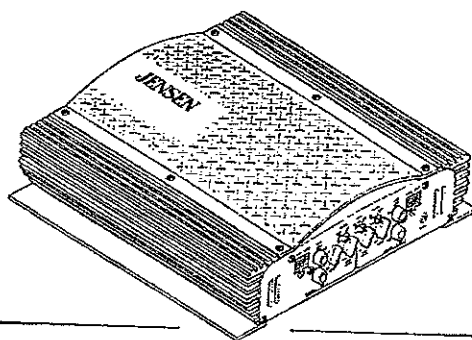


JENSEN®

How to Install and Operate
the XA 6040Lx Amplifier



Welcome!

What you're holding in your hands is no ordinary owner's manual. We've tried to make the instructions in this book clear and easy to follow.

For your Jensen amplifier to work right, it must be installed correctly. This manual will show you how to install your new amplifier like a pro. It's a good idea to read all of these instructions before you begin the installation. Most installations are straightforward and can be handled by a do-it-yourselfer with the right tools, patience, and the ability to follow instructions. But, do-it-yourself installation isn't for everyone. If you still don't feel confident after reading this book, consider turning the installation job over to someone better suited to it.

Warranty Service

If your Jensen amplifier should ever require service, you will need to have the original dated receipt. If you ever need to return the unit for any reason, always include the receipt with the product.



Technical Assistance

For technical assistance with the operation or installation of the XA 6040Lx, call 1-800-323-0221 or 1-847-671-4877

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Features

The Jensen XA 6040Lx power amplifier is a four-channel 600-Watt total system power automotive amplifier. The XA 6040Lx includes:

- RCA phono inputs
- Input level control
- Bass boost feature
- Remote turn on/off
- Electronic protection circuitry to protect the amplifier from short circuit, DC offset and thermal overload
- Unique, super-efficient heat sink design
- 4 x 75 Watts RMS per channel (4 x 150 Watts peak)
- 2 x 200 Watts RMS bridged
- Bridgeable design to direct full power to a single speaker

Audio Amplifiers

Amplification offers two advantages:

- The XA 6040Lx amplifier can make the sound of your receiver fuller and richer, even at low volume levels.
- Many automotive receivers provide four to 10 Watts at maximum power. At 4 x 75 Watts RMS per channel (2 x 200 Watts bridged), the XA 6040Lx can be played substantially louder, permitting the use of more powerful speakers.



Installation

Before You Begin Installation

Before you begin, you will need tools, supplies and adapters. It is best to make sure you have everything you need before you start. There is a list of supplies and tools on the next page.

Amplifier Location

Important:

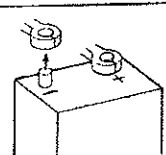
Allow air circulation around the amplifier.

The XA 6040Lx amplifier's compact design allows greater flexibility in mounting. It can be mounted under a seat or in the trunk.

When selecting a location, remember that amplifiers generate heat. Select a location where air can circulate around the amplifier. Do not cover the XA 6040Lx with carpets or enclose it behind interior trim panels. Every installation will be a bit different based upon vehicle design. Check all locations and placements carefully before making any cuts or connections.

Disconnect Battery

Before you begin, always disconnect the battery negative terminal.



Professional Tip

Amplifier Installation Kit

Your installation job will be much easier if you purchase an amplifier installation kit. We highly recommend SOUND QUEST brand. These kits often include low-level RCA cables, extra large power and ground wires, a fuse or circuit breaker and connector for the battery.

Supplies and Tools Needed

Supplies:

- Speaker wire
- Nuts and bolts to secure amplifier
- Electrical tape
- Solder (optional)
- 1/2" thick plywood to mount amplifier (optional)

Amplifier installation kit:

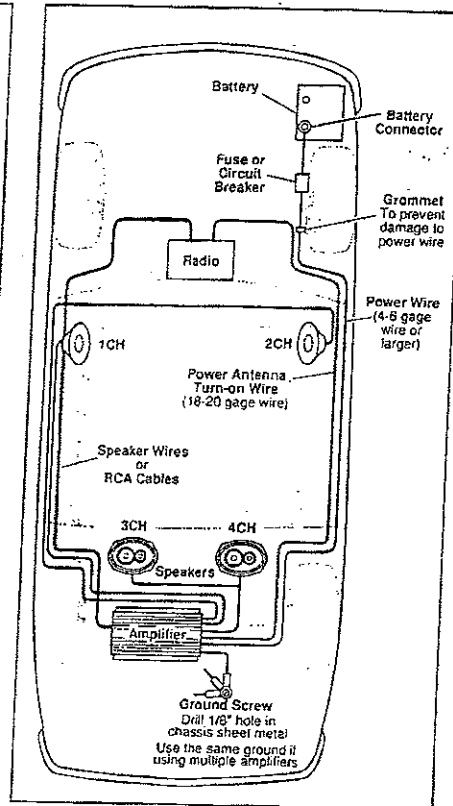
You will need an amplifier installation kit or you may purchase the following supplies:

- 25 feet of 4-6 gage wire for power supply
- 25 amp fuse or circuit breaker
- 20 feet of 18-20 gage wire for connection to receiver power antenna wire (dark blue, if possible)
- RCA cable
 - 20 feet for trunk installation
 - 12 feet for pickup truck or under-seat installation
- Battery connector (top terminal or side terminal)
- Three 4-6 gage crimp-on ring connectors
- Two 4-6 gage butt connectors
- Two 18-20 gage butt connectors
- One grommet for power wire protection
- Spade connectors for speaker connections (two per speaker)

Tools:

- Flat and Phillips screwdrivers
- Wire cutter
- Wire stripper
- Drill and 1/8" drill bit
- Crimping tool
- Circuit tester
- A pocket knife or scraper to make a clean connection for the ground wire
- Tools to access speaker wires on the receiver (screwdriver, socket wrench set or other tools)
- Soldering iron (optional)

Routing Wires



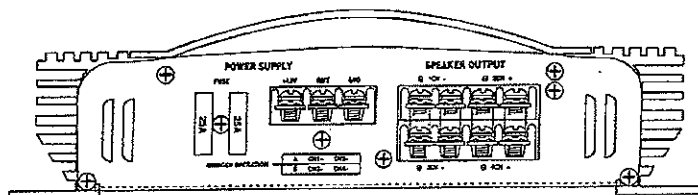
Professional Tip

Bigger is better

Stereo installation dealers sell extra thick power and speaker wires to ensure best sound. Look for 4-6 gage power wire, especially if you have several amplifiers.

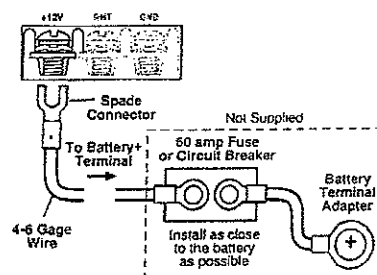
Wiring

Power and Speakers



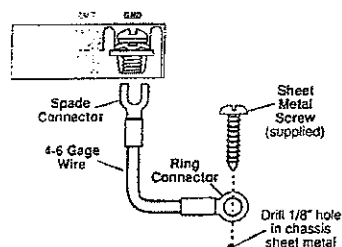
Power Terminal (+12V)

Connect directly to the vehicle battery + terminal with 4-6 gage wire (minimum).



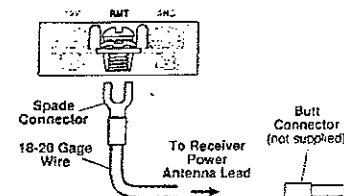
Ground Terminal (GND)

Connect to a good chassis ground. The ground connection should be to clean, unpainted metal to provide a good electrical connection.



Remote Terminal

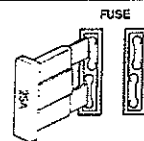
Connect the radio power antenna lead from the receiver to the amplifier RMT terminal. This turns the amplifier on whenever the receiver is turned on. If a power antenna lead is not available, connect this wire to the radio or accessory fuse.



Power Light

The power light comes on when 12 volt power is available at both the battery +12 volt and RMT wires.

Fuses



Use only 25 amp blade-type fuses.

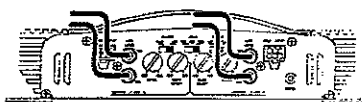
Speaker Connections

Inputs

Use RCA (low-level) inputs.

Four-Channel Inputs

Some radios have separate lines for each channel (LF, RF, LR, RR). Connect to channels 1, 2, 3 and 4.



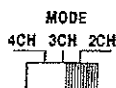
Two-Channel Inputs

Most radios provide left and right lines. Connect to amplifier inputs 1 and 2. Use Y-adapters on each to split inputs. Left: 1 and 3. Right: 2 and 4.

Channel Switch

To prevent damage to the amplifier, select the correct number of channels in use:

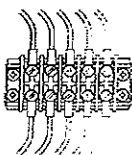
- 4CH Four separate channels (1, 2, 3 and 4)
- 3CH One bridged speaker (1-2) and separate channels (3 and 4)
- 2CH Two bridged speakers (1-2 and 3-4)



Professional Tip

Barrier Strips

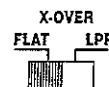
Use barrier strips to connect the amplifier to vehicle wiring. This allows you to easily upgrade the amplifier or add amplifiers later.



Crossover (X-OVER)

Adjust the crossover to accommodate your chosen installation method.

- LPF=low pass filter—only bass tones (under 100 Hz) go to speakers. Use with woofers or subwoofer.
- Flat=no filter—all tones go to speakers. Use with full-range speakers.



Connecting Subwoofers

Low Pass Filters

Always use a low pass filter when connecting a subwoofer.

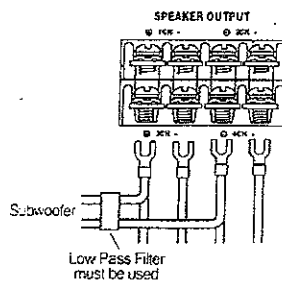
Use X-OVER switch and select LPF OR

Install a low pass filter (available from a electronics store or car stereo installer)

Use the separate low pass filter when connecting both subwoofers and full-range speakers to the same channel pairs.

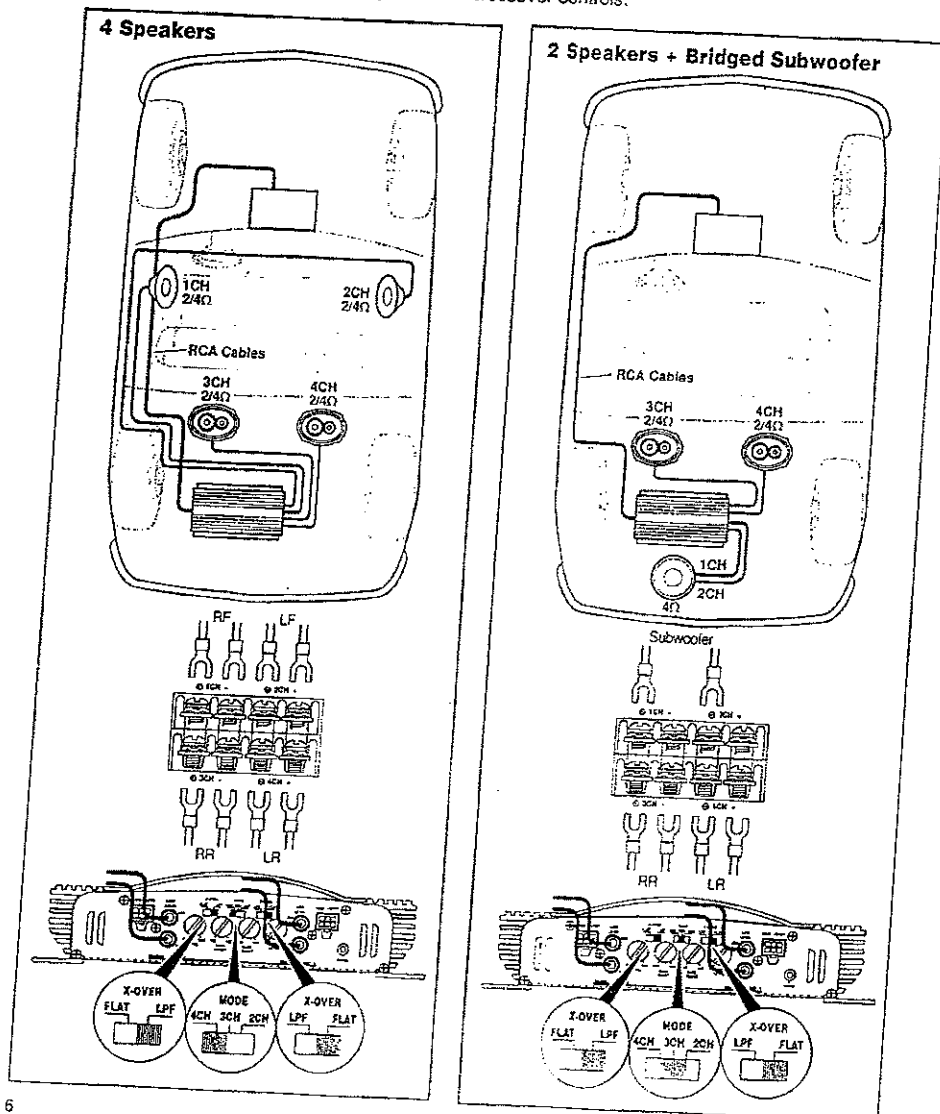
Bridged Connections

For higher power output, you can connect a subwoofer to two output channels. Look for ⊕ and ⊖ to indicate the correct connections.



Speaker Wiring

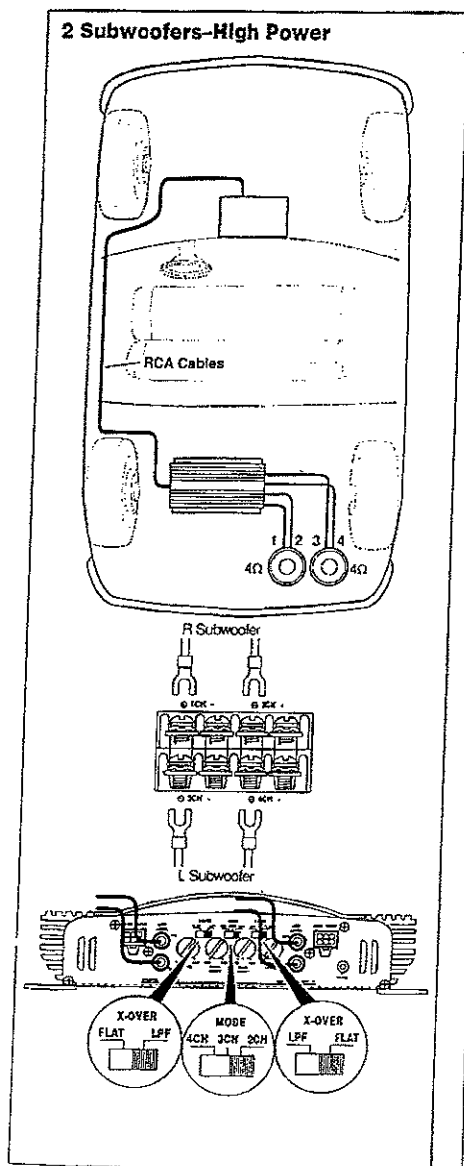
The XA 6040Lx amplifier has inputs and outputs for four channels (labelled 1CH, 2CH, 3CH, and 4CH). 1-2 and 3-4 are paired, using their own crossover controls.



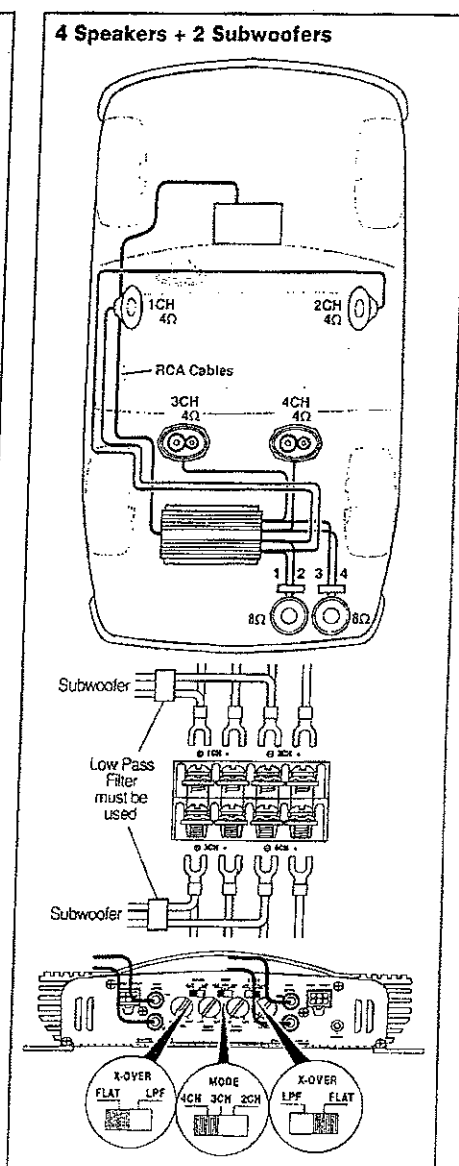
XA 6040Lx

JENSEN

2 Subwoofers—High Power



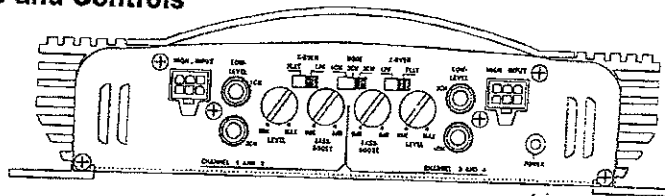
4 Speakers + 2 Subwoofers



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XA 6040Lx

Inputs and Controls



Input Wiring

The XA 6040Lx has four input and corresponding speaker output circuits, labelled 1CH, 2CH, 3CH and 4CH.

Inputs may be high level (from the receiver's speaker) or low level (from special low level outputs). Low level input is preferred for best performance. Do not use both.

Low Level Input

Use a pair of shielded stereo audio cables with RCA type jacks. Most trunk-mount amplifier installations require 20-foot RCA cables. Most under-seat and pickup truck installations use 12-foot cables.

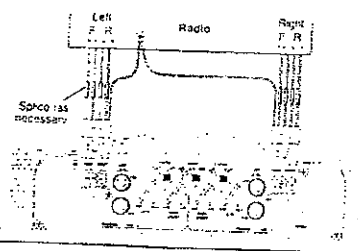
Connect RCA cables from your receiver to the RCA input jacks on the amplifier.

High Level Input

1. Connect signal ground wire to the receiver chassis.
2. Connect left and right speaker wires as shown.

1CH+	white/black	3CH+	white/black
1CH-	white	3CH-	white
2CH+	gray/black	4CH+	gray/black
2CH-	gray	4CH-	gray

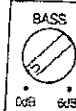
Use either low level or high level inputs. Never connect both high and low level inputs.



Important

If wiring connections are made wrong, the unit will not operate properly and it could be damaged. Follow the installation instructions carefully, or have the installation handled by an experienced technician.

Bass Boost



Bass Boost increases the volume of the bass by up to 6 dB

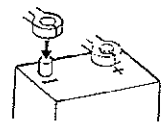
Input Level Control



Adjust input level so the receiver volume control operates normally. When using two amplifiers use input control to balance volume for all speakers.

Reconnect Battery

When wiring is complete, reconnect the battery negative terminal.

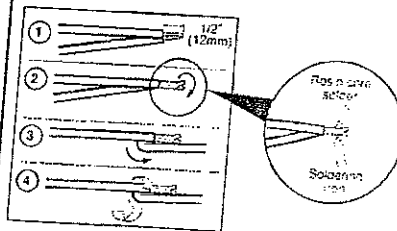


Professional Tip**Connections**

Good wire connections are very important for best sound and long-term reliability. Here are two methods:

Splice

1. Strip 1/2 inch (12 mm) of insulation from both wires.
2. Wrap wires together
3. Fold wires over
4. Stretch electrical tape tightly over splice.

**Solder**

Solder is the best way to connect wires, but it takes skill and practice. Splice the wires (as shown above). Before taping, heat the wires (not the solder). When the wires are hot enough, touch the solder to the splice. The solder will flow over the wires. Stretch electrical tape tightly over splice.

Important:

Be very careful when soldering wires in your car. Cover nearby carpeting and seats to prevent damage from hot solder.

Professional Tip**Installing in Trunk**

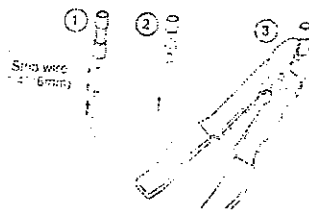
When installing the amplifier in the trunk, run the power wires along the same path as the other vehicle wiring. Many cars have insulated channels for wiring. You will have to remove the door sill trim and the carpet.

Professional Tip**Crimp Connections**

Purchase crimp connectors and crimping tool. Connectors are color coded.

1. Strip 1/4 inch (6mm) of insulation from both wires.
2. Insert into connector.
3. Crimp tightly.

You can make permanent splices (using butt connectors) or select connectors that can be removed and reinstalled.

**Professional Tip****Securing Wires**

Be proud of your installation! Use wire ties to bundle wires together when possible. (But never bundle speaker wires and power wires together!)



Secure loose wires to the vehicle to make sure they don't rub or rattle.

Professional Tip**Speaker and Power Wires**

Don't run speaker and power wires next to each other. Power wires can generate a 'sine' sound in the speakers. Run speaker and power wires on opposite sides of the car.

Testing

Before you finish the installation, you should do the following tests to make sure the wiring is correct and everything is operating properly.

Test Power Wiring

1. Turn on the receiver but do not turn up the volume. The amplifier power light should come on. If not, check the RMT and +12V wires.
2. Turn up the receiver volume slightly. All speakers should operate. If not, check wiring connections at amplifier and speakers.

Adjust Input Level



Adjust input level so the receiver volume control operates normally. When using two amplifiers use input control to balance volume for all speakers.

Test Speaker Connections

These tests make sure the speakers are connected right. If speakers don't play at all, one (or both) speaker wires may be disconnected. If the wrong speaker plays (you hear left speaker when you expect right speaker) make sure you connected the wires correctly.

Once everything is operating correctly, reassemble vehicle trim.

Professional Tip

Dealing with Alternator Noise

The vehicle's alternator can cause a "siren" sound in the speakers that changes with engine speed. To prevent alternator noise:

- Do not bundle RCA cables with speaker or power wires
- Do not run speaker wires parallel to power wires
- Make sure all wires are as short as possible
- Make sure the radio black wire has a good connection to an unpainted metal surface on car chassis
- If you have more than one amplifier, connect all ground wires to the same screw

Professional Tip

Improving Bass Sound

Some full-range speakers may create a muddy bass sound. To improve the sound, change the polarity of one speaker (reverse + and - wires)