

A Guide To Easy Car Amplifier Installation

Article by: Gregg Hall

Installing car amplifiers is challenging. You have to make sure the amplifier gets enough air circulation to keep from overheating while enclosing it in a way that prevents theft. Satisfying these needs doesn't always yield the best looking results. But, you can still show off your personal style when installing your amplifier with these simple suggestions.

Picture how you want the amp to look. Are you thinking "high tech" with a concealed panel? Or, are you going for a more industrial look with visible cables? Paint it; Wrap it in leather, carpet, or vinyl. Use your imagination and your rack design will show your style.

Airflow is a major consideration when installing an amplifier. The electronics in the amplifier produce a lot of heat when you crank up volume, and heat can damage the components. Ample airflow is essential for good performance and reliability and two ways to accomplish this are convection and forced-air systems.

The simplest cooling method is convection. It's simple because most car amplifiers come with convection cooling already built in. Convection occurs when the warm air inside the amplifier rises and dissipates through the fins of the aluminum heat sink. Warm air is replaced by cooler air drawn from below creating a continuous circulation of cool air that prevents the amp from overheating. Convection cooling works fine as long as the air circulates. The ideal would be to install the rack on a vertical surface in an open space with the fins vertically aligned.

A forced air system has triple the cooling capacity of a simple convection system. Simply adding an electric fan to increase airflow over the amplifier's heat sinks makes a big difference. That's one reason why high power amplifiers have thermostats; thermostats control the fans. If your rack holds multiple convection cooled amplifiers, it's worth it to install multiple fans. The cooler the amps, the longer they'll last. Running power for a fan is just a matter of connecting with the source unit's remote turn on lead since most accessory fans run on 12v DC. When the system turns on, the fans start up along with the other components on that circuit.

Now that you've got this great amplifier you want to show it off, but, how do you keep it from being stolen? If you can see the rack from the outside, you could be tempting fate. Consider one of the following options to prevent someone from stealing your equipment.

1. Make it detachable by fastening the amp rack with wing nuts. If the amplifier takes up cargo space, being able to take it out of the vehicle is an asset. However, removing the rack every time you park your car can be a hassle.
2. Create a removable secret panel to conceal the rack. The cover can be made of anything from fabric to fiberboard.
3. Install a good security system.

Use all three deterrents for the ultimate protection. Detachability provides extra security and additional cargo space when necessary. A removable panel is convenient. And, finally, a security system provides the last defense. You put a lot of effort into this project. Protect your work in style. Gregg Hall is an author living in Navarre Beach, Florida. Find more about this as well as a car amps at <http://www.ampsandtuners.com>.