

Product Improvement SD Amplifier Tech Bulletin

The SD amplifiers have been ultra successful for Phoenix Gold in 2011. In 2012, we have added three new models and made the following key improvements:

- SD amplifiers are now fully compatible with newer model vehicles that operate at higher voltages. Many new vehicles now idle and run at or above 15 volts. SD amplifiers now operate up to 15.8 volts.
- SD amplifiers will soon feature lower noise levels. Its uncommon but many class D amplifiers can reduce/eliminate radio reception in certain installations. In 2012, we are in the process of lowering noise levels of the SD amplifiers to eliminate the chance for any radio interference.

HIGH VOLTAGE IMPROVEMENTS FOR SD500.4 AND SD800.5 IN NEWER VEHICLES

Symptom: Amplifier makes clicking, scratching noises or has no output on the front or rear channel of SD500.4 or SD800.5.

Problem: SD500.4 and SD800.5 engage their overvoltage protection on newer model cars that run at higher voltages.

Vehicles Affected: Any vehicle that idles or runs at 14.8 volts or higher. Newer GM/Ford trucks, newer Jeep Wrangler, some hybrids.

Improvement and Solution: SD500.4s built on or after NOVEMBER 2011. SD800.5 built on or after AUGUST 2011 have this improvement and operate up to 15.8 volts without any problems. Build date is located on the bottom of the amplifier, gift box and master carton.

All SD300.1, SD600.1, SD1300.1, SD200.2, and SD1300.5 operate up to 15.8 volts with no issues.

IN VERY FEW CASES SD AMPLIFIERS MAY AFFECT RADIO RECEPTION

Symptom: Poor or no radio reception after installing an SD amplifier.

Problem: All class D amplifiers emit varying amounts of EMI (Electromagnetic Interference) on the speaker and power wires. The location of the speaker and power wires near the antennae can interfere with radio reception. This is true for many class D amplifiers not only the SD series.

Vehicles Most Likely Affected: European vehicles (BMW, Mercedes, Audi, VW), any vehicle with an amplified rear antennae. Other cars are unlikely but are still possible to exhibit this issue depending on the wiring locations.

Solution and Units Affected: Move the amplifier and all power/speaker cables (including amplifier ground location) as far away from antennae as possible.

SD300.1s built DECEMBER 2011 AND AFTER are very unlikely to interfere with radio reception.

SD300.1s built BEFORE DECEMBER 2011 may interfere with radio reception in rare/certain installations.

SD600.1s and SD1300.1s are very unlikely to interfere with radio reception.

SD200.2, SD500.4, SD800.5 and SD1300.5 may interfere with radio reception in rare/certain installations. Starting with SD500.4 and SD800.5, we anticipate to have improved models with little to no affect on radio reception during the 2nd quarter of 2012. More updates will follow.