

Rushmore Radio Flash Tech Bulletin

A common question we seem to receive is below. We hope this document clarifies your situation!

"Customer complains that the sound the radio outputs differs when the engine is running.

"Less bass when running, then annoying quality transitions when engine shuts down."

My questions:

Is this just a 2019 radio thing?

Isolated to this bike?

Sound system specific?

Or whatever insight you might have."

I am pretty sure we have covered this...a time or two, however, multiple companies keep changing their "flash" which adds confusion instead of real customer support.

This symptom is due to an improper flash which is a result of an aftermarket manufacturer's concern of analog fade. No one can retain digital fade, and to reduce one tech call, they sacrifice this tech call.

Their flash is still causing a factory style curve, indicated in the attached picture in green that looks more like a silhouette of a mountain ridge. We want the other flash (Soundz Flash) indicated in blue which is an almost completely flat curve.

By using the Soundz flash, you are not only obtaining the flat output response, but reducing the high output voltage, reducing the higher distortion caused by a radio output IC change at half volume, and eliminating the bass algorithm that is built in on any 0 amp flash.

What the customer hears with a zero-amp flash is a heavily boosted bass when the bike is sitting still. This is ok with low power and low volume, but not with a high power, high volume aftermarket system.

Also, under a 0-amp flash, the EQ and bass algorithm change drastically once the engine is running to a lower bass response curve in order to save the speakers from damage and reduce heat on the radio.

This should also explain why anyone trying to use one of the 0 amp flashed and any analog type of signal correction (DSP, line leveler) cannot truly solve the problem for both engine off and engine on. They can only solve for one or the other and even so, they cannot fix the higher distortion of the output IC change, nor the bass algorithm.

