

## Troubleshooting Noisy or Static Display of Reversing Cameras on Volkswagen / Audi / BMW head units with a Running Engine

- Symptom of reverse camera failure:

Backup camera image is static or jumpy.

Makes noise when engine is running but works fine when the engine is off.

No camera signal input to the screen.

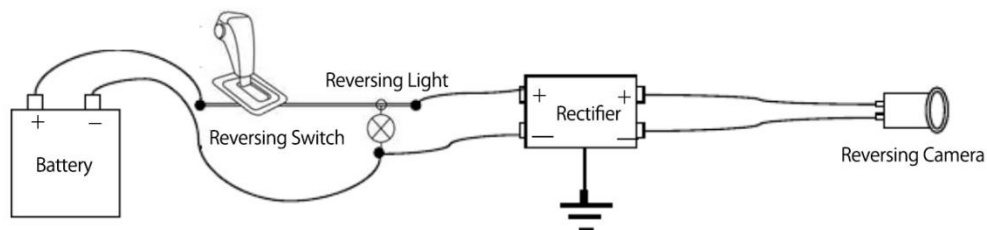
- Main cause:

On most Volkswagen, Audi and BMW vehicles, the output voltage will cause interference once the engine is running and the reverse camera will be feed with impulse signal power. The impulse signal causes unstable voltage to the reverse camera instead of stable direct current, which in turn causes the camera not to work correctly.

- How to fix it?

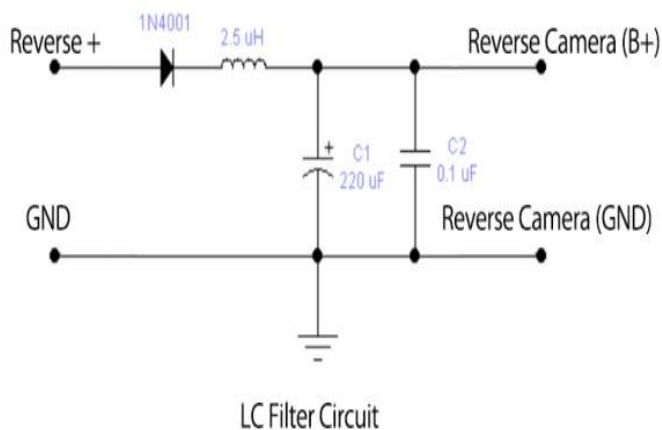
1. Get a rectifier for your camera and follow the wiring instruction below:

(A rectifier is an electrical device that converts AC to DC. AC occasionally reverses direction and DC flows in one direction only.)

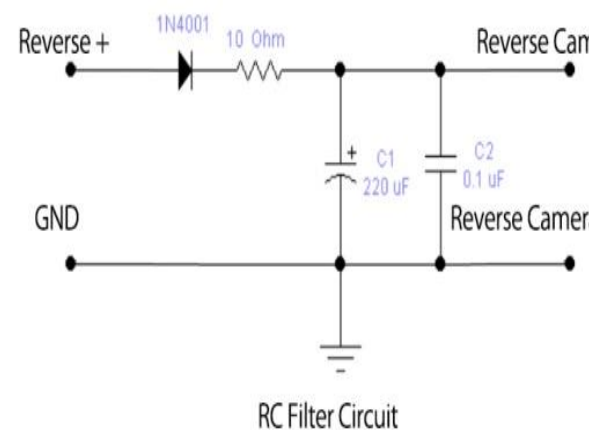


2. Build a L-C or R-C filter for your reverse camera as shown in the diagram below or find more instruction online:

When choosing capacitor, ensure the capacitor voltage rating supports the voltage of your application. 110uF or 220uF is a good choice for C1 and 0.1uF ceramic capacitor for C2, also keep the resistance below 20Ω



LC Filter Circuit



RC Filter Circuit

3. Add a relay: This way is applicable for the vehicles with normal B+ power output.

The camera is fed by B+, the reverse camera control wire on the head unit will control the relay.

The following relay is most commonly found in stores:



Please use the following diagram:

1 is for parking lamp

2 is grounded

3 is for B+

5 is for the positive output of your reverse camera

If you still have any questions about connection of a rear view camera bought from XTRONS , please write to our technical support, and we will do our best to help you.