1. Principle

A ground loop through receivers caused by antenna connection is very common if you have your computer connected to the same system. This type of ground loop problem can be solved by using suitable galvanic isolation between your receiver and the antenna cable:

The antenna isolator is build by a simple high frequency broadband transformer. The input / output impedance is 50 Ohm (ratio = 1:1), therefore you can also invert the connections.
- Antenna isolator -
for receivers
2. Kit parts

The kit include:

- PCB board 46x15mm, dual layer
- 2 pcs. BNC - Female (UG1094)
- BNC male-male adapter (UG491)
- broadband transformer MINICIRCUITS T1-1
- heat shrinkable tube
- Antenna isolator -
for receivers

3. Assembly

Solder the transformer and the connectors:
- Antenna isolator -
for receivers

3. Assembly

Place the pcb in the heat shrinkable tube:

Shrink the tube with a hot air gun or a small flame (please be careful !!):
- Antenna isolator -
for receivers

4. A usage example
- **Antenna isolator** - for receivers

5. Technical specifications

- Input/output impedance: 50 Ohm (1:1 ratio)
- Insertion loss: max. 1 dB (2-50 MHz) / 3 dB (0.15-400 MHz)
- **Maximum RF Power**: 0.25W

![Graphic representation of technical specifications](image-url)