

# AOR® GT-1 Galvanic Isolation Transformer

GT-1 is an isolation transformer which, when connected between a receiver and an antenna, greatly reduces local noise by breaking the ground loop effect between antenna and receiver. Typical noise sources are switching power supplies, such as those used for receivers and computers.

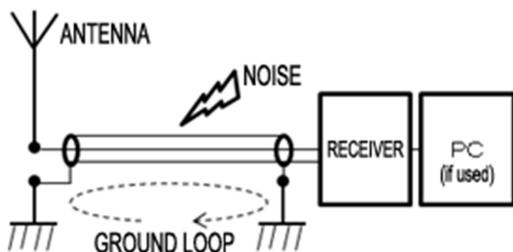
## Main features:

- Reduce or suppress ground loop induced noise
- Very efficient noise reduction in a PC controlled receiver environment.
- Great performance in LF and MF bands (40kHz~3MHz)
- Protects the receiver from electrostatic discharges from the antenna
- 40kHz~30MHz Wide band coverage from low frequencies to shortwave.

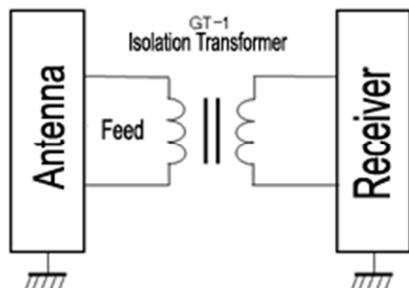
## Operation principles:

In a city environment where a good quality grounding is not available for your receiving station, a "ground loop effect" can occur and greatly affect your listening experience with unwanted electrical noise. This is particularly true for PC controlled receivers such as SDR receivers.

The "ground loop effect" occurs when the receiver ground and antenna ground have different potentials, thus being a major cause of noise and interference originating from other electrical equipment such as switching power supplies. This noise can block the signal you want to receive.



GT-1 will break this ground loop and by Galvanic isolation filter the noise out of the signal before it reaches the receiver's antenna input.



GT-1 circuitry



## Operating instructions:

Using the GT-1 is very easy!

Just connect your antenna cable to the GT-1 socket marked "ANT", and connect the other socket marked "RX" directly to the antenna input of your receiver. If you lack space behind your receiver, just use a 10 to 20cm long (non-supplied) coaxial BNC cable between the receiver and GT-1.

GT-1 will reduce or even suppress "ground loop" induced noise by trapping the noise before it enters the receiver.

GT-1 is not effective for suppressing noise not caused by the ground loop effect.



GT-1 connected to a receiver

## SPECIFICATIONS

GT-1 Galvanic Isolation Transformer

Frequency range	: 40kHz ~ 30MHz
Insertion loss	: Up to 3dB
Input/output impedance	: 50Ω unbalanced
Connector type	: BNC (F) (receiver side) : BNC (M) (antenna side)
Sizes (connectors excluded)	: 34.5 x 50 x 25mm
Weight	: 50g

**GT-1 is for RECEIVE ONLY. Do not transmit with it!**



AOR, LTD.  
2-6-4 Misuji, Taito-ku, Tokyo 111-0055, Japan  
Tel: +81-3-3865-1695 Fax: +81-3-3865-1697  
www.aorja.com

