

RCA L/R Ground Loop Noise Isolator

Audio Hum & Buzz Eliminator for Home Theater, Car Audio, Amplifier Systems

Model No.: GI-RCA-M

Version: v2.1

The flykantech.com GI-RCA-M RCA L/R Ground Loop Noise Isolator is designed to eliminate unwanted hum, buzz, and low-frequency noise caused by ground loop interference in analog audio systems. It effectively isolates ground potential differences between connected devices, ensuring stable and clean audio signal transmission. Built with a passive isolation design, U101 requires no external power supply and provides reliable plug-and-play operation. The RCA male-to-female inline structure allows easy integration into existing audio chains without modifying system wiring. With a wide frequency response from 20Hz to 20kHz and low insertion loss, the GI-RCA-M maintains original audio signal integrity while significantly reducing noise interference. Its compact and lightweight design (approx. 60g) makes it suitable for both fixed installations and portable audio systems. This model supports flexible input/output usage and is compatible with a wide range of RCA-based audio equipment.



Features

- Dedicated Ground Loop Noise Eliminator
- RCA L/R male ×2 to female ×2 inline design
- Input/Output interchangeable use
- Passive Design, No Power Required
- Metal enclosure protects against magnetic fields
- Low insertion loss for minimal signal degradation

Applications

- Professional audio studios and recording setups
- Live sound and concert systems
- AV installations in commercial or corporate environments
- Mixer, amplifier, and DAC signal protection
- Broadcast and streaming setup

Specifications

Audio circuit type	Passive, transformer based
Transformer	Custom made Eclipse
Number of channels	2
Frequency response	20 Hz – 20 kHz
Nominal Impedance	Supports 600 Ω load
GROUND LIFT	N/A
Connector	RCA L/R Female x 2 RCA L/R Male x 2
Construction	Metal+ABS
Power	Passive, no power required
Size (L x W x D)	70 x 23 x 16.50mm (Main Body)
Weight	App. 60g

Input-Output Connections

Input	RCA L/R Female x 2	Output	RCA L/R Male x 2
Note: The GI-RCA-M is bidirectional design.			

What is Ground Loop Noise and what Causes it?

- Radio system draws power from a power system.
- Frequency of oscillation of the powerline and its harmonics
- Radio system connects to an unbalanced speaker system.
- Different voltage exists between two different ground connections of separate electrical devices connected to the same ground system within an enclosed system.
- Magnetic capacitance or inductance on a signal cable
- Power transformer that feeds the circuit