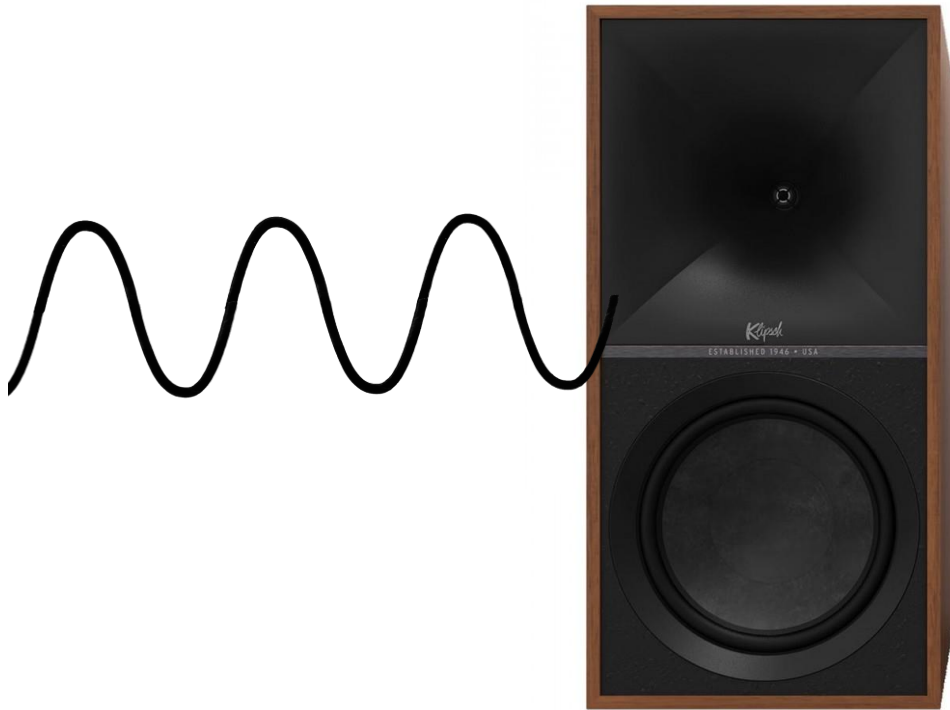


# iDefender Max Tech Lowdown

# iDEFENDER MAX



# Ground Loops Explained



A ground loop simply means there are multiple paths to ground in your system.

Slight differences in potential between these points can cause current to flow through the ground connections, resulting in interference, noise, or hum through your speakers or headphones.

This hum is persistent, annoying, and ruins the enjoyment of listening.

# Diagnosing Audio Noise

You can easily diagnose and locate ground loop issues.

By touching a metal chassis in your audio setup, listen to whether there is a change in your hum or buzz.

If there is no audible change, it is most likely that you have a ground loop from multiple earth connections.

## Diagnosing audio hiss

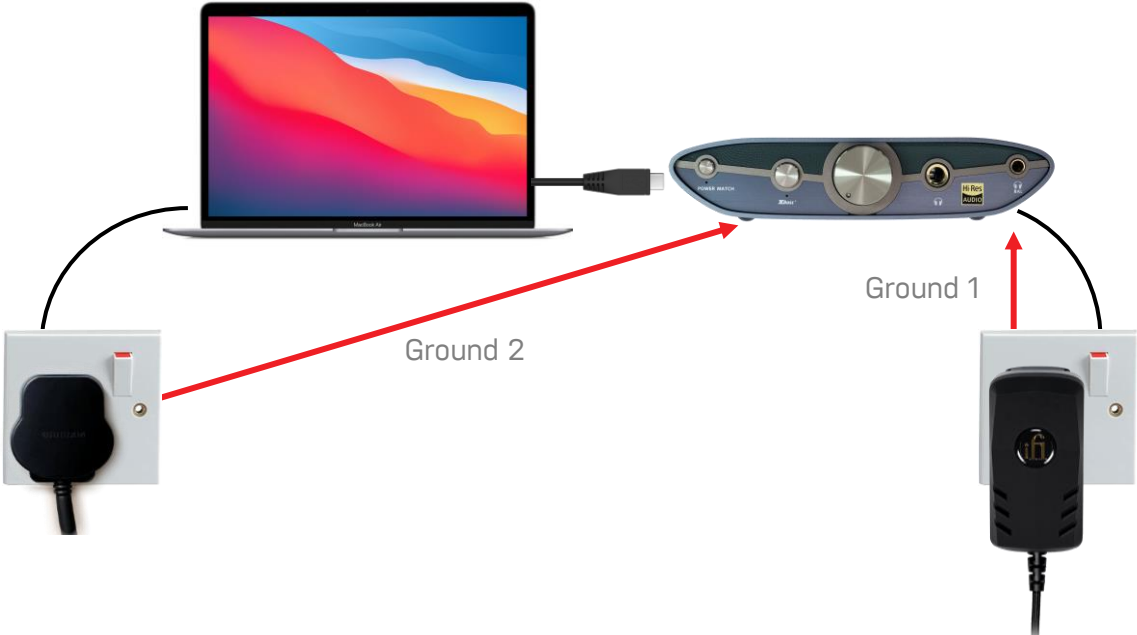
- 1) Touch the music device
- 2) Is the hum/hiss/buzz reduced?



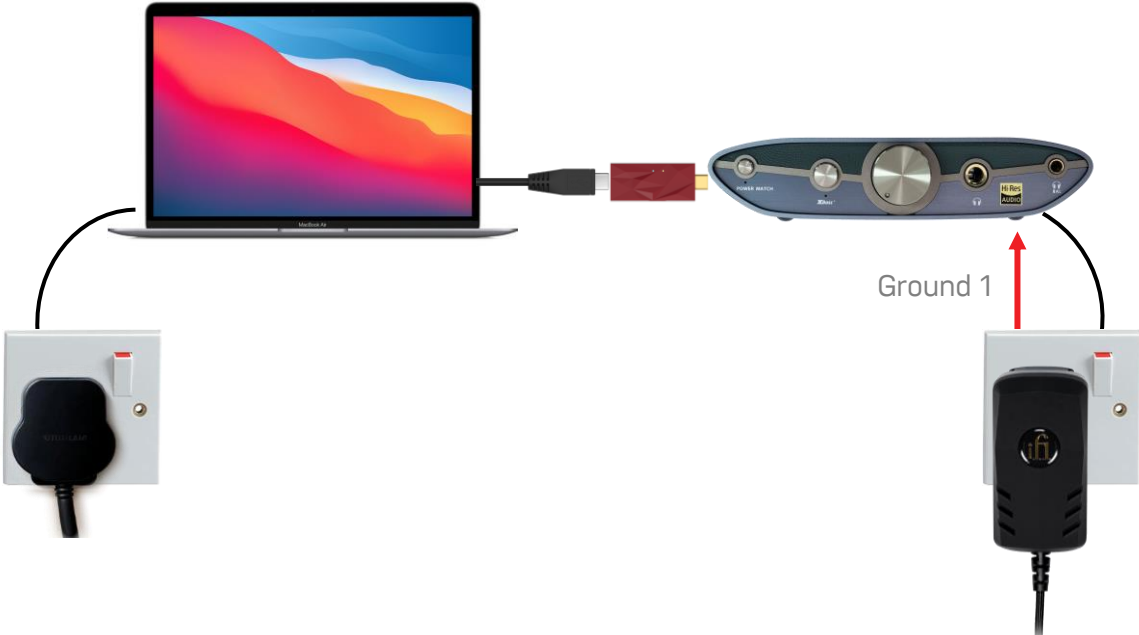
# Removing Ground Loops

iDefender Max eliminates hum and noise in your Computer Audio System by intelligently disconnecting the PC's earth.

Excess Ground Connection



Single Ground Connection



# Retains Safety

The iDefender Max is intelligent in how it removes excess ground connections – it does not compromise equipment or user safety.

Unlike other ground lifts, iDefender Max will automatically reinstate a ground connection if a current-based fault is detected and features built-in surge protection with an overload rating of 275A.



# Maximum Compatibility



The input of the iDefender Max now supports up to **100W (20V/5A)**.

This greatly expands the list of devices it is compatible with and removes it from the confines of USB DAC applications.

# Interference Immune

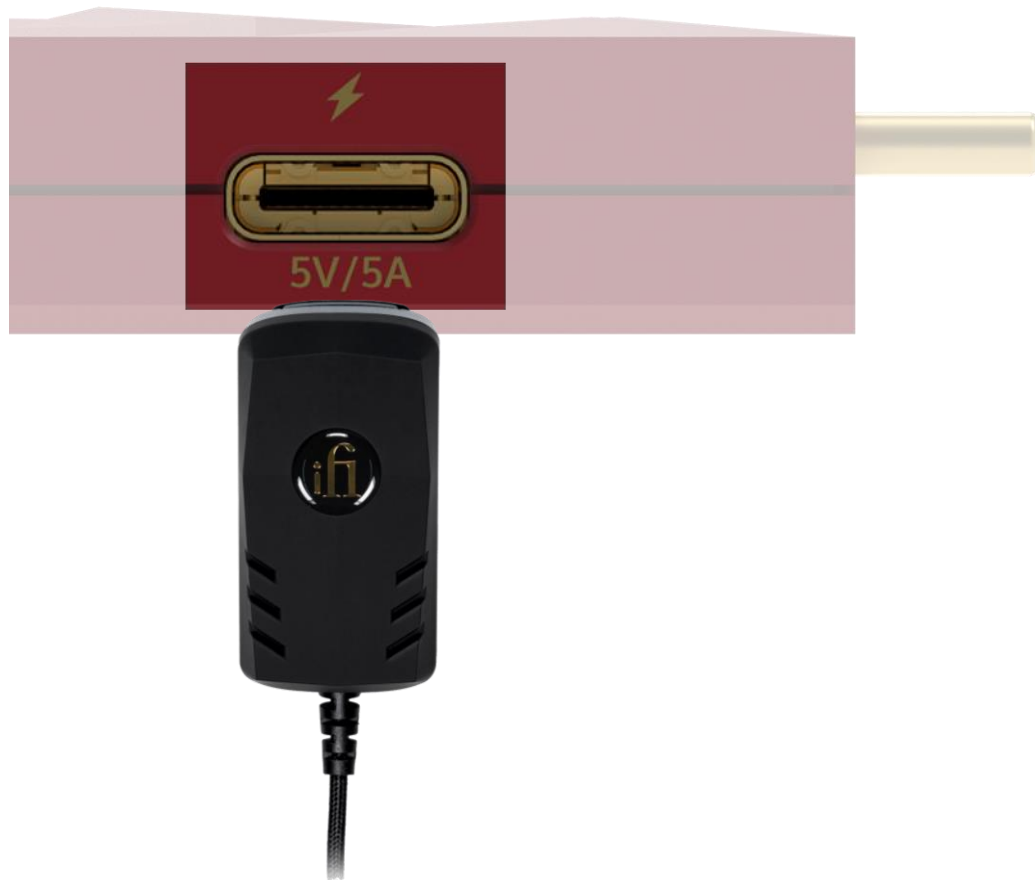
The aluminium housing of the iDefender Max is not just for durability.

The chassis acts as a heatsink, enhancing cooling performance of the unit.

It also ensures for complete shielding against Electromagnetic Interference (EMI).



# Unleash The Power



iDefender Max features a side USB-C port for separate, clean external power.

This disconnects the USB power from the PC and replaces it with a cleaner, more audiophile-grade solution – such as the SilentPower iPower2.



# Speed Without Compromise

iDefender Max supports USB 3.0 high-speed data transfer, significantly faster than USB 2.0 standards.

This means that it does not impair playback of hi-res audio files, regardless of quality or file size.

USB 2.0: 480 Megabits per second

USB 3.0: 5 Gigabits per second

# Key Features



IsoGround technology breaks ground loops without compromising equipment safety



USB Noise Termination effectively cuts noisy USB power at the input



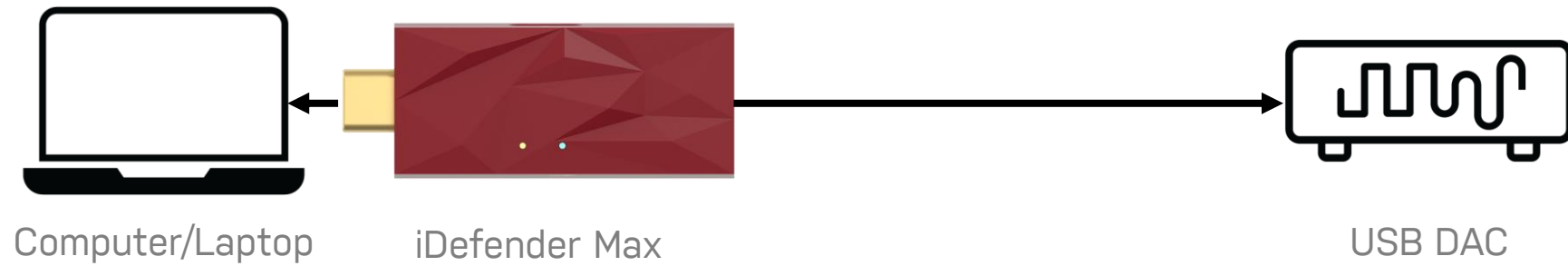
Dedicated USB-C port ensures clean external power input



Supports up to 20V/5A power for maximum compatibility

# Connections

iDefender Max offers a simple, plug-and-play solution for effective ground loop removal.



# Specifications

iDefender Max	
Input/Output	USB-C
Compatibility	USB 3.0
Max. Power Support	Up to 100W (20V/5A)
Dimensions	51.3 x 20 x 12mm (20 x 0.8 x 0.5")
Net Weight	21g (0.74 oz)
Limited Warranty	12 months*

*\*12 months typical or as permitted/required by local reseller laws.*

*\*\*Specifications are subject to change without notice.*

# Diagnosis Flow Chart

