## IDEFENDER MAX





#### Summary

"Pure, Pristine Sound Awaits."

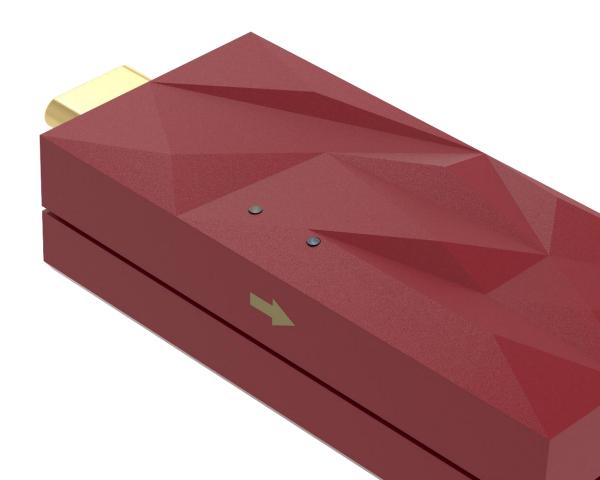
Intelligent USB-C Ground Loop Breaker and USB Power Injector

#### USPs:

Intelligently Breaks Ground Loops
Terminates USB-C Noise

#### Features and Functionality:

Dedicated USB-C Port for Clean Power
Supports up to 20V/5A
High-speed USB 3.0 Data Transfer
Aluminium Housing Enhances Cooling and Durability





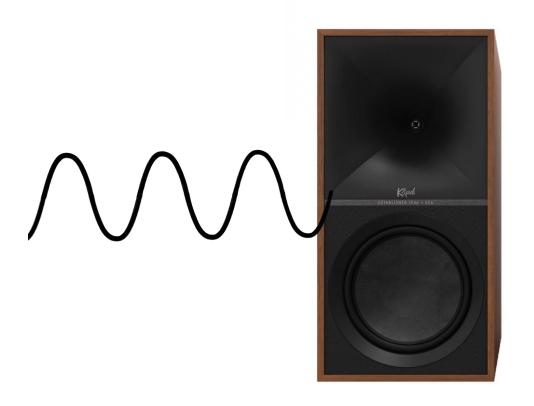
#### Story and Tagline

We know how crucial it is for you to disconnect and immerse yourself in your favourite music. Whether you're relaxing after a long day or losing yourself in the rhythms of your favourite songs, the clarity of your audio is paramount.

However, excess earth connections often introduce ground loop noise, causing irritating hum in your speakers or headphones – significantly detracting from your listening experience.

The iDefender Max removes unwanted earth connections to resolve annoying ground loop hum, bringing you closer than ever to the music you love.

"Pure, Pristine Sound Awaits."



#### What is a Ground Loop?

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.



#### How to Diagnose

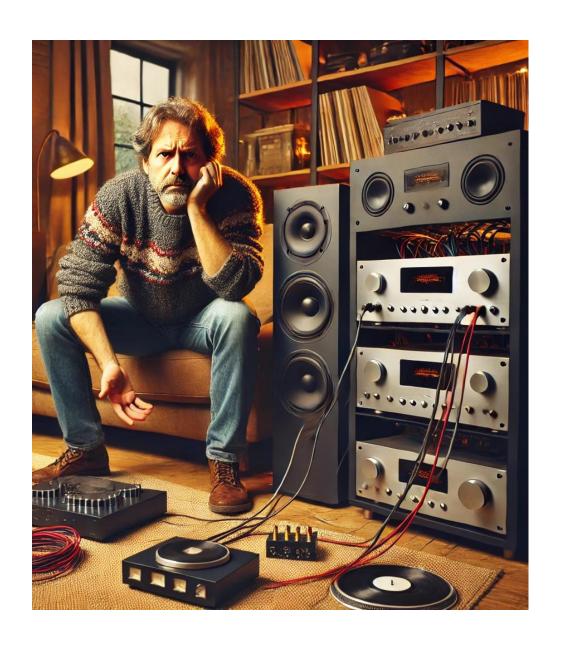
You can easily diagnose and locate ground loop issues.

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.







#### Target Audience

Demographics: 20 years +

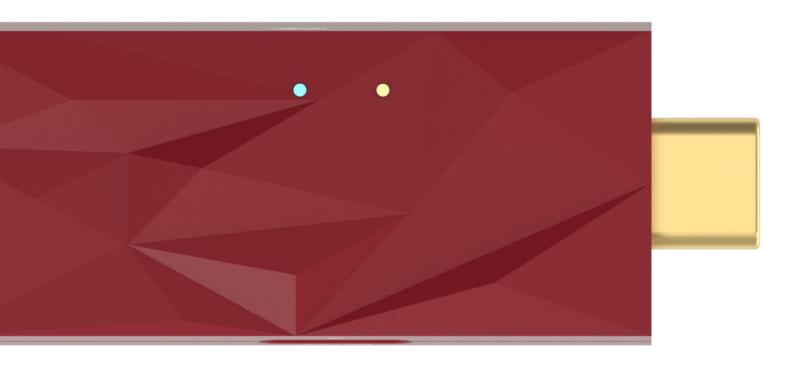
**Need for iDefender Max:** Wants to remove distracting and noisy ground loops interfering with their audio or video system, without compromising equipment safety.

#### **Categories:**

CAS Audiophiles, Home and Recording Studios

#### Usage:

USB DACs, Audio Interfaces, USB Microphones, USB Speakers



## Unique Selling Points



#### Get Shut of 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**





#### **Retaining 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, sending excess current directly to earth.





## **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.

#### Immune to Interference

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



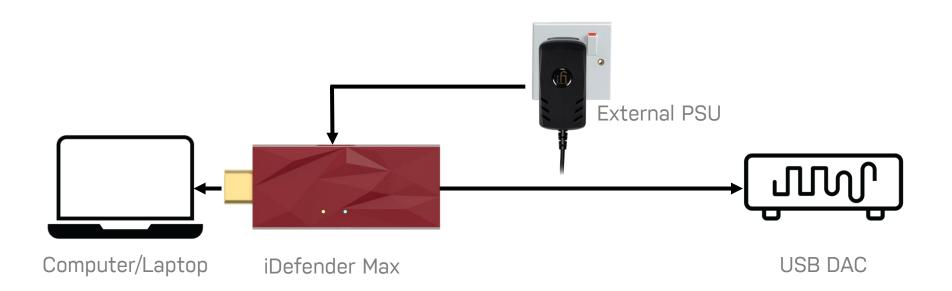
Dedicated USB-C port ensures clean external power input



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

#### Connections

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



## Appendix





## Compared to iDefender+





iDefender+	iDefender Max
£59	£79
IsoGround Technology	IsoGround Technology
5V/1A	20V/5A
Terminates USB Noise	Terminates USB Noise
Dedicated USB-C Power Input	Dedicated USB-C Power Input
Super-Speed USB 3.0	Super-Speed USB 3.0
Polymer Housing	Aluminium Housing for Improved Cooling and Durability



## **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*

<sup>\*12</sup> months typical or as permitted/required by local reseller laws.
\*\*Specifications are subject to change without notice.



#### Contents

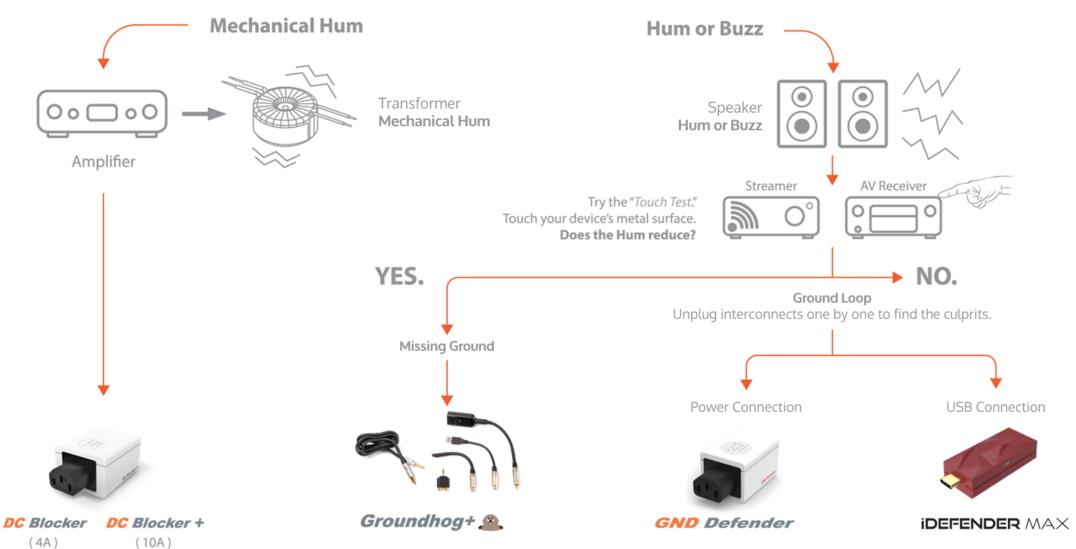








## Diagnosis Flow Chart



# Silent Power by ifi