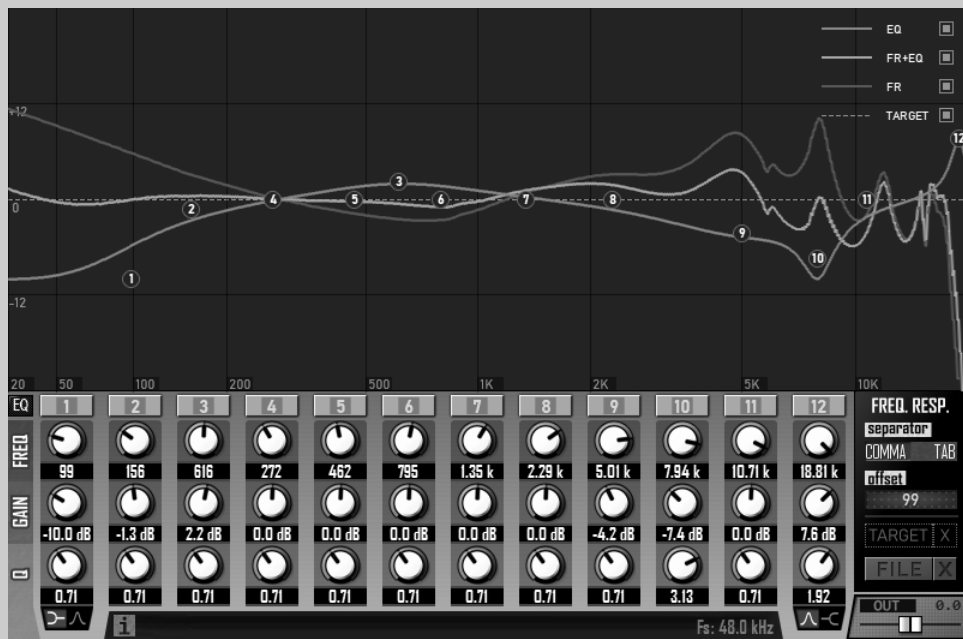


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# RFLATHEADPHONES MANUAL



## TABLE OF CONTENTS

<u>Installation</u> .....	3
<u>GUI (Graphical User Interface)</u> .....	4
<u>Basic Operation</u> .....	4
<u>General Overview</u> .....	4
<u>Usage</u> .....	5
<u>Display Section</u> .....	5
<u>EQ Section</u> .....	6
<u>Frequency Response File Section</u> .....	7
<u>Out Gain Section</u> .....	9
<u>GUI Resizing</u> .....	10

## Installation

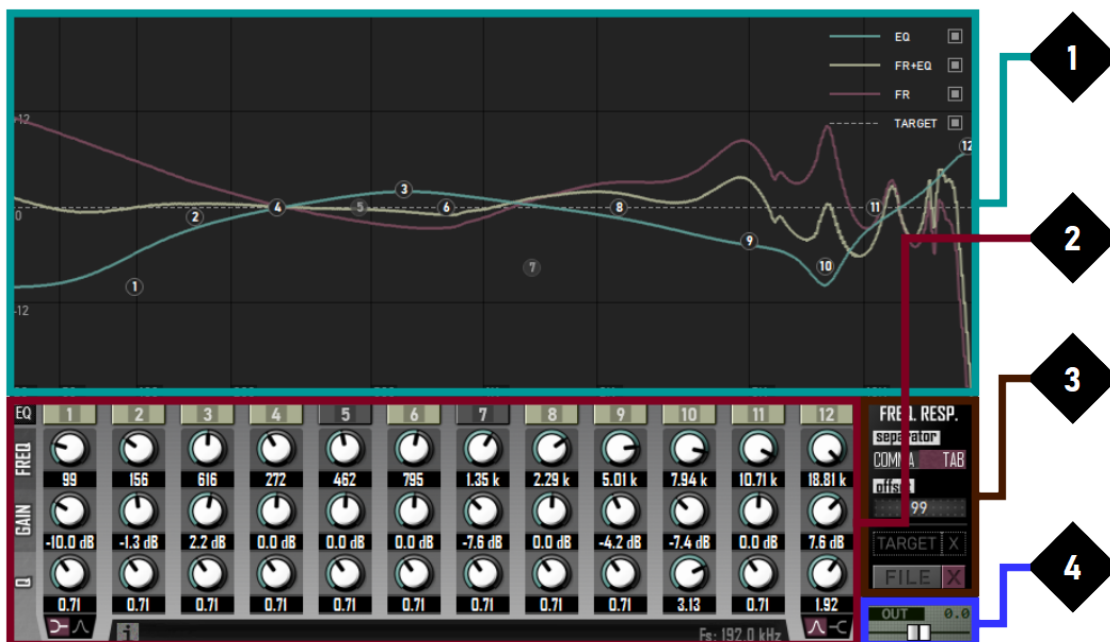
Unzip the downloaded file and copy the desired plugin formats into your DAW's plugin path.

# GUI (Graphical User Interface)

## Basic Operation

- **Double-click:** Resets the parameter to its default value
- **Right-click:** Opens a prompt to manually enter the parameter value
- **(Left Click + Drag) / Mousewheel :** Adjusts the parameter value

## General Overview



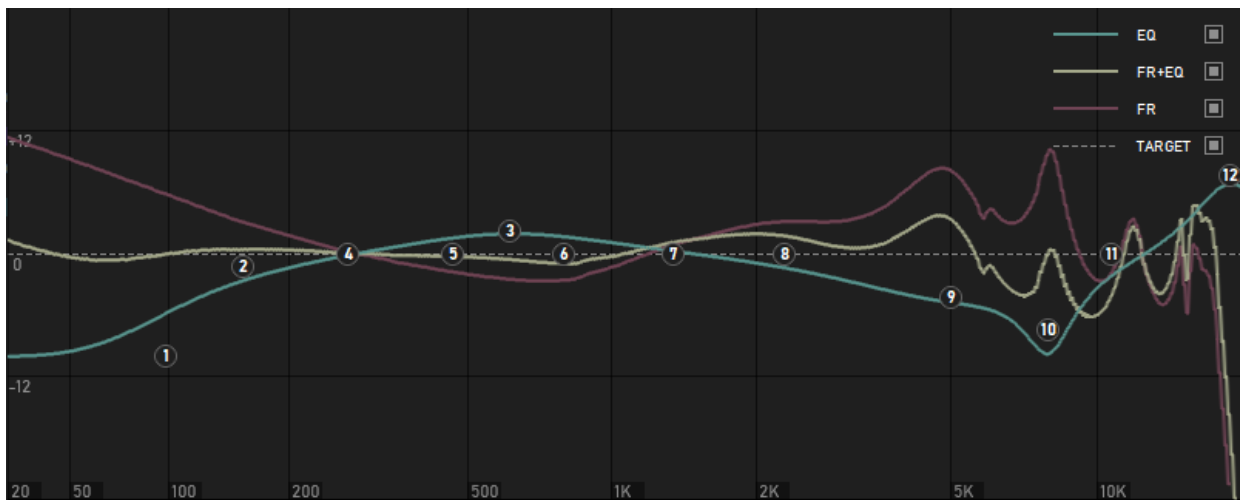
1. Display Section
2. EQ Section
3. Frequency Response File Section
4. Out Gain Section

# Usage

## Display Section

Turn ON/OFF the switches located in the upper right corner to show/hide the desired graphs:

- **EQ** : Equalization applied
- **FR+EQ** : Frequency response file + Equalization applied
- **FR** : Frequency response file
- **TARGET** : Default target



As with any equalizer, the X-axis represents frequency and the Y-axis, amplitude.

## EQ Section

You can turn **ON/OFF** any of the 12 filters using the square buttons located at the top of the section.

You can also completely bypass the EQ using the button located in the top-left corner (**Note:** This button does not affect the out gain parameter).



Bellow every button there are a **frequency**, **gain** and **Q** knobs for the respective filter. Every filter is a **“Peak”** filter, but the filters 1 and 12 have a switch for selecting a **“Peak”** or a **“Low-Shelf”/“High-Shelf”** filter respectively. If you are not familiar with these filter types, you can get an idea of what they are doing simply by observing the EQ graph.



Finally, at the bottom of the section, there is a button on the left to open the splash screen, and on the right, a label displaying the detected sample rate (this is the value provided by the DAW and cannot be edited here)



## Frequency Response File Section

### First, a little context

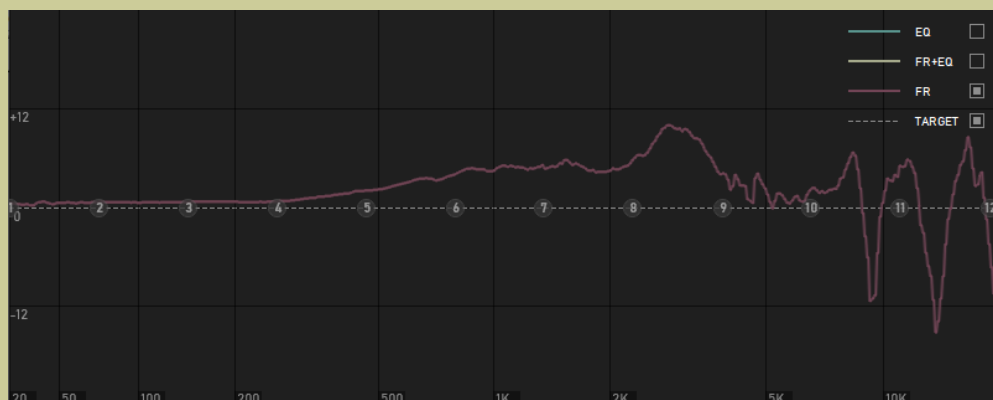
#### What is a Frequency Response File?

It's a text file (usually a .txt or .csv file) that describes how your headphones, IEMs, or monitors behave across the frequency spectrum.

This file has two columns of data: frequency and amplitude/gain. Here is an example of how the file may look (in this case, values are separated by tabs):

Line	Frequency	Amplitude/Gain
1	20	92.160591
2	20.290906698750476	92.160591
3	20.586044732869844	92.15105426705523
4	20.885475648548283	92.13486404969247
5	21.189261887185914	92.12640629916557
6	21.49746679841394	92.13601418857496
7	21.810154653305165	92.1561212745531
8	22.12739065777668	92.18000302155625
9	22.449240966187475	92.19778552073211
10	22.77577269513385	92.19564411119224
11	23.107053937445478	92.17632576006295
12	23.44315377638505	92.14954850766166
13	23.784142200054445	92.12000154254026

And heres an example of how it looks as a graph inside RFlatHeadphones:



## Where can I obtain a frequency response file for my headphones / iems / monitors ?

At the time this manual was written, there are many good websites available where you can find frequency response files for your headphones, IEMs, or monitors. One popular example is Squiglink (<https://squig.link/>), although there are many other alternatives depending on your preferences.

First, there is the **separator** switch, which allows you to choose the separator type used in your frequency response file (commas or tabs). You can change this setting at any time, even after loading your frequency response file.



Below it, there is a slider that lets you apply a gain boost to the data in your frequency response file. This can be useful because, depending on the source of the file, the amplitude values may not be normalized (i.e. The default amplitude value isn't 0)



Then, we have the target file loading and unloading buttons, which are not yet implemented.



Finally, at the bottom of this section there is a button labeled "FILE", which allows you to load your corresponding frequency response file. To the right, the "X" button allows you to unload the currently loaded file.



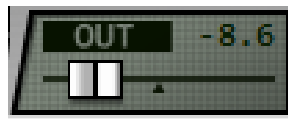
## Out Gain Section

Adjust the fader to control the final output gain applied to the signal.

To set a manual value, right-click the fader and enter the desired value (-12 to +12).

**Note 1:** The value is measured in decibels (dB).

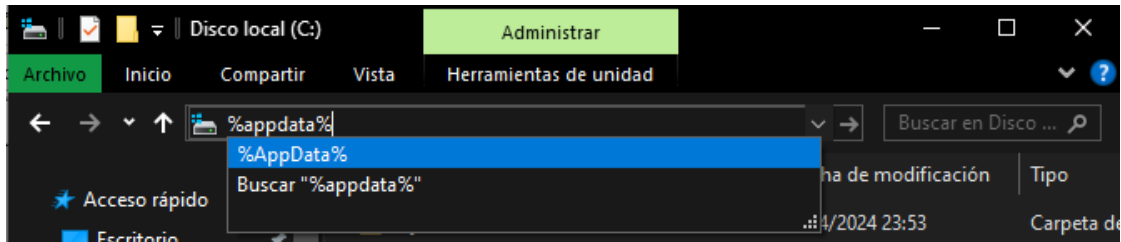
**Note 2:** The output gain is applied after EQ processing



## GUI Resizing

If this is your first time using the plugin, run it once to create the necessary files. If you have already run the plugin before, proceed to the next step.

Type `%appdata%` into the Windows File Explorer address bar and press **enter**, as shown in the following image:



Open the folder named **RflatHeadphones**, and edit the text file inside it. Type the desired GUI scale value, for example:

- **100** -> 100% (original size)
- **200** -> 200% (double size)
- **50** -> 50% (half the original size)

Save the file and restart the plugin for the changes to take effect.