

# **ELECTRI-Q**

## **MANUAL**

**Tunafish Edition**

© 2005 - 2006 by AIXcoustic Creations  
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<http://www.AIXcoustic.com/>  
VST Technology by Steinberg

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## Welcome

Thank you for downloading and using **AIXCOUSTIC** CREATIONS equalizer 'ELECTRI-Q Tunafish Edition'.

This EQ is made for processing your sound as directly as possible. No need to tweak virtual knobs, everything is done directly in the frequency domain.

Due to its flexibility the EQ can be used both for mastering and as everyday track-EQ. Therefore 'ELECTRI-Q Tunafish Edition' ships with several different algorithms.

The algorithm 'Analog' is based on a real analog circuit and thus it delivers a subtle warmth. Its counterpart is the algorithm 'Digital' which delivers a more transparent sound.

These algorithms use minimal phase filters. This will result in a better impulse response compared to linear phase filters.

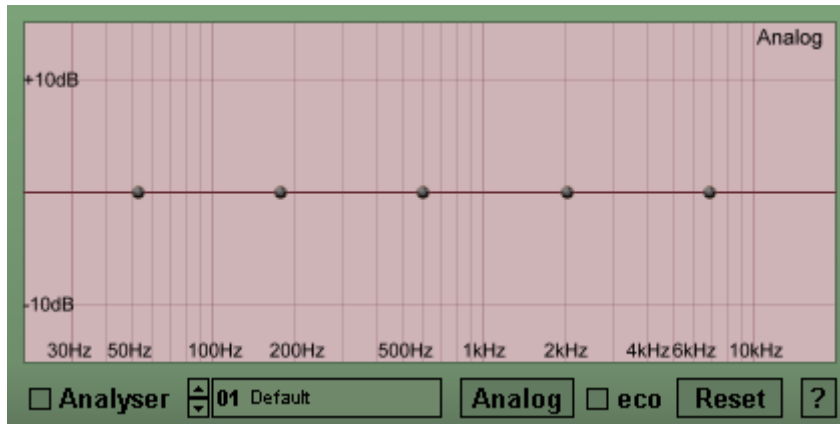
The full version also contains a linear phase and maximum phase mode and several extras.

In order to get the most out of the 'ELECTRI-Q Tunafish Edition', please spend a few moments reading this brief manual.

## Installation

The installation of 'ELECTRI-Q Tunafish Edition' is very easy. Simply put the DLL in your Tunafish directory and select it as VST Plugin inside Tunafish.

## The Plugin



Adjusting the equalizer is very simple and intuitive. Just drag one of the dots to the desired frequency (x-axis) and the desired gain/attenuation (y-axis).

Likewise, adjusting the bandwidth is simple, too. The simplest way to do so is by using the mouse wheel. Just place the cursor over the dot you want to adjust. Now, just scroll with the mouse wheel to actually adjust the bandwidth.

If your mouse doesn't have a mouse wheel, you can also change the bandwidth by holding down both buttons on the mouse or by pressing the [ALT] key and moving the mouse up and down.

You can also hold the [CTRL] key to establish the gain/attenuation. Now all you can change is the frequency.

You can also carry out a similar action by holding the [SHIFT] key. Now you can only change the attenuation/gain.

With this kind of tweaking, the program switches to precision mode which allows more accurate adjustments to be made.

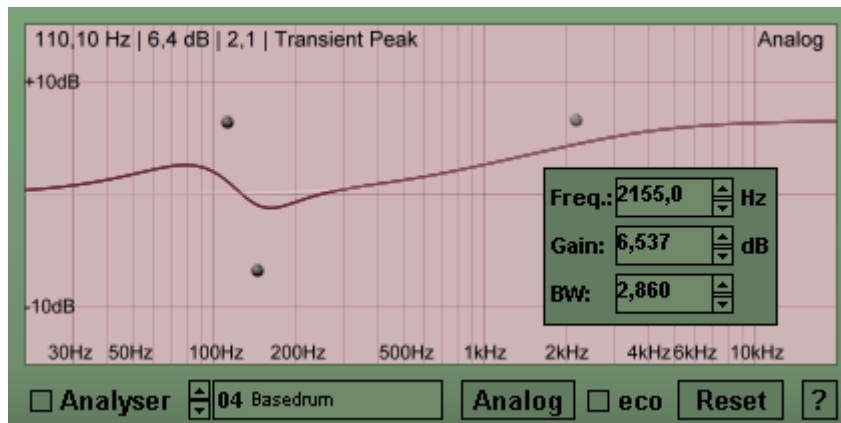
## Edit

To set up a single band in detail, you can also double-click on the chosen band to open a small editor with all the settings.

Within this editor every property of the band is shown in detail. Now you can adjust every value. To accept the change, simply hit enter.

By clicking on one of the labels you can also lock the value. Now you can move the dot around, without changing the value.

You can also drag the box away if it is blocking important parts of your EQ curve.



## Filter types

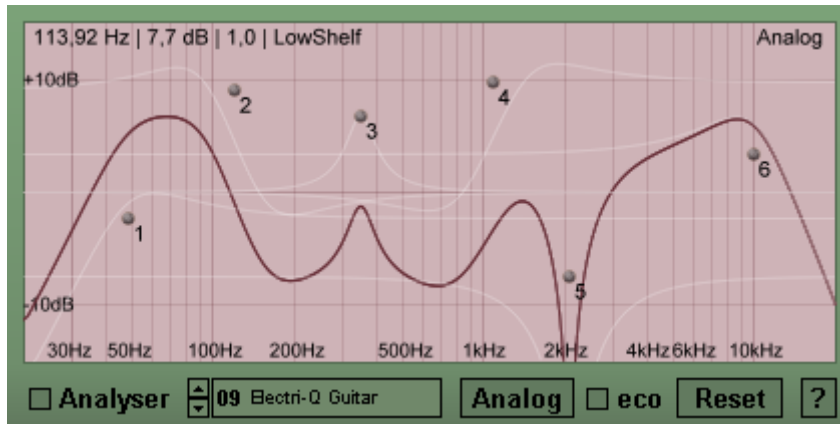
In Electri-Q you can choose between several different filter types. Generally, the right mouse button is reserved for selecting these.

A simple click will skip through the basic filter types. This skipping is dependent on the position of the chosen band. E.g. if you are clicking on the lowest band, you only have the ability to skip through peak, highpass or lowshelf.

If you hold the right mouse button for longer than 500ms, a pop-up menu with all the different filter types will appear.

See the following pages for a detailed description of the different filter types.

## Filter Types



*(Basic Filter Types)*

On the above screenshot 6, different basic filter types are shown. These are the most commonly used, called:

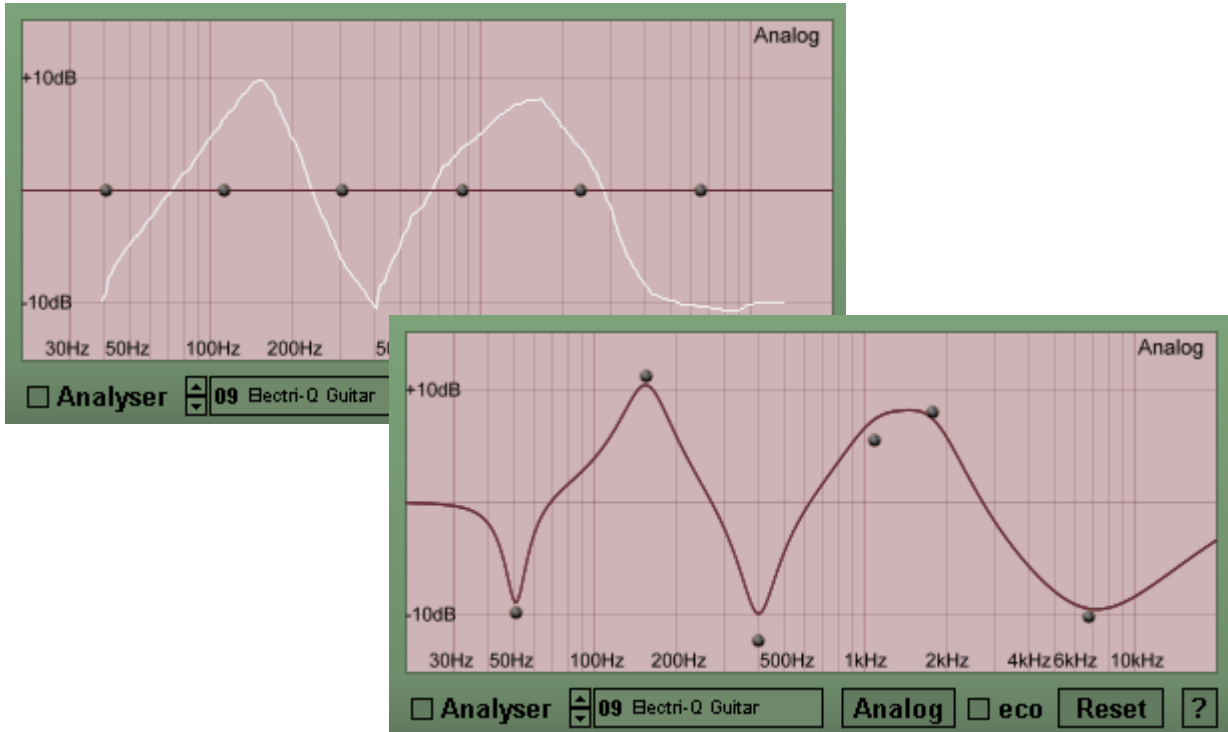
- [1] High Pass
- [2] Low Shelf Filter
- [3] Peak Filter
- [4] High Shelf Filter
- [5] Notch Filter
- [6] Low Pass

A detailed description about the filter types can be found at our homepage: <http://www.aixcoustic.com> inside the complete 'Electri-Q' manual.

## Draw

By using the right mouse button you can plot a desired EQ curve.

'ELECTRI-Q Tunafish Edition' uses a special algorithm to calculate an approximate set of filters. These can be used as initial values.



## **Analyser**

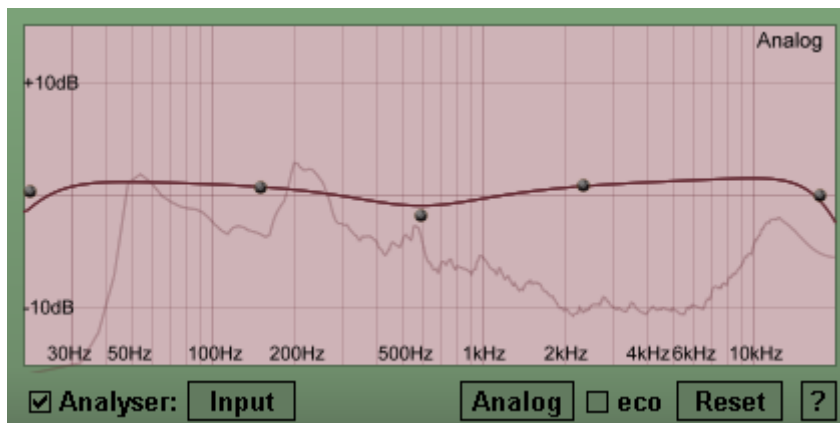
The spectrum analyser function of 'Electri-Q' visualises the frequency response. You can either choose to analyse the input or the output. Therefore, a button is presented if the analyser is switched on.

If possible, the spectrum of the audio signal will be completely in the visible range. The analyser has a special automatic gain control (AGC) which measures the average sound level of the signal and from this, calculates the necessary measurement area.

Within the first two seconds there will be an overshoot. This is needed to adjust the AGC algorithm.

The analyser is – as opposed to normal analysers – a psychoacoustic analyser. Here the mask effect of the ear is allowed for. Also the peaks in the spectrum with increasing frequency get smoothed.

Because of that, the handling of this analyser might be a bit strange at first, but after a short time, you won't know how you lived without it.





## Settings

'Electri-Q' has two different algorithms built in: 'Analog' and 'Digital'. The 'Analog' model is based on a transistor circuit, while the 'Digital' algorithm delivers a neutral, uncoloured sound. The 'Analog' algorithm uses about twice as much processing power compared to the 'Digital' algorithm.

In the lower area of the Electri-Q you see the following options.



In this area, you can activate/deactivate the built-in analyzer. If it is activated, you can also select your input or output to be analyzed – if desired. By simply clicking the button labeled [Input|Output], you can either analyze your input signal or output signal. This has been processed by the Equalizer.



To change between the different algorithms, use this button. The algorithms are described below:

### Analog

The 'Analog' algorithm combines the different filters by means of a modeled transistor circuit.

### Digital

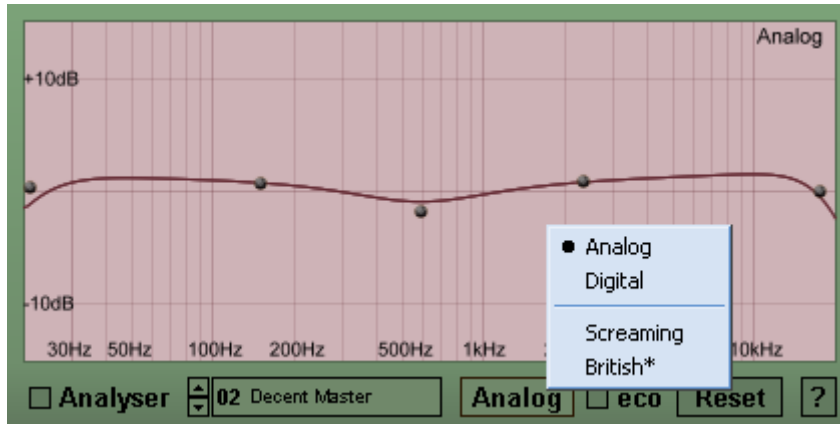
This algorithm combines all the different filters without any coloration.

### eco

Having 'eco' means you are in the economy mode. This leads to a dramatic reduction of the CPU-Performance, but also brings alias effects with it.

Be warned - in the analog mode this soon sounds very harsh and metallic, the warmth is lost.

## Modes



Beside the both standard algorithms 'Analog' and 'Digital' you also have several other modes available.

By right clicking the mode button, a menu will pop up, where you can easily choose your favorite mode.

The Screaming mode is a modified 'Analog' mode but with more soft distortion. With some filters it's a kind of 'Scream'.

The British mode is there for compatibility reasons with the 'posihfopit'. It is discontinued.

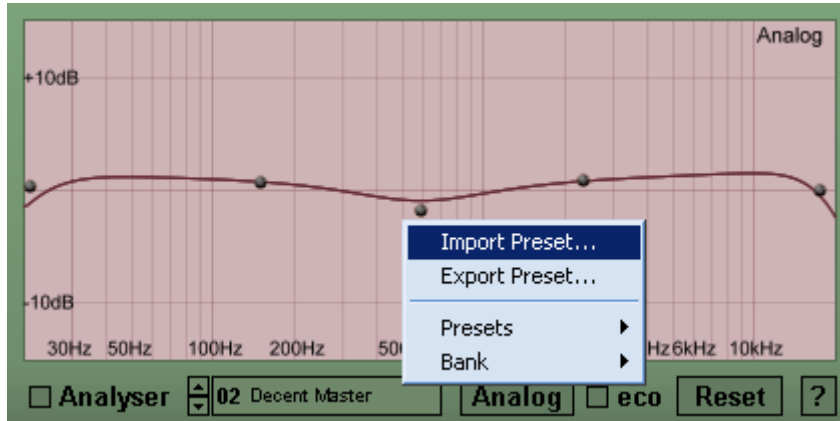
## Reset



With this button you can reset to the default 5 band preset which is loaded initially. With the full version it is possible to customize this preset. In that case the reset acts as reset to template.

## Presets

Using the preset panel, different settings of the EQ are accessible. Here you will find basic settings for the most commonly used instruments. From this starting point you can tailor the settings to your needs.



The preset panel presents you with the name of the preset currently being used and the program memory number. Using the right mouse button, you can import and export in several different file formats. The most robust format is '\*.e-q' a human readable XML file format.

If you have modified too much, you can select 'Recall Factory Settings' to reset to factory settings.

As stated above, the presets of 'ELECTRI-Q Tunafish Edition' are only presets in the sense of templates. This means that you are welcome to adapt these settings to your needs. For example if you'd like to adjust the fundamental frequency of a drum with a small bandwidth, you may need to find the fundamental frequency first. The fundamental frequency of drums is mainly defined by the size of the drum. This way it is nearly impossible to create a universal setting for a tom. If you need to find this fundamental frequency, you can use the analyser function of Electri-Q.

## ***Bands***

With 'ELECTRI-Q Tunafish Edition' you can work with up to 64 bands. It is very simple to add another band. Just drag the EQ curve to create a new band. It can be deleted by selecting it and simply pressing [DEL]. The minimum number of bands is limited to two, due to the design of the analog algorithm.

## ***More functions***

### **Randomize**

The randomize function [r] sets the EQ dots randomly using a gaussian shaped function around the 0dB line.

### **Shuffle**

The shuffle function shuffles every parameter a little bit. By holding the key down, you can let your EQ curve drift into the unknown.

### **Invert**

To equalize a track, it is common to gain a band first. Then one usually searches for a undesirable frequency to attenuate it afterwards. This attenuation can be done by using the invert button, which mirrors the selected band at the 0dB reference.

### **Complementary**

The complementary function will create a symmetrical copy of the second half of the filters. They are mirrored around the 0dB line. In the digital mode this has no effect, but in the analog mode, you can clearly hear the effects of the soft distortion caused by the algorithm.

**Shortcuts**

Key	Mouse	Function
--	Drag dot	Gain, Frequency
[SHIFT]	Drag dot	Gain, Frequency fixed
[CTRL]	Drag dot	Frequency, Gain fixed
[ALT]	Drag dot	Bandwidth
--	Both mouse buttons + drag	Bandwidth
--	Mouse wheel	Bandwidth
--	Drag aside dots	Mark several dots
--	Double click aside dots	Reset
--	Double click selected dots	Reset selected dots
--	Right mouse button	Draw
--	Drag curve	Create new band
[DEL]	--	Delete Band
[R]	--	Randomize
[I]	--	Invert
[C]	--	Complementary
[S]	--	Shuffle
[SHIFT]+[CTRL]+[ALT]	Mouse Move	Show Filter Number

## Feedback / Error report

We are always glad to receive your feedback so we can improve this plugin in the future. If you have questions or suggestions, please send an email to:

[techsupport@AIXcoustics.com](mailto:techsupport@AIXcoustics.com)

We hope you have lots of fun with our product.

## Version History

1.5.4	07/28/2006	First release of the 'Tunafish Edition'
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## Homepage

<http://www.AIXcoustic.com/>

## Credits

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