QB-3 was developed by **de la Mancha**
It is a 3-band EQ effect plug-in in VST format for Microsoft Windows based hosts.

This manual applies to QB-3 v1.1

INTRODUCTION

QB-3 is a vintage-style, 3-band EQ plug-in, with its own unique colouring and a few tricks up its sleeve. For each band you can adjust the centre frequency and gain. For the low and high shelving bands you can adjust the steepness of the slope, whilst for the mid peaking band you can adjust the bandwidth. This allows a range of sounds from steep, sharp cuts to smooth and gentle boosts.

But it's not a super clean and transparent plug-in. QB-3 features a pleasing combination of harmonics, saturation and low level noise to bring a subtle mojo to your sound. You also have the option to switch on a 40Hz cut to boost your low frequency headroom and a limiter to curb any peaks.

FEATURES

- Vintage-style, 3-band EQ
- Subtle colouring from a home-made blend of harmonics, saturation and low level noise
- Full Stereo processing
- Centre frequency adjustable for each band
- Gain adjusts positively and negatively for each band
- Low and High bands have adjustable slope, including negative 'resonant' like curve
- Mid band has adjustable bandwidth for narrow to wide curves
- Master gain control
- Optional 40Hz cut for low frequency optimisation
- Optional limiting on final output
- Non-linear knobs for precise control at small values, with double-click reset to default value
- Presets covering all functions and different configurations
- Updated to SE 1.1 to eliminate multi-instance bugs [*QB-3 v1.1*]

INSTALLATION

Installation is simple, just extract *QB3_1_1.dll* from the zip file and copy it into your VST directory. Install and load in your host program as you would any other VST effect

As QB-3 will install some module files into a sub-directory with the dll, you need to make sure that Windows folder permission rights for your VST directory allows this, especially in Vista where it may default to block this process

Install of QB-3 v1.1 will not overwrite the original QB-3 install, they will both be available in your host VST list

To uninstall, simply delete the *QB3_1_1.dll* file and the associated *QB3_1_1* folder from your VST directory

PRESETS & TWEAKING

The presets demonstrate the range of QB-3, from subtle to extreme. These presets can sound totally different depending on the source material and may seem too subtle or could clip/distort depending on the type and level of the material that you try it on. The settings will almost always need to be adjusted to suit the audio you are running through it. So the presets are a demonstration and a starting point, but you should expect to tweak each one a little if you want to get the best out of QB-3.

EQ BASICS

EQ is all about increasing or decreasing the levels of sections of the audio spectrum, to achieve a different balance of high, mid and low frequencies from the original signal. This can be subtle boosts or steep cuts depending on how much you want to change the audio.

This 3 band EQ gives you the opportunity to change the gain across 3 points in the spectrum.
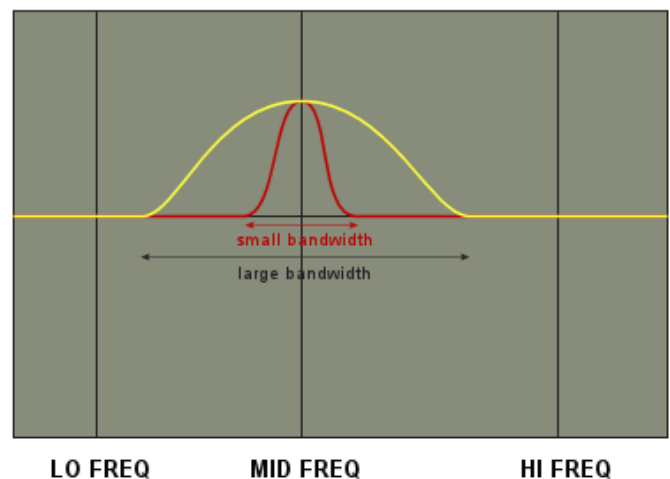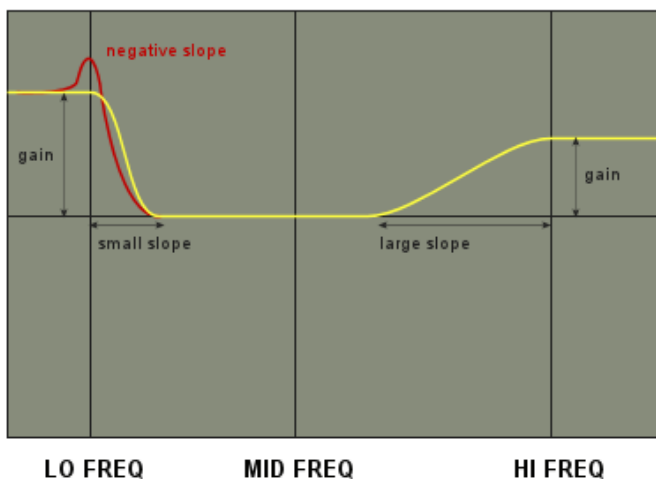
Low = 20 – 600Hz
Mid = 1 – 5 kHz
High = 6 – 20 kHz

The Low band uses a Low Shelf filter. This means you isolate a band below the set frequency, which can be increased or decreased in gain. Above the set frequency, the filter smoothly transitions back to the original levels, at a rate determined by the filter slope

Similarly, the High band uses a High Shelf filter, which does the same in reverse. Above the set frequency is affected by the gain, and below the frequency slopes back to the original level.

These 2 concepts are shown below in the diagram on the left

The Mid band uses a peaking filter, which means the gain is applied to the centre frequency with a transition on either side. The steepness of the transition is determined by the bandwidth of the filter. This is shown in the diagram above on the right.

CONTROLS

LO FREQ (Hz) – sets the frequency for the low shelf filter. Below this frequency will be affected by the gain
MID FREQ (kHz) – sets the frequency for the mid peak filter. This is the centre frequency that will be affected by the gain
HI FREQ (kHz) – sets the frequency for the high shelf filter. Above this frequency will be affected by the gain

LO/MID/HI GAIN (dB, -30 to 30) – adjusts the gain level of the audio for that band, negative values reduce gain, positive values increase the gain.
Double clicking these knobs will reset to zero

Slope (%, -13.6 to 100) – sets the steepness of the slope of the low or high shelf filters.
0 is the default minimum slope
Increasing the value means that the slope is longer and affects even higher frequencies on the low shelf and lower frequencies on the high shelf.
Negative slope values give a boost around the set frequency, similar to resonant filters
(*see diagrams on previous page*)
Double clicking these knobs will reset to zero

Bandwidth (%, 0 to 100) – sets the width of frequencies either side of the peak filter frequency.
0 is the steepest slope, making a very narrow width of frequencies affected by the gain
100 is the shallowest slope, giving a very wide band of frequencies affected by the gain
Double clicking this knob will reset to 20, an arbitrary medium setting
 (*see diagrams on previous page*)

OUT GAIN (dB, -30 to 30) – adjusts the gain level of the combined output, negative values reduce gain, positive values increase the gain.
You guessed it, double clicking will reset to zero

40 Hz cut – when this toggle is down, a High Pass filter will cut frequencies below 40Hz. This can be very useful to eliminate inaudible sub-bass frequencies that take up headroom and muddy the bass end of the mix. You should hear a kick drum in a loop more clearly when this is on for example.

Limiter – when this toggle is down, a limiter will prevent audio from clipping. This can be useful for taming occasional peaks, but ideally you should use the OUT GAIN knob to balance any increase from the 3 bands.

NOTE: Although the knob ranges are limited, you can enter any value you wish in the text value displayed under the knob. In this way, you can abuse the parameters to set different frequency values or greater gain for example.

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CREDITS

Thanks to **Jeff McClintock** for creating SynthEdit and to the 3rd party SE module developers, without which this plug-in wouldn't exist.

Also a big thanks to **Jonathan Styles** at SUKaudio, for the brilliant toggle graphic used on the GUI

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SynthEdit	http://www.synthedit.com/
Dave Haupt Modules	http://www.dehaupt.com/SynthEdit/semodules.htm
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ABOUT THE DEVELOPER

de la Mancha lives, eats, dreams and breathes VST plugins, seeking to bring randomization and modulation to the masses. He is also a producer of odd-skool breakbeat, downtempo glitchy beats and other assorted bleeps and noises. You can find his music at www.papadodo.co.uk www.3x0.co.uk and www.mono-log.co.uk

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