

# MQ55 v1.0

## ADVANCED MIXING EQUALIZER



### INTRODUCTION

MQ55 is parametric equalizer designed for mixing stage of music production. It is based on MQ57 and shares most of it's functions. Main difference is that MQ55 doesn't support separate channel processing, i.e. it only works in classic stereo mode. Other differences are: 1) pass filters have much bigger operating ranges and two selectable slopes; 2) maximum filter gain is doubled in default state ( $\pm 12\text{dB}$ ) and when using ratio knob it can be tripled ( $\pm 18\text{dB}$ ); 3) Q factors for peak filters are slightly narrower and they're set at maximum value of 2.5 by default.

- 7 parametric minimum-phase stereo filters, 5 of them are peak, 2 are shelf;
- Functions and ranges optimized for mixing tasks;
- HP and LP filters with two selectable slopes (1st & 2nd order for HP, 2nd & 4th for LP filter);
- Ratio knob that serves as a overall gain multiplier;
- Possible monitoring for each peak filter;
- 32-bit internal precision with zero latency and low CPU consumption;
- No introduced harmonic or dynamic distortion;

### FUNCTIONS

The larger part of interface consists of seven modules (labeled LSF, LF, LMF, etc.). The first and the last are low-shelf and high-shelf, while inner five are peak filters. They all have  $\pm 12\text{dB}$  operating range when ratio knob is in default position. Ratio knob controls multiplying factor for all filters. For example, when it's at maximum position (3:2) every gain is multiplied by 1.5, so  $+6\text{dB}$  becomes  $+9\text{dB}$ , and  $-8\text{dB}$  becomes  $-12\text{dB}$ . You should use it after you've set all other parameters to adjust overall amount of equalization (kind of dry/wet control). Monitoring button (MON) activates isolation of each peak filter while you adjust it's frequency. Frequency controls are divided into seven overlapping zones that cover every useful part of spectrum. LSF and LF as well as HF and HSF share those zones, but since they are different types you'll get different results out of them. Above them are located displays with numerical readouts showing current frequency or filter gain amount. Q factors are controlled with lower row of knobs, five of them being blue, two being green. Shelf and peak filters have Q factors that do not act the same, although they share the same principle of higher Q meaning steeper curve. On the bottom there are on/off switches for each filter. Use CTRL+mouse for precise adjustment of each knob and double-click to reset them to default position.