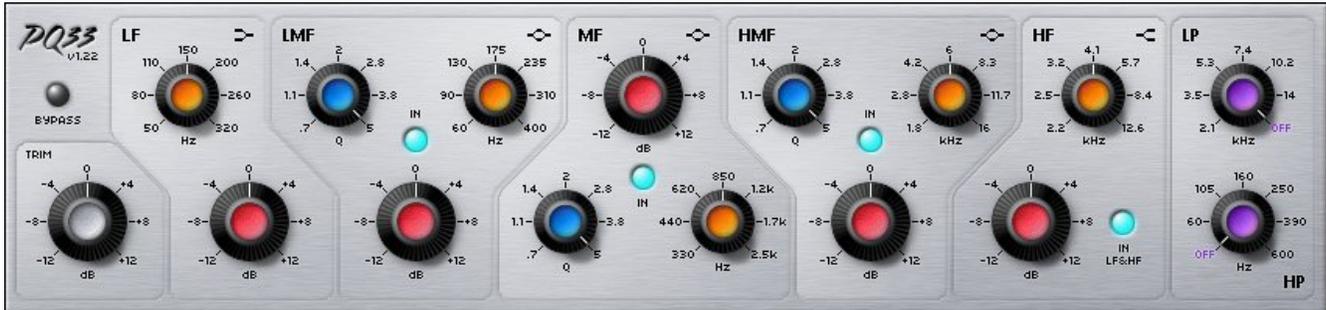# PQ33 v1.22
PARAMETRIC VST EQUALIZER

INTRODUCTION

PQ33 is based on RND Portico 5033 equalizer with two additional pass filters. It has the same layout of elements, similar frequency ranges for all filters, same gain operational levels and same Q factors. There are some differences in frequency response of it's shelf filters, but those are relatively small and they could be noticed only by those who regularly use 5033. It has subtle saturation stage, which keeps critical high frequencies crystally clear. In it signal is getting harmonically enriched and transparently compressed as you approach 0dBFS level. PQ33 is not a linear-phase EQ, but in my opinion linear-phase equalization is mostly required during mastering and even then it's not a prerogative, while in the mix you'll be hard pressed to notice phase-smearing effect on individual tracks.

- 3 fully parametric filters, with slightly overlapping frequency ranges, identical gains and Q factors (labeled LMF, MF & HMF);
- 2 semi-parametric shelving filters for lows and highs, with automated Q factor depending on selected frequency and applied gain (LF & HF);
- 2 passing filters with 12dB/oct slope (HP & LP);
- Authentic saturation stage;
- All knobs are continuous, allowing fine adjustments of each control;
- All gains, including input trim, have +/-12dB operating range;
- 32-bit internal processing and support for most common sample rates;
- 16 presets, including very useful curves for complete mixes;

USAGE

On the far left of GUI there's a global bypass button which lights yellow when it's activated. It bypasses every control except input trim. Input trim can be used for two things: reducing too high levels to avoid clipping during equalization (TRIM label turns red when output is clipping) or correcting loudness difference between dry and wet signal, for better evaluation. Saturation stage is activated by clicking on PQ33 logo, red being active. Passing filters are automatically disabled at their minimum (HP) and maximum (LP) positions (OFF labels turn purple) and they engage from 34Hz and 18kHz, respectively. If saturation is active and HP knob at off position, HP filter will still be active at 20Hz to remove any introduced DC signal. To reset knobs to their default position double-click on them. For precise knob movement use CTRL. Take notice that LF and HF filter share common IN switch. If you want to use PQ33 for sub-mixes or mastering you can try the last four presets as a starting point, since they produce gentle ear-pleasing results.

IMPORTANT: For the best results use higher sample rates (88.2kHz, 96kHz, etc.) on any high frequency equalization, especially when using LP filter.

If you have any questions or remarks, feel free to send them at ijovica@gmail.com.