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JOEMEEK ONEQ2 MASTER STUDIO CHANNEL

Redux of oneQ Offers Enhanced Features, More Headroom

The oneQ2 features seven analog processors in a single-channel unit.

The updated Joemeek oneQ2 Master Studio Channel keeps all the color, charm and naive quirkiness of the original two-rackspace oneQ, but widens its operational range, reliability and usefulness. Primary among the many improvements are the "remixed" front end, a 10dB increase in headroom and lower noise floor for the entire unit, all conjured up by audio magus Paul Wolff.

HIS NAMESAKE CHANNEL

Legendary British recording engineer Joe Meek's subversive "If it sounds right, it is right" mantra is well represented in this improved, single-channel unit. There are seven analog processors: mic preamp/Input section, Joemeek's signature optical compressor, Meequalizer, De-Esser, Enhancer, Master Fader and A/D converter. Any section can be inserted ("On" in Meekspeak) into the signal chain at the touch of a button. The large, lighted Nissei VU meter switches between measuring the preamp's output, gain reduction and final output. The Master Fader section provides up to +10dB additional level and functions as a master fader for direct recordings.

Burr-Brown OPA2134 op amps are used throughout, and the input Gain control now ranges from 18 dB to 60 dB for both the mic and line inputs. A Cinemag transformer (CMM1-10PCA) is always inline for the mic input and also available for line-level processing when toggling the Iron switch. The 80Hz, 12dB/octave highpass filter is now available for all three sources: mic, line and the ¼-inch instrument input. The ¼-inch DI now has a 0dB to +40dB operating range.

The mic preamp accepts up to +24 dBu with the -20dB attenuator pad inserted. The line input gain range is now -19 dB to +22 dB with unity still at the straight up 12 o'clock knob position. A red LED lights when the preamp section clips at around +15 dB. The Input section finishes with +48-volt phantom, polarity flip, line/mic button, and a rear-panel unbalanced TRS send/return insert jack.

The A/D converter has AES/EBU, S/PDIF and Lightpipe Toslink digital output connectors, plus BNC connectors for external word clock in/out. The original 24-bit Wolfson A/D converter is used, with sample rates up to 96 kHz selectable on the rear panel. The output Peak FSD LED lights at +16 dBu, or 2 dB below full-scale digital clip. There is a single balanced TRS ¼-inch analog line-level input jack on the rear panel that utilizes the otherwise unused right channel of the stereo A/D converter.

COMPRESSION, EQ AND MORE

The compressor section is unchanged and uses the same Silonex optocoupler. Controls are: Compress for setting threshold, Slope or ratio adjustable from 1:1 to 10:1, program-adaptive Attack and Release controls, and a Make Up gain control. The Post EQ button toggles the com-

TRY THIS

When using the oneQ2 for super-fidelity vocal recordings, start compression ratios at 2:1 or lower for minimal control and use attack times (5 to 10ms) and medium release times (0.3 to 1 second). The visually helpful GR LED fades down during release and lights up with every new attack. The Compress knob or threshold was at 0 dB. High gain (vocal) recordings and hyper-compression effects are where all sections of the oneQ2 come into play. If I ran compression threshold set at -15 dB, 6:1 Slope, 3 to 5 ms attack time and 0.3 or longer release time and +20dB makeup gain, it's a whole new processor. The Enhancer and De-Esser sections will ameliorate (or boost) the havoc sibilants caused by using this much gain.

pressor before or after the Meequalizer.

The Meequalizer has two overlapping semi-parametric midrange sections: Low-mid has a variable frequency range from 120 Hz to 2 kHz and the high-mid section goes from 600 Hz to 10 kHz. They each have a fixed Q of 0.9. There are two 12dB/octave shelving EQs. The high shelf has 7kHz and 14kHz positions, and the low shelf with 80Hz and 120Hz choices.

The Enhancer section has a variable control over the frequency: 800 Hz to 16 kHz—above which boost is dynamically added according to the amount set by the Effect control. The Q knob sets the amount of a resonant peak at the selected frequency from 0 to 10.

The De-Esser has a Listen button to aid in setting controls for its frequency (Tune) from 2 kHz to 10 kHz and amount (De-Ess) 0 to 10.

All the sections and controls on the oneQ2 Master Channel interact greatly; while audio is coursing through the unit, there is an unavoidable level shift or slight pop when toggling in/out any of the sections.

FEELING THE LOVE

For all evaluations, I kept the Cinemag transformer always inserted; it rounds out the low frequencies in a clean, polyunsaturated way. I used the secondary analog line-level input that feeds the right channel of the unit's built-in A/D converter as the best way to evaluate the oneQ2 Master Channel's performance because a common A/D is used throughout all testing.

I routed the A/D converter's digital output to the stereo AES/EBU Enclosure XLR input on the back of my HD 192 I/O and recorded into Pro Tools HD 10 24 bit/44.1 kHz. I externally clocked both the HD 192 and the oneQ2 from my Benchmark Media ADC1 over short BNC cables.

My first test was recording a direct Fender Strat. I used the Creation Audio Labs MW1 Studio Tool to provide two identical guitar signals from one instrument. One signal connected to the oneQ2 DI jack and the other to a RTZ Professional Audio 9762 Dual-Combo Mic Preamp—it also has a high impedance DI. The line-level output of the RTZ connected to the second analog input on the back of the oneQ2. The RTZ is a copy of the Neve 1272 circuit but custom-built to mil-spec.

Once I matched impedances (the MW1 does this), matched level and flipped the absolute polarity to check null, I could hear no difference between the DI paths of these two units. About 45 dB of gain was required, and both units portrayed the exact sound of my Fender Strat in all ways I know well.

When a ¼-inch plug is inserted into the front of the oneQ2, the XLR mic input is defeated. Having a front-panel mic input XLR is handy, but there should be a way to disconnect it from the rear-panel mic XLR—they are hard-wired in parallel.

A troublesome direct bass guitar recording was easily fixed using both the Compressor section and the De-Esser section to reduce transitory, bright moments, especially whenever the player/part went up the octave or he did an occasional "pops" that jutted way out in front of my mix. Using the Listen button, I set the frequency to 2 kHz and was able to come to a good balance without the tedium of drawing breakpoint automation—plus this sounds better.

The Enhancer section works the other way around from the De-Esser. Using both sections together at cross-purposes—boosting frequencies above 1 kHz, Q knob on 10, Effect on 10 with the Enhancer and then De-Ess at 5 kHz—these two sections become analog sound-designer tools capable of very interesting sound treatments akin to software-based tools. But this is faster.

The Meequalizer works excellently for both smooth touches—+/-3 dB all the way to massive EQ cranks, vocal effects and radical boost/cut EQ styles. It has a broad midrange character and overlapping frequency ranges.

For all microphone preamp tests, I used a transformer mic splitter box made using a Jensen JT-MB-E to split the output from a Pearlman 250 tube condenser microphone (cardioid, no roll-off, no pad) between the oneQ2 and the RTZ.

I used about 50 dB of gain on both units for quiet singing. The oneQ2 sounded slightly thicker and the RTZ more linear in its overload characteristics.

The oneQ2 is excellent for vocal recording or processing during mixing. In general, I preferred using the compressor first in the chain followed by various amounts of the Meequalizer, Enhancer and De-Esser—a little of those three goes a long way for natural-sounding recordings.

USING HARDWARE LIKE PLUGS

When crafting a unique sound treatment, I "channeled" Joe Meek's methodology and left no controls or section un-maximized, undiscovered, unused or uncombined in pursuit of the unquantifiable and, hopefully, the sonically attractive. With the oneQ2, being able to audition each of these sections individually or in any combination is like using a chain of software plug-ins in a DAW, only these are all real analog processors. Joe Meek would love this and so do I! ■

PRODUCT SUMMARY

COMPANY: Joemeek (dist. by PMI Audio Group)
WEB: joemeek.com/oneq2.html; pmiaudio.com
PRODUCT: Joemeek oneQ2 Master Studio Channel
PRICE: $1,200
PROS: Modern/pro updates extend its usefulness
CONS: Needs routing switch for the front-panel mic XLR

Digital I/O on the unit is impressive with Optical, S/PDIF, AES/EBU and Word Clock I/O.