

COMBO PROCESSORS
LANGEVIN DUAL VOCAL COMBO



The Langevin Dual Vocal Combo is a 2 channel microphone preamplifier with 2 shelf equalizers plus 2 channels of electro-optical limiters. The combo is the result of suggestions from our customers to combine two of the most popular Langevin products and make the price irresistible, half the price of the Voxbox in fact, for 2 channels of great sounding all discrete channel strips. Seem interesting? This includes VU meters, individual phantom power, limiter linking and time proven circuitry. This is an ideal box for musicians and engineers on a budget and is equally at home in a big league studio, mobile recording truck, or live gig. It has the reliability, functionality, and the sound without the any of the complexity— the essential features without the “ sea of knobs.” Easy on the wallet, easy to use.

The Mic Preamps are transformer coupled (hand wound by Manley Labs) with 50 dB of gain provided by pure discrete transistor circuits, same as found in the stand-alone Langevin Dual Micpre. 48 volt phantom power can be applied to each input XLR independently and the switches are a locking type to prevent accidents. New to this unit are the front panel 1/4" Direct Instrument inputs. A new little discrete circuit from our tech Paul Fargo gives these inputs an appropriate input impedance (500K) and provides about 40 dB of gain.

The Equalizers are comprised of a low frequency shelf that can be switched to either 40 Hz or 80 Hz and a high frequency shelf that can be set for 8 KHz or 12 KHz. Very tasty choices! These shelves are continuously variable from -10 dB to +10 dB of gain. Of course, the EQ can be completely switched out with the BYPASS switch making it easy to make a choice.

The Limiters are the discrete transistor version of the Manley ELOP (same as the Langevin stand-alone version). This type of limiter is superb for vocals and a wide range of instruments from basses and guitars to synths and room mics. When it comes to tracking and fast set-ups, the lack of a multitude of controls is a real feature. You can simply set up the Threshold and Gain controls and expect that the limiter will do the right thing without a lot of tweaking. The Limiters have Threshold and (make-up) Gain controls, a Link switch for stereo and a pair of toggles that switch the VU meters to “ Gain Reduction” or “ Output Level” . These are true stereo limiters without the usual problems of left/right matching common to other stereo opto based limiters.

The back panel has XLR mic inputs paralleled with 1/4" TRS jacks that feed the mic pre stage. By popular request we have added separate 1/4" TRS micpre outputs which "normal" into the 1/4" TRS limiter inputs so they can be permanently wired into a patchbay. Now there are “ Direct Outputs” from the Mic Pre/EQ stage so one can indeed use the micpreamps and the Limiters as 4 separate sections.

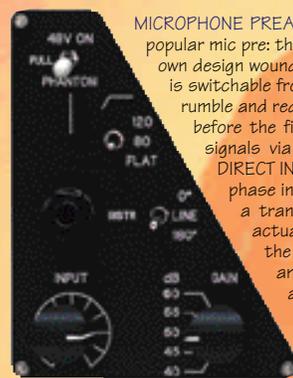
The main outputs are available as either transformerless balanced XLR or unbalanced 1/4" Tip-Sleeve jacks. The solid 14 lb. 2U chassis is 19" x 3 1/2" x 10" and sports a billet 1/4" thick machined faceplate. All the specs and numbers not mentioned specifically on this page are the same as the two stand-alone Langevin units elsewhere in this catalog. And don't forget to check out our website and see the rave reviews this Langevin DVC has scored in all the magazines, including Electronic Musician's 2001 Editor's Choice Award!



EQ SECTION: Lots of folks requested that we include the Pultec Mid Frequency Equalizer in the VOXBOX, but they wanted MORE.... Now we've extended it to 33 frequencies in 3 bands with 6 new frequencies from 20 Hz to 150 Hz, and 6 more in the highs from 6.4 KHz to 20 KHz. Ever notice that only EQs with real inductors have the bottom end magic or that only Class A circuitry can keep the top end sweet? This is for you. The EQ INPUT switch patches in the Line Input, Preamp Output, or the INSERT return. This switch serves double-duty acting as a bypass switch for the preamp and/or external processors or for processing two different tracks.



DE-ESSER & LIMITER SECTION: Designed by folks with admittedly large gaps between their two front teeth, (Hutch and EveAnna) the VOXBOX also includes a de-esser & peak limiter based on our original ELOP design but with an added passive LC network to handle the de-essing— four carefully chosen notch frequencies from 3KHz to 12KHz. (That 3KHz setting really tames those annoying frequencies!) The fifth position gives you a limiter which totally mimics the famous LA-2A. This means you can both compress pre-EQ then limit here post-EQ. Another cool feature is the ability to insert this de-esser silently and smoothly as the music plays, using it as needed.



MICROPHONE PREAMPLIFIER SECTION: The preamplifier is a clone of a highly regarded and popular mic pre: the Manley Mono Microphone Preamplifier. The mic input transformer is our own design wound in-house at the Manley Labs factory. High current 48V Phantom power is switchable from the front panel. A simple and effective passive BASS CUT switch kills rumble and reduces popping. The INPUT ATTENUATOR is a variable pad control situated before the first tube stage allowing the preamplifier to accommodate +4 line level signals via the balanced LINE INPUT and instruments via the front panel 1/4" DIRECT INPUT. These inputs are selected in the middle position of the dual-function phase invert switch. We provide both transformer balanced XLR output as well as a transformerless “ audiophile” 1/4" phone jack output. The Gain switch is actually a clever variable feedback control that changes not only the gain but the slew rate and flavour of the circuit. With it you can choose how laid back and mellow or how up-front and aggressive you want it to get. Headroom is a strong point in this circuit, +31dBu capable. This is 5 to 10 dB better than almost all other pro gear. The music passes through only our super-clean pure Class A vacuum tube circuitry. There are obvious advantages to our purist approach and foremost is the un-electronic final sound that carries emotion into the digital realm.

COMPRESSOR SECTION: This cool compressor design is the result of blending the control ideas in our best selling Variable MU Compressor Limiter with the opto-isolator approach of the Manley Electro-Optical Limiter. We figured out how to compress the signal before it hit the tubes with no detrimental effect on distortion or frequency response. This way, it can prevent mic-pre clipping and eliminate whole stages of electronics. This cuts the typical path of mic to tape in half! We also pioneered new thinking in the sidechain. Rather than compromise, we developed a technique of using up to four different time constants simultaneously and controlling them with familiar simple attack, release and threshold controls. We call the approach “ Parametric Compression” . We developed optimum settings or presets based on the Light Dependent Resistors of our own fast ELOP, the quick LA-2A, the slower LA-3A and then created more complex special settings. This extended range and method of timing delivers fresh sounds from powerhouse punching drums to super-solid bass yet can also emulate the way good engineers delicately ride a fader while recording. It is transparent and liquid-smooth on vocals, easy to use and accurate. Also rare for an opto-based dynamic processor, this compressor works great on mixes. Of course, you'll be needing two VOXBOXes linked in stereo...



The METER is a full size illuminated Sifam VU meter. A five-position switch shows three audio levels: the line input, the preamp output and the final output. It also shows compressor gain reduction and the de-esser/limiter action. Other clever innovations incorporated into the VOXBOX include warm-up muting circuitry, extensive magnetic field containment, “ smart-grounding” , and silent switching. The sum-total is more than the separate parts: consider the reduced patching, the short path to tape and you having this much immediate control. As engineers, we choose what we use not based entirely on features and functions— there is a sound, a texture we reach for and the VOXBOX puts the “ Manley Sound” together with “ Your Sound” .

Langevin FAQ:

We frequently get asked a number of questions regarding Langevin, including the proper pronunciation of the name. (The “g” is soft like “gelatin” or “orange”).

Langevin was one of the original pro audio manufacturers dating back to WWII. In that era there were far fewer audio manufacturers and Langevin gear was very popular and respected in the broadcast industry. Early Langevin equipment was vacuum tube based and later became mostly discrete transistor based. Today, you can often find vintage Langevin pieces still in use after all this time.

Are these the exact same circuits as the vintage pieces?

The micpre and EQ borrow a few ideas from the historic gear but are not identical at all. We designed new discrete gain blocks to deal with the balanced/unbalanced issue better than they used to.

Do we support any vintage Langevin products?

Sorry, no. We just bought the name and rights to use any of the old circuits. We didn't build the old stuff and never had parts or real documentation. The usual experts on vintage gear and restoration are your best bet.