

DerrEsser

Model EL-DS

Dynamic High-Frequency “Fixer”

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Empirical Labs - *Technology for the Artist*

DerrEsser

Features

- ❑ **Possibly the highest performance analog De-esser in existence.**
- ❑ **HF Lim Mode, as well as standard De-Ess** – High Frequency limiting with a tailored soft knee. The Dynamic Section can be used for De-essing or smooth high frequency softening.
- ❑ **A “BAD!” Hard Clip Indicator light** – This “Bad” Clip LED lets user know he is within 1dB of hard clipping. It monitors several sections within the DerrEsser for possible clipping.
- ❑ **Unity Gain in and out** – 6dB of gain available
- ❑ **Foolproof operation** - it's almost impossible to clip or get a bad sound.
- ❑ **Industry standard API 500 Series Rack compatible**
- ❑ **True bypass** - Know what it's really doing.
- ❑ **High reliability parts and military grade switches and relays.**
- ❑ **Three year limited warranty.**
- ❑ **Interface and features found nowhere else.**
- ❑ **Hand built and calibrated in USA. Shipping weight 1 Lbs.**

Specs

- ◆ **Freq. Response** is 3 Hz to 120 kHz (-3dB points).
- ◆ **Dynamic Range** - 115 dB from maximum output (.5%THD soft clipping) to minimum output. Noise floor typically – 93dBu.
- ◆ **Distortion Ranges between .0035% and .01%** depending on mode and settings.
- ◆ **DC coupled Input and Outputs**
- ◆ **High quality audio caps used internally.**
- ◆ **Input Balanced, Output single ended but with balanced impedance. It can be made differential by moving a jumper on the board.**
- ◆ **Input Impedance is 20k Ohm.** Output impedance is less than 51 ohms.
- ◆ **D-S Dynamics Time Constants** - Attack time is less than 1mS. Release .04 sec, fixed internally.
- ◆ **Power Consumption** – 8 Watts max. 4 Watts Typical

Empirical Labs - *Something Old, Something New*

What is the DerrEsser?

The DerrEsser is a multi function dynamic filtering device, in an API 500 series module format. In its basic “DS” mode, the DerrEsser is an effective, level insensitive de-esser, which is a device that will adjust the high frequency gain on overly trebly or spiky vocal, or other source. By using a crossover technique, and dividing the audio up into a high frequency range and a low frequency range, the DerrEsser can use its Voltage Controlled Amp to turn down comparatively high or harsh high frequencies in an extremely musical manner. However, unlike other de-essers, the device is not limited to just de-essing, and allows for multi use of its circuitry. See Below.

The Four Modes of Operation

Besides Bypass, there are essentially four modes of the DerrEsser:

DS Mode – (Bypass Button IN, all other buttons OUT). As a de-esser in the DS mode (HF Limit OFF), one can set the threshold to tame harsh S’s (sibilants) that result from an overly bright singer or from EQ’ing to make a vocal sound aggressive and clear. In this mode, the dynamic action is “level insensitive”, as the detector circuitry compares the High Frequency content to the low frequency content, overall signal level doesn’t matter at all. When there is enough HF compared to LF, the threshold is exceeded and the DerrEsser starts to turn down the frequencies above the crossover point set by the Frequency control on the front panel. Again, great care was taken to ensure this DS section meets the Empirical Labs reputation for originality and ease of use. We use the latest technology VCA, specially selected for glitch free, distortion free, and noise free performance. The time constants were carefully selected and the corner frequency is user adjustable with a high performance active crossover.

HF LIMIT – (Bypass Button IN, HF LIM IN, all other buttons OUT). In this mode, the DerrEsser looks at the general level of the High Frequencies only. Think of it as a high frequency compressor. If there is enough high frequency content to exceed the threshold, then gain reduction occurs. It is level sensitive, but responds much more to high frequencies. This mode can also act as a de-esser but is more of a general high frequency smoothing device. The HF limiter is probably the first carefully tailored soft knee HF limiter in existence. We believe both the DS and HF LIM modes offer the highest performance of any similar device.

HIGHPASS – (Bypass Button IN, Listen IN, HP/LP OUT, HF LIM doesn’t matter). By using the “LISTEN” Function, the user can employ the superb filter circuitry inside the DerrEsser to process their audio. With the LISTEN button IN, and the HP/LP switch OUT, the user will be hearing the high frequencies that are being controlled with the dynamic/compression circuits. The corner frequency is adjustable by the Frequency knob. Once the LISTEN switch is engaged, all bargraph LED’s should light as indication.

LOWPASS – (Bypass Button IN, Listen IN, HP/LP IN, HF LIM doesn’t matter). With the LISTEN button IN, and the HP/LP button IN, the user is now listening to the low frequencies, those not affected by the VCA and dynamic/compression circuits. This is a 12 dB per octave filter whose corner frequency can again, be adjusted by the Frequency knob.

USING FOR THE FIRST TIME

The DerrEsser is not only a high frequency problem solver, but can be used as a super-quality HP or LP filter, AND as a coloring device to give a more analog sound to digital sources. Use the DerrEsser when you have a vocalist with prominent unnatural “S’s. The standard DS Mode is usually used, with the Frequency set to 2 – 6K. Adjust the threshold till the S’es are tamed and not much else is affected. The HF Limit will more generally smooth the high frequencies, gently subduing high frequencies that exceed the user adjusted threshold. Great on so many sources.

The DS Mode can also help difficult problems like high hat bleed in the snare mike, or occasional SQUEEKS on an acoustic guitar or other instrument. See example settings.

The HF Limit Mode is a general high frequency smoothing setting. Use it to soften the high end on zillions of sources, not just vocals. If you have a track that has high frequency spikes, or plucks, or edges, this can let you keep the air of the high end except when it really piles up.

Example Settings

Vocals - One of the worlds favorite vocalists, Frank Sinatra, became so good at " working the mic", moving in when he was singing soft and wanted intimate body, moving back when he belted and needed to get the higher notes out... he became so proficient that I have heard the engineers used very little or no EQ his voice. He got the sound at the source. As he sang soft, he would move in a little closer to the mic, giving his voice an intimacy. He would even turn his head quickly to the side so certain breaths wouldn't be heard. Modern singers of every style could learn from what Frank was doing 40 yrs ago. He pronounced his S's very soft and short. Here are some tips that may help prevent needing the De-Esser or any radical EQ.

Pick the right mic, the right distance and the right angle for the singer. The most expensive mic isn't always the best mic for a person's voice. U2's Bono uses a cheap ol Shure SM58, but... who could complain about his vocal sound? Moving a person a couple inches in and out from the mic can make all the difference in the world. Putting the mic up above the person's mouth around their nose level can warm things up, avoid pops, and make a singer sound less nasal. A distance of 6 – 10 inches from mouth to mike is common. When a mic is aimed down a little towards the singer's mouth, you will be aiming it at their body also, where lots of low frequency resonance occurs. Conversely aiming it up can work, having the singer sing over the top of the mic. Remember that a leading cause of "nasality" is the lack of sound and air coming from a persons nose, so by aiming up or being level with the nose, an engineer can often improve the basic quality of a voice. Remember to remind the singer they can move slightly in on soft intimate parts, working the microphone ala "The Frank".

There are some other dynamic equalizers out there that work pretty well, but... hoping to get a great vocal sound using one "holy grail" setting on a wildly dynamic vocal is dubious in our minds. On an occasional overly sibilant vocal, use the standard De-ess mode which is level insensitive. Adjust the frequency for around 2.5 - 6Khz and adjust the threshold till the sibilants start sounding natural. If lisping starts occurring, raise the frequency or lower the threshold to lower the De-essing. The De-esser should only be working on the offending fricatives and sibilants.

Often the sibilants only become a problem after eqing. However, one very useful technique is to add the high frequencies AFTER the DerrEsser to add overall sheen back into the vocals, where the De-Essing can't undo the Eqing. Of course, many aggressive engineers EQ before and after the De-Essing.

If a vocal is kind of "generally harsh" and "ESS-y", the high frequency limiter can provide a smoother sound. This limiter is extremely smooth and will sound pretty natural working on just about every line of an overly bright vocal. Just make sure that a gentle EQing wouldn't be a better solution. The HF Limiter can sometimes give an analog tape-like effect; warming the vocal the harder you hit the DerrEsser with level.

Various Instruments

Elec. guitar - If there's just an occasional peaky note, the normal DS mode can tame specific notes, taking the harsh freqs out surgically. Analog tape was always a big help with vocals and electric guitars because it clipped all the pointy peaks and saturated when the high frequencies piled up. Using the DS dynamic HF limiter can get a verry tape like affect if used judiciously. We have found it to be verry useful on overly crunchy plucky guitars, and "spitty" vocals alike.

Bandlimiting the top end can tighten up and quiet the hiss of electric guitars, especially "heavy" ones. Put the DerrEsser in LP Mode and close down the top end to 8 – 10KHz. You will usually find you don't miss these frequencies on heavy distorted guitars at all. It lets the cymbals and vocals etc have more clarity up there.

Plucked Instruments & Acoustic Guitar – Sometimes you may want to keep the dynamic range of a plucked instrument but need to smooth out just the hard front edge of the attack. The DerrEsser's HF Limiting is perfect here. Adjust the threshold until you have a smoother, more natural sound - usually 3 - 10 dB of HF attenuation is enough. In addition to your normal monitoring levels, listen very softly, and very loudly to the adjusted track to make sure it isn't too dull, or still in need of "softening". Squeaks from hands sliding on strings can often be "fixed" using the De-Ess mode judiciously. Problems such as these often become more pronounced after compression, but the DerrEsser can be effective placed before or after the compressor.

Example Settings (Cont'd)

Percussion

Snare/Toms – Hi-hat bleed. Snare often need some top sizzle, but adding hi frequencies can often cause problematic hi-hat bleed. The DerrEsser can easily tame the hi hat bleed in standard DS Mode. Set the frequency between 2KHz and 8KHz and adjust threshold to catch the problem areas. Putting the DerrEsser before the EQ boost can help keep the snare sizzle from getting clamped on every hit. Cymbal and hi-hat bleed on tom mics can also be treated the same way.

Again, analog tape was always a big help in getting a fat, punchy, natural snare. If the snare has a plastic edge to the front end (especially after EQing), the HF limiter can be engaged to fatten it up, allowing the “snare” to stay present after the initial offending attack... like analog tape. The HF Limit Mode can be useful in evening out the overall top end of the snare.

Overhead cymbals – It is a common practice for some engineers to roll off much of the low end on the overheads, but it is prudent to leave this for mixdown, after tracking. Overly bright or percussive cymbals are irritating. Here in the digital recorder age the front edge of cymbals can be harsh and too “pingy” once the engineer gets to mixdown. Analog tape used to soft clip and self erase these sometimes annoying transient pings. The DerrEsser’s HF Limiter can be a wonderful tool to soften these edges. Enable the limiter (the orange LED will be on, as well as the DS Blue LED) and dial in 1 – 6 dB with the threshold in the DS section. Adjust the frequency for 4 – 10Khz depending on the severity of the cymbals edge. The limiter should only work on the very front edge of the cymbals. Make sure you aren’t squashing the clarity and overall air of the cymbals.

Room Mics – You can use the DerrEsser to tame splashy cymbals which are usually a problem after compression. Set frequency to 2 – 5KHz. The DS mode or HF Limit mode may be helpful. The DS will mainly remove cymbals when no other drums are played. Alternately you can also use the LOWPASS mode to more or less get rid of the cymbals. This can be dangerous!

Keyboards – Obviously in this sampled age, this covers a lot of sounds. Acoustic Pianos are a whole subject unto themselves, so lets start there.

Acoustic Pianos – Often in digital recordings, excessive hammer attack can cause “plucky” sounding acoustic pianos that pop out in a mix. Using the HF LIM mode in the DerrEsser can gently soften excessive transients and bright notes. It can often be most effective after compression, which lets the “sharp” first 10-100mS through. Try adjusting the frequency lower around 2KHz and adjusting threshold till the piano “edges” start to sound more natural.

Synthesizers – You can probably plug a synth straight into the DerrEsser. Synths often have plucky top ends. One can band limit the top end with the LISTEN LP mode, or try the HF Lim to control the high frequency peaks. Compression can help get rid of the pointy peaks also, but often more other treatment is necessary. Sometimes theres simply too many highs and the LP Mode can warm the synth up by rolling off unneeded highs. Cutting freqs on one track, gives room for them elsewhere.

Bass – Bass is a critical element in all mixes. The DerrEsser offers some solutions to several common Bass instrument problems.

If a bass is very clacky and has excessive pick noise etc, engage the DS mode (Only the BYPASS button pushed IN). Adjust the frequency to 1 – 6Khz and adjust the threshold till the clacks and clicky notes are attenuated and fit better into the mix.

You can also add harmonics by using the fast attack/release times, to modulate and saturate low frequencies. Set Freq to Min (about 830Hz) and raise threshold to activate gain reduction. Engage the HF LIM and the DS circuitry will be working on faster rising edges of low frequencies, adding low order harmonics.

Band limiting the bass by rolling off the high frequencies is a verrrry useful technique. Engage the LP Mode by pressing LISTEN In on the DerrEsser, ensure the HP/LP switch is IN, and adjust FREQUENCY to taste. Start gentle since one doesn’t want to lose the definition on the bass, especially in small speakers. I have seen engineers “band limit” the top and bottom end of the bass to approximately 70Hz through 4 KHz, letting the rest of the tracks fill in above (and below) this band.

RECALL SHEET

DerrEsser
Dynamic High Frequency Fixer

THRESH 4 5 6 7 8 9 10
BADI 1 2 3 4 5 6 7 8 9 10
BYP (In) (Out)
HF LIMITER
LISTEN (All LEDs On)
HP (Out) LP (In)
FREQ 3K 5K 6K 7K 8K 10K

DerrEsser
Dynamic High Frequency Fixer

THRESH 4 5 6 7 8 9 10
BADI 1 2 3 4 5 6 7 8 9 10
BYP (In) (Out)
HF LIMITER
LISTEN (All LEDs On)
HP (Out) LP (In)
FREQ 3K 5K 6K 7K 8K 10K

Draw pointers on knobs, color in pressed buttons

Inst/Track _____
 Input is from _____
 Max GR _____
 Session _____
 Song _____

DerrEsser
Dynamic High Frequency Fixer

THRESH 4 5 6 7 8 9 10
BADI 1 2 3 4 5 6 7 8 9 10
BYP (In) (Out)
HF LIMITER
LISTEN (All LEDs On)
HP (Out) LP (In)
FREQ 3K 5K 6K 7K 8K 10K

Inst/Track _____
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DerrEsser
Dynamic High Frequency Fixer

THRESH 4 5 6 7 8 9 10
BADI 1 2 3 4 5 6 7 8 9 10
BYP (In) (Out)
HF LIMITER
LISTEN (All LEDs On)
HP (Out) LP (In)
FREQ 3K 5K 6K 7K 8K 10K

Draw pointers on knobs, color in pressed buttons

Inst/Track _____
 Input is from _____
 Max GR _____
 Session _____
 Song _____

Installing & Wiring the DerrEsser

Installing the card: Simple! Unplug powered rack, remove two screws on top and bottom of designated slot on powered rack, line up the card in the connector, and gently press into place. Check module is right side up and properly mated, and then re-install the two screws.

Most API 500 series racks offer XLR inputs and outputs. The DerrEsser module is almost completely insensitive to wiring as long as Pin 2 is hot on the XLR.

It is best to attach both input signals to something, with an unused pin (pin 3 usually), tied to ground. At least Pin 1 (ground) and pin 2 (main signal) should be connected on the output. Pin 3's impedance is balanced to Pin 2 on the output XLR connector. Pin 3 can be connected or not.

Differential Output – There is a jumper in the middle rear of the board that can be moved to make the output Differential. The downside is that the gain will increase 6dB, making the output drop in level when bypassed. To change to differential, pull the jumper up and off, and move it to the rear position.

Now start fixing those high frequency problems!

Troubleshooting

- ❑ **Bad! light comes on – You are coming into the DerrEsser with too hot (loud) of a signal.**
Turn down the stage or device before it.
- ❑ **Unit is on but not doing anything** - The unit may be bypassed or operating subtly. If bypassed, you need to press the "BY-PASS" button IN.
- ❑ **Distorted output** - If there is any un-musical distortion, chances are you're hard clipping. If the Bad! light isn't coming on, check that the output cable is properly wired (see Wiring the DerrEsser). Shorting an active output pin will not harm the unit but can show up as distortion in the output driver.
- ❑ **Bargraph on DS shows gain reduction but very little or no limiting is actually occurring** - The section is bypassed, or the unit is possibly severely out of adjustment. We use very stable trim pots and high quality components, and it's rare that long term component aging or failure will cause failure, but... things do happen. At present you will have to return the DerrEsser to factory for re-calibration. In the future there will be local dealers and/or service centers to help.
- ❑ **Unit seems noisy** - The dynamic range of the DerrEsser is much greater than CD (16 bit) quality. However, if you are working with a really low level signal such as a microphone, you need to preamp it. Microphones almost always need 20 –50dB of gain to be at "Line Level".
- ❑ **No sign of life** - Check power cord for firm connection. Press LISTEN button in and see if bargraph lights up. If still no life unplug unit and open fuse holder to see if it is blown. If it is blown, pull it out and replace it with new fuse. If fuse is OK, ensure Voltage select switch is set to current wall outlet voltage (115, 230 VAC). If other modules are in the rack with the DerrEsser, perhaps you could pull the modules out one at a time and see if one of them is affecting operation of the others. If one module seems to cause problems, it should be removed till it is repaired.
- ❑ **Unit seems too aggressive or causes lispng.** Raise the frequency, or lower the threshold. A little can go a long way. Also, perhaps the HF Limit mode is what you need to smooth out the highs instead of the more brickwall type of curve the DS mode offers.
- ❑ **All GR LEDs are on and won't go off** – The LISTEN Mode is engaged. Press the Listen Button so it is OUT and the LEDs should go off.
- ❑ **There's a level drop when using quarter inch input (compared to bypass).** You may be using a stereo input cable (1/4") that doesn't have the ring connected to ground or something. Try an unbalanced input cable.
- ❑ **There is a 6dB increase in gain thru the unit when not in Bypass.** The gain jumper in the middle rear of the board is in differential mode. Moving the jumper to the forward to pins will set the unit back to unity gain. The output is still balanced impedance wise, but not differential.

Stereo Operation & 5.1 Surround Use

The user will usually start by matching the controls on two DerrEsser's for Multi-Buss use. Since the units are highly calibrated at the factory, matching the front panel controls will yield highly accurate frequency response between the two channels. However, often one channel has more annoying high frequency problems than the other, and different settings are appropriate. The same applies to 5.1 surround treatment.

Cable Facts... and Fiction

CABLES GENERALLY DO NOT MAKE A BIG DIFFERENCE IN SOUND. As long as a cable is wired properly, shielded properly, and not damaged, no one will be able to hear the difference in a length of decent cable 40 feet or shorter... regardless of what Munster Cable or anyone tells you! To our knowledge, no AB/X listening tests have ever found any difference between a short, properly wired low cost cable, and a premium "audiophile" cable, in low impedance situations. But even though there are cable companies who have made millions propagating misconceptions (one cable manufacturer even advertises greater "sincerity"!), some cables are indeed lower impedance, better shielded, and break-free than others. Mogami is a great price/value in our opinion.

The big "gotcha" is that between patch bays and remote wiring, the accumulative lengths can exceed 60 ft or more for a professional studio "patch". These longer lengths can start to show shortcomings of cables, since the capacitance vs. inductance begins to mount and causes slight phase shift and high frequency loss, especially in high impedance, low level sources. In fact, "passive" guitars, basses, and microphones are probably your biggest cabling worries.

Speaker cables are generally even less sensitive as long as they are heavy gauge. Stranded 10 – 14 gauge zip cord should handle most anything (for some reason the lower the gauge, the thicker the wire).

The same applies to the AC power cables. We have seen \$150 power cables that are "tuneable." This verges on insanity. As long as a \$1 six foot AC cable isn't worn, and is less than 16 gauge, signal processors such as those in a studio will perform just as superbly as with any \$150 cable. Do not forget, almost all musical gear has a regulated DC power supply that does an incredible job at completely isolating whatever flaky AC comes in.

About Empirical Labs

Empirical Labs was founded in 1989 and operated for years as a recording studio in Garfield NJ. In 1992, Dave Derr, the founder of Empirical Labs Inc, left Eventide after being an engineer on the design team for the H3000 and DSP4000 Ultra-Harmonizers™. By 1994, work on a first product, the Distressor, was underway, and in 1996, the first products were shipped. Gil Griffith came on board shortly after this, taking Empirical Labs promotions and sales to an international level with his own company, Wave Distribution. With Gil, a techno-crazy guy with the latest toys, sales jumped and several employees were added to Empirical to keep up with orders.

We believe there's always room for a great, fun to use product... a better mousetrap. Conversely, there's little room for mediocrity, and so, several Empirical Labs designs were tossed out early on. If we are lucky, maybe certain parts of the "discarded" product's circuitry will be used in later designs. "A FEW GREAT PRODUCTS" has been our guiding dictum.

Empirical Labs takes pride in making customers happy and giving hassle free service. Someone will always answer the phone here during working hours... we frown upon companies who waste people's time with aggravating voice mail, and automated phone "frustration" systems. ELI makes premium products and believes that our customers should get premium service. We rarely charge for a failure of a product that was not the result of extreme abuse, even when long out of warranty. After dealing with so many companies who really don't seem to care if customers go away mad, we strive to be a "Good News Company" that leaves it's customers with a feeling of satisfaction... AND a desire to do business with us again.

Empirical Labs strives to be an environmentally friendly company. We encourage and give incentive to its employees to use as little non-replenishable resources as possible. By designing in serviceability and upgrade ability, we strive to make "non-disposable" products that will still be in use 10,20, even 40 or more years from now. Empirical aggressively recycles, as well as avoids waste, encouraging suppliers to not send multiple neither copies, nor cover pages on faxes. We try to reuse paper, packaging, and even parts when possible. We encourage employees to use energy efficient automobiles, offering cash incentives to buy cars that get over 30mpg. As scary as it is, global warming may be a real, irreversible phenomena.

Our Valued Customer Comments

Comments About the DISTRESSOR

Dear Empirical, I'm an LA based producer and an owner of a Distressor. The unit is really awesome! I've used it on guitars, bass, room mics, vocals it works great on everything. I've used it on records I've made with Beck, U2, Etta James, Hole and lots of others. Joe Chicarelli"

"Distressors: I can't get over HOW GREAT they sound. On everything. It's truly the best compressor made today." Greg Wells 10-1-04

"After buying a Distressor I had an epiphany. Having used software plug-ins for years I often didn't hear or understand the affects of various controls. After getting my Distressor, and using it and hearing the obvious affects of the attack and release controls, I was able to go back and use the Plug-ins with a new understanding." (Email)

"I sold a couple of 1176's and have replaced them with the Distressors, which do a great job of emulating the 1176's. Michael Wagener "(Ozzy Osbourne, Extreme, Metallica)

"In General, I really like where Dave Derr's ear leads him; one of pro audios truly independent thinkers, I'm a huge fan of the box (the Distressor), I use it for bringing up the "goosh" on ambient sources, and for saturating snares, toms, and kicks." George Massenburg

"For those who have come to love and depend on the sound of the Distressor, the new British Mode turns it into a new fun loving animal. At the flick of a switch, the Distressor becomes more aggressive and stressful on any instrument you desire. Dave Derr should win the "(explicative)" award for coming up with such a nice but nasty box." Michael Brauer (Cold Play, Aretha Franklin, Paul McCartney)

Comments About the FATSO Jr

"In a word, the FATSO is a very good answer to what a lot of people loathe about digital recording. It smoothes out the sharp, brittle edges to exactly the extent you choose, and fills in the hairline cracks just right. I use one on almost every mix I do. I could easily use one and possibly two more." George Massenburg

"People used to have to hunt for old, expensive gear to get the kind of sounds that the FATSO gives me." Ed Cherney (Lenny Kravitz, Dave Mathews, Eric Clapton, The Wallflowers, Goo Goo Dolls, Jackson Brown, Bonnie Raitt, Stones, etc.)

Best new Signal Processor-EQ AES Awards - "Empirical Labs Fatso took this category, despite the introduction of a variety of cool new processors. Who can resist the best aspects of analog tape combined with great compression" EQ Magazine

Comments About the Lil FrEQ

"Hey Dave... so I got the box, plugged it in on an Etta James vocal that I was having problems with... and it \$\$\$%^&* rocks. This is a great box, my friend. I can see anybody with a DAW wanting to use this thing. I am using the shelving, DS'ing and transformer out, and I am just thrilled. Congratulations. It absolutely complements the digital crap that I am forced to use...wooo hooo." Ed Cherney

"I finally got to hear Empirical Labs' Lil FrEQ, a monster that will destroy the way you think about EQ. This single-channel unit has two shelving bands, tunable low cut, four parametric bands, dynamic EQ for de-essing and direct box input—all noiseless and distortion free. Best of all, its smooth processing is absolutely addictive. Sweet!" George Peterson (Mix Magazine)

Comments About the Mike-E

"If you're looking for a WOW moment with a preamp, you should look into the EL-9 Mike-E. I have some pretty nice gear here, and when I got one, I put in an order for another the next day (my girlfriend wasn't pleased, but...). Seriously. True story. I would be surprised if you could find a used one...."

"We have used the Distressor pretty much since its inception and now use the Mike-E like we use our lungs! Thanks Dave and everyone at Empirical Labs. You are amazing!"

"It's true that the mic pre on it's own is fast and accurate... but it sounds so damn BIG and FAT that it doesn't bother me in the least. Add to that the seemingly endless versatility of the Compsat section and i can dial in as much grit or character as i could want...with total control. And yes, the ability to blend the compsat section into the signal is AWESOME.

Distressor

Warranty and Factory Service

This Empirical Labs Inc. product is covered by a limited warranty covering full parts and labor for 3 years from the purchase date. The warranty is only effective if the owner has returned his or her warranty card. See warranty card for further details.

Should problems arise, call Empirical Labs at 973 541 9447 or contact us from our website below, to obtain an RA number (Return Authorization). Pack the unit up well¹, with a note explaining the problem and return to Empirical Labs for repair. Include your name, address, phone number, and the date of purchase, and RA number. Send the unit with freight prepaid to the address below:

Empirical Labs (Repairs)
41 N. Beverwyck Rd.
Lake Hiawatha, NJ. 07034

We can also be reached on the Web at www.empiricalabs.com by selecting "CONTACT" and then "Techsupport" to email repair requests or information to Empirical Labs. The repaired unit will be returned to you via UPS Ground.

- 1) Pack the unit in original carton if possible. Otherwise, pack with bubble wrap and /or foam in a thick corrugated box. Shipping people are absolutely brutal to large packages and you must take every precaution against constant dropping, throwing, and crushing. We are not liable for products damaged during shipping.

Other Empirical Labs Products:

- 1) **Distressor EL8** - Classic Knee Compressor. Used on thousands of major records!
- 2) **Distressor EL8X** - The original Distressor on Steroids.
- 3) **Fatso Jr** – Two channels of Full Analog Tape Simulation and Classic Compression.
- 4) **Lil FrEQ** – An EQ with 8 Sections of unparalleled tonal contouring.
- 5) **Mike-E** – Digitally Controlled Mic Preamp with compression and saturation.
- 6) **DocDerr** – API 500 Compatible EQ, Compressor/Saturator, & Instrument Preamp.

Visit our website for other product info at EmpiricalLabs.com !



Empirical Labs
INC.

Technology for the Artist