



The Sound Wizard



Do you know how live music really sounds?

You can talk about this to the FOH of SEAL or JAMIROQUAI or MANÁ or TOM JONES or ALAN PARSONS or JAMIE CULLUM or ALEJANDRO SANZ or JULIO IGLESIAS or RAPHAEL or COLDPLAY or RIHANNA or RHCP etc.

And ask: Why are they using Neutral Audio's DREI tech.?

**or you can turn the page and discover it now.
Only will take a minutes.**



Here it is. Our advanced analog processor with DREI technology;

X-DREI PRO DEINTERMODULATOR

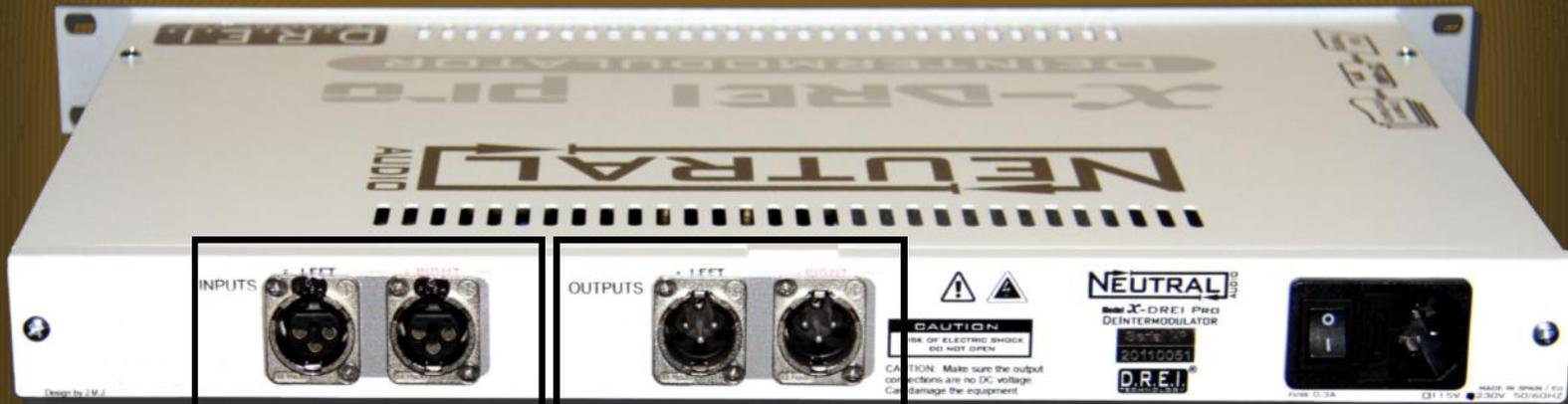
TOTALLY UNIQUE
6 buffers in parallel
100% Analogical

Authentic
LIVE sound



Harmonic Distortion Neutralizer

Target: Increase the overall performance of any sound system. 



L&R Inputs

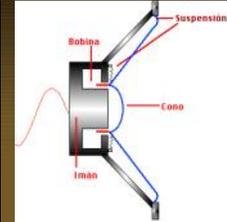
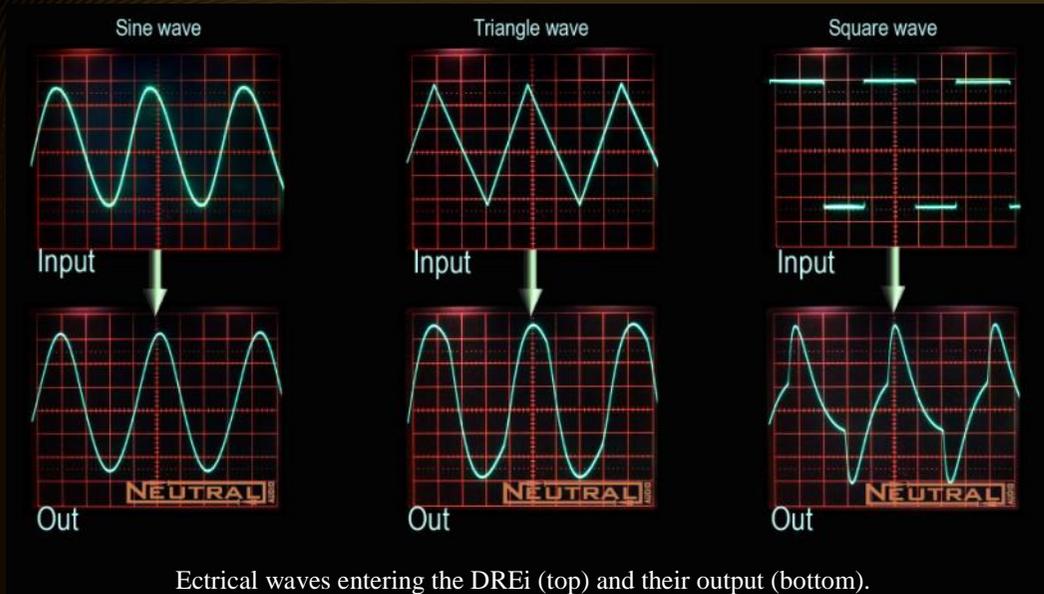
L&R Outputs

Analog mixer connected to the output.
Digital mixer connected as an insert.

No programming,
no adjustments needed.
Only insert, on and go!

 **Target: ZERO difficulty.** 

DYNAMIC
REDUCTION OF
ELECTRONIC
INTERACTIONS



These are real images taken with an electronic oscilloscope.

The speakers can only reproduce sinusoidal type waves due to electromechanical limitations. DREi sends only the pure music signal without loss of information. This is directed to amplifiers, filters and speakers to increase their overall performance and dynamics. No digital techniques are used.

DREi achieves this using several techniques together, some of them are:

- It attenuates the intermodulation produced by the frequencies and the electronics.
- It reinterprets waveforms which are difficult to play through the speakers, thus increasing their performance.
- It reinterprets distortion caused by saturation and recovers lost "energy".
- Controls the power in the lower frequencies to give a strong bass response and prevent it from subtracting "energy" from other frequencies.

And much more...



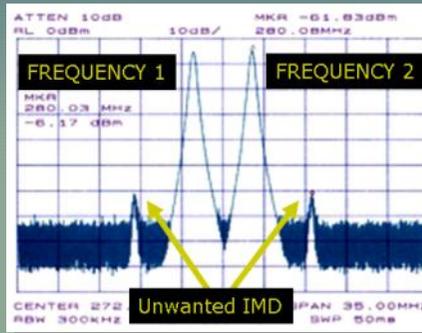
Target: No amplified sound outside the physical limits of the speakers.



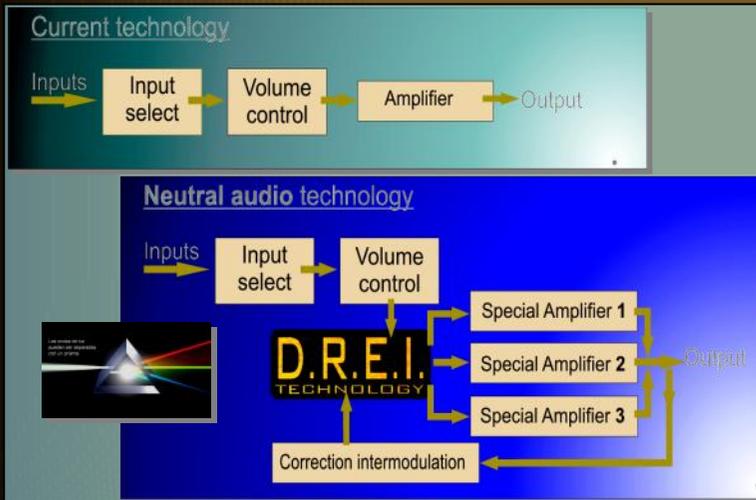
DEINTERMODULATOR
Harmonic Distortion Neutralizer

Objective:

To mitigate the ill effects of the **INTERMODULATION** (IMD) that occurs between two or more signals with different frequencies, (or instruments), which occur in all the elements an audio system and impair the purity of the original musical signal.

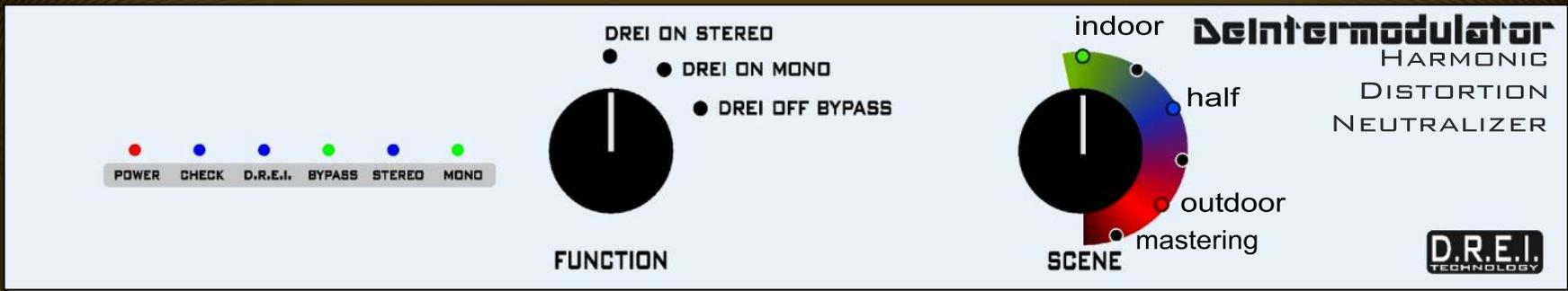


Pink noise



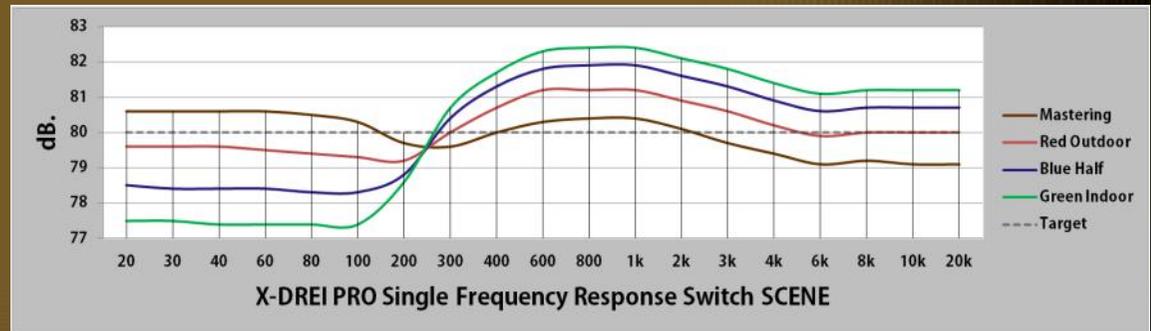
Musical signals enter the device and once amplified and processed are sent to 6 independent buffers which are dynamically controlled by D.R.E.i.

 **Target: Attenuate the intermodulation between nearby frequencies and the produced by the electronics.** 



With the BYPASS / DREI ON you can test the performance of this extraordinary machine.

The SCENE switch selects one of 6 sound-stage positions. Independently of this adjustment the DREI effect always works 100%. Used to optimize the synergies of audio response of the associated sound



Is not an equalizer, not a filter. The change in the dynamics between 6 buffers controlled by the DREI enables this versatile and interesting control.



Target: Achieve easily maximum synergy with any show room + amplification + speakers.



What do I gain by adding one to my systems?

You will notice some major and obvious improvements:

- Increases in the overall performance of the speakers and filters and optimization of the power amplification, offering greater volume for less energy, thus causing less damage and less deterioration.
- Crossover is more accurate when working with pure signals.
- The relationship between music and "other things" increases dramatically, resulting in cleaner sound details.
- It particularly stresses the bass sounds making them clearer, more consistent and powerful.
- There is a remarkable improvement in the headphones and monitors.
- Each instrument sounds more individual helping you to optimize the mix. The instruments and voices sound more "present" and the different sound levels can be heard better.
- In the recording studio, part of this effect is transmitted to the Master.
- and much more. We invite you to discover all its facets.

In what situations is it more advisable to use it?

No doubt in live concerts. It is also being used with remarkable results in recording studios, for monitoring and mastering, in discos and night clubs, sound systems, broadcasting, etc.. In fact any place where people work with audio signals.



Target: The sound cleaner and pure as possible with existing systems.



Now The Questions:

⇒ Are you interested in distributing? You are Welcome.

Dealers in:

Germany
Japan
Austria
Estonia
Spain
Portugal



X-QUANTUM Double/Double
Multi Preamp High-End



X-ONE Multi Preamp



X-DREI HighEnd

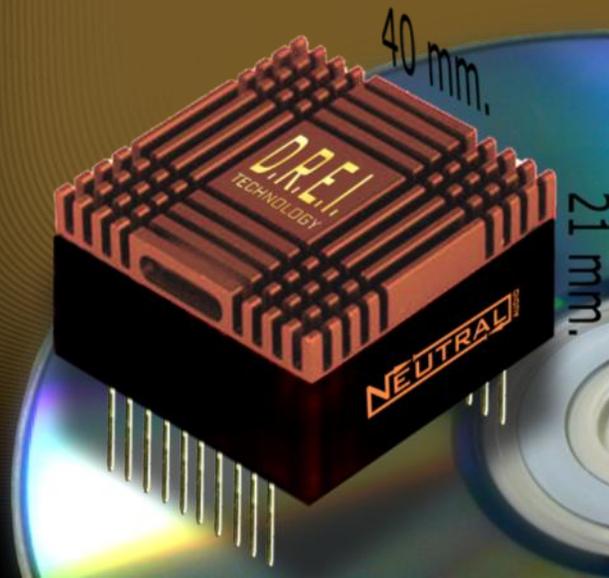


X-DREI PRO

DEINTERMODULATORS

Soon: - Preamp entry level with DREi ALL INSIDE
- X-DREi BASIC for integration, and more...

⇒ Are you manufacturer of audio electronics?



2 Channels

Maybe will be interested for you company our new chip
“DREi ALL INSIDE” to add to your designs.

Your designer can incorporate the connect for DREi
and include as standart or sell later as an upgrade.



Target: DREi tech. **WORLDWIDE.**





The Sound Wizard



THIS IS NOT ALL...
but I asked only a few minutes.



Thank you very much for your time.
We hope has been of interest.

For more information on our website.

www.neutralaudio.com



info@neutralaudio.com



Target: Present to you the next step in the audio industry.

If you still have more time, then can read the any FAQs and professional comments in next pages.



- JULIO GARCIA** We have bought this marvelous little device which is a real monster!!! We have tried it and it really works!!!
- PABLO MEDRANO** With the sound engineers of: Malu, Shakira, Enrique Iglesias, JessieJ, The Wanted, El Pescao, LODV, Pablo Alboran, etc. We had the opportunity to do blind tests with X-DREi, and I have to say it is not often I have seen such a homogenous opinion, the conclusion was unanimous: X-Drei is a marvel!
- SEAN SULLIVAN** (RIHANNA) The sound of the mix, Rihanna's vocal, the Sub bass, everything was on a whole other level than I've ever heard before, I could use so many words to describe it but just one says it best, phenomenal!!!
- DANIEL GREEN** (COLDPLAY) I love the device and think it is a major step forward in audio processing.
- TONY SMITH** (COLDPLAY) I inserted the XDrei over the L+R buss and gave Dan a blind A-B. The result is it has been racked up and is part of our set up.
- FERNANDO DIAZ** (ALEJANDRO SANZ) I've been dreaming of a device which does what this does for years.
- FERNANDO PEREZ** (MANA) Everything has gone up 30%. It has brought the colours to my mix.
- MATTEO CIFELLI** (Studio and live): It's too good!
- ANTONIO CHICO** I dare say that this machine will be on all drivers on all tours in the blink of an eye.
- JOHN ROBBINS** (USA) The Neutral Audio device is very good. Ten times better than the other harmonic filters on the market. I have made many tests of the equipment in the studio and lab, with Audio Precision and TEF and it is a really well made unit.
- ANGEL MARTOS** (MIGUEL RIOS) The definition and force it achieves with Drums and basses is incredible, really magical.
- GERMAN ROD.** (Fluge) We tested individual tracks. The piano and classical guitar sounds fantastic. The guitar strings seem to be amplified seperately.
- ANDY** (ANDY Y LUCAS) The voices are incredible, if it were manufactured in Houston it would cost 10 times more
- MANUEL ESTEPA** Mixtures are faster and easier because every instrument is so well defined.
- ANDRUS ARBA** I do not leave home without this "Betterizer"
- ALBERTO LYRA** (BISBAL) A phrase that I identified with what I felt mixing with DREi "Thanks to the greatness of DREi engineering this art will be even more outstanding"
- JAVIER RONDAN** I tried it in the studio and the result was spectacular. Suddenly it seems that all the instruments become more defined. The mix planes were more defined. The basses gain clarity, the voices separate from the guitars, etc.



What is the X-DREi DeIntermodulator?

It is a 100% analog machine designed to combat intermodulation -hence its name-, the physical limitations of the speakers and other factors that should not be in a music signal or amplified. A machine is composed of a DREi tech module and 6 buffers operating in parallel. The goal is to work with as pure a signal as possible and neutralize what is harmful.

What is a DeIntermodulator?

The word may sound funny or strange -in fact we have had to invent it- but it defines one of our core technologies well. For example if a De-Coder is a device that returns a coded signal to its original form, then the De-intermodulator is a device which returns an audio signal affected by intermodulation to the original sound.

Why the nickname Harmonic Distortion Neutralizer?

To better clarify the role of the device it is not a filter, processor, digitizer or an equalizer, it is a neutralizer of some factors of electronic signals that should not be amplified. At no time are audio signals lost or filtered.

What does DREi mean?

Dynamic Reduction of Electronic Interaction. All our devices have at least one of these modules. To function properly DREi uses various dynamically controlled preamps on each input / output channel.

What does it do and what do I gain by adding one to my systems?

You will notice some major and obvious improvements:

- Increases in the overall performance of the speakers and filters and optimization of the power amplification, offering greater volume for less energy, thus causing less damage and less deterioration.
- Crossover is more accurate when working with pure signals.
- The relationship between music and "other things" increases dramatically, resulting in cleaner sound details.
- It particularly stresses the bass sounds making them clearer, more consistent and powerful.
- There is a remarkable improvement in the headphones and monitors.
- Each instrument sounds more individual helping you to optimize the mix. The instruments and voices sound more "present" and the different sound levels can be heard better.
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- and much more. We invite you to discover all its facets.



How does DREi do it?

DREi achieves this using several techniques together, some of them are:

- It attenuates the intermodulation produced by the frequencies and the electronics.
- It reinterprets waveforms which are difficult to play through the speakers, thus increasing their performance.
- It reinterprets distortion caused by saturation and recovers lost "energy".
- Controls the power in the lower frequencies to give a strong bass response and prevent it from subtracting "energy" from other frequencies.
- And much more.

Does DREi function well in all audio systems?

Yes, its effect is the same. No matter the quality or level, there is always improvement. The greater the complexity of the equipment or music, the better the X-DREi PRO works, much better in the case of multitrack systems. For modest systems it is a great investment. To achieve the quality obtained by simply inserting an X-DREi you would have to pay several times its cost.

In what situations is it more advisable to use it?

No doubt in live concerts, there are many elements and tracks that add problems to the audio signals. It is also being used with remarkable results in recording studios, for monitoring and mastering, in discos and night clubs, sound systems, broadcasting, etc.. In fact any place where people work with audio signals.

How to connect to analog or digital?

Very simple, insert any audio signal through its circuits. DREi gives its best performance at the mixer exit before the crossover and amplification. We always use analog, no digital. If the entire system is digital you can insert the X-DREi to the mixer as an external processor and divert the final LR mix to this connection. Some crossover devices also permit this insert. Although it may seem that a dual D / A and A / D conversion impair the audio signal, the improvement with X-DREi is much better and offsets this possible loss.



Are there digital processes in this device?

No, the audio signal never leaves the analog domain.

I already have a good sound, is the improvement great enough to make it worth buying?

Without a doubt. This is one of those rare occasions when a new device with new technology is clearly, instantly and undoubtably noticeable. Not small or subtle, doubtful changes for better or worse. It is very difficult to define but the fact that a large number of artists and engineers have already built it into their systems is strong evidence our claims are justified. No one inserts a new device unless it is really worth it. The audio professional is always working to improve each day, if there is a new and powerful tool in the audio shed you should be using it.

Should I make mixes with or without using the DREi?

With DREi. It will help you optimize the mix to levels that you can not even imagine because it will give you a much greater separation of instruments and any slight change in the adjustment of the mixer is more evident. But the first time you try one of these machines you should do it with the DREi off.

The first time you use DREi it is better to connect X-DREi and leave it on "bypass". Make your mixes as usual and when you think you can not get more performance and are satisfied, switch on your audio input, (a band playing or a recording (best with multitracks) and try several times connecting / disconnecting the X-DREi bypass switch on the front panel. That way you will hear the differences clearly even using a mix put together without using the X-DREi. You may imagine how it will be the next time you use DREi while doing the mix, then it will be better not to use "bypass".

Does it affect the frequencies and my mix?

It depends on your audio system and the SCENE switch. In the last position (past red = mastering) of this switch, there is no effect on the scene and therefore it does not affect the frequency response at all. Changing positions from red to green slightly alters the relationship between the bass and the high frequencies. With a simple frequency the difference can be +-2dB, but is much lower with music that has a more dynamic DREi effect. If you need to, you should not forget that you can easily compensate in your final mix before reaching the DREi. There is a graph in the owner's manual or



What is meant by reinterpretation of waveforms?

This is another of the internal functions of DREi, which is able to reinterpret the types of waves which should not be amplified as they waste unnecessary power sources as they can not be easily reproduced by the speakers. The electromagnetic behavior and physical limitations of the speakers do not let you reproduce a triangular wave efficiently and much less so a square wave (eg.a sine wave cut caused by saturation), and prevents them from behaving optimally with the rest of the sound if there are these types of waves. DREi corrects these problems but does not eliminate them, as you would lose some of the sound, but uses the part that must be reproduced and reinterprets the rest. So no nuances are lost in any of the instruments, or even the electronics. Try to imagine a speaker playing a slow square wave and you'll understand this better.

Does it affect the phase or polarity?

Not at all. Proof of this is that ,if you want, you can interchange the LR channels and use them interchangeably, for example in multi-channel systems such as monitors or movie theatres.

What is the LED CHECK?

This is an automatic function giving added security. If the machine detects an anomaly or the internal power supply fails, it instantly goes into BYPASS, so you will never be left without sound in any event. Remember that turning off the unit also puts it into bypass mode.

How do I use it in a studio?

It should be used in the position after red (mastering), but experience tells us that people actually use red (outdoor), it is a matter of the mix engineer's taste. You can insert it into each track at the time of recording, (especially for vocals / piano / guitar / strings) in the mastering position, then once all the work done, when creating a master it must be inserted again, but now you can use the SCENE position you like best, which may depend on the type and complexity of the music. The DREi effect is partly transmitted to the recording and helps create better sound when reproduced.

Why will DREi damage your speakers less?

Because they do more real work with less input, you need less volume input to fill the room and the amplifiers stay cooler. You can do the following to check. When you have a line of subwoofers, no music playing but with everything on except the X-DREi, approach those woofers. Sometimes you will see that the cone is moving, a small tremor that produces no sound but which is wearing it out and damaging it when in use. Now connect the X-DREi and then look at the cones. Normally they will move much less or even not at all, depending on the system. Draw your own conclusions.