CORAL 2

Acustica

CORAL 2

REEF

Acustica

INDEX

MADREPORA OCULATA *White coral*

CORAL2 INTRODUCTION

Madrepora oculata, also called zigzag coral, is a Scleractinia (stony coral) that is found worldwide outside of the polar regions, growing in deep water at depths of 80–1500 meters. It was first described by Linnaeus in 1758. It is one of only 12 species of coral that are found worldwide, including the Subantarctic oceans.
In some areas, such as in the Mediterranean Sea and the North-east Atlantic Ocean, it dominates communities of coral.

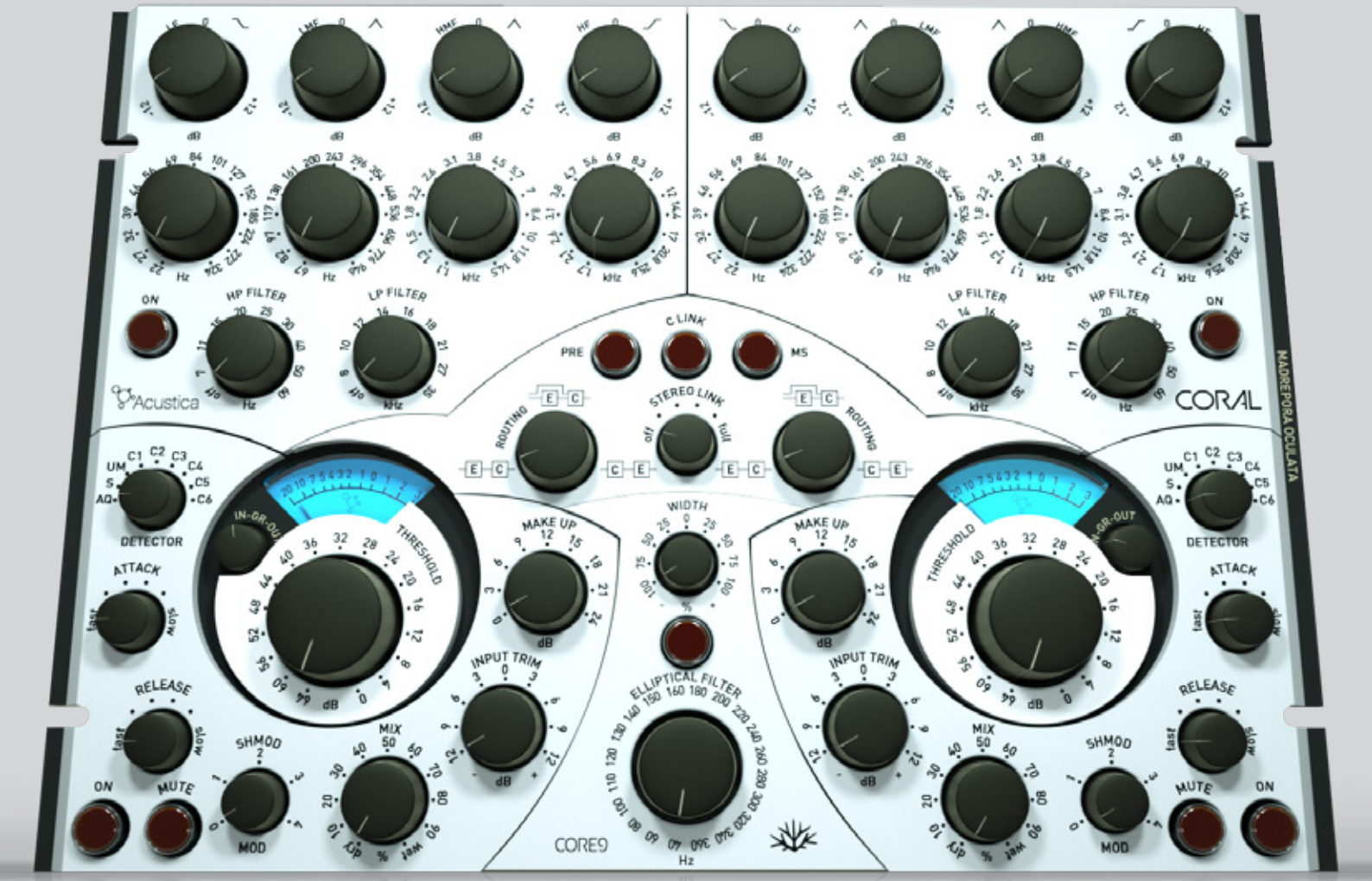
The species is quite variable in its tendency to branch, its texture and color and other aspects, even within specimens in the same coral colony.

It is bushy, growing in small colonies that form thickets, creating matrices that are fan-shaped and about 30 to 50 cm high. It has thick skeletal parts that grow in a lamellar pattern. As its skeleton is fragile and unable to sustain a large framework, it is usually found among stronger coral, such as Lophelia pertusa and Goniocorella dumosa, that offer protection. In areas where it dominates, it is usually found in rubble and debris rather than in coral reefs.

Madrepora oculata produces large amounts of mucus that is extracellular or outside the cell membranes. The mucus acts in a protective capacity to shield the coral skeleton from attacks of destructive pests.

The first instances of seeming neoplasms in a coral were reported in a species of Madrepora in Hawaiian waters in which hypertrophied corallites or skeletons in the coral were noted. Similarly hypertrophied corallites were described in colonies of Madrepora oculata near northwestern Australia and Japan, as well as in the Formosa Strait and other areas, but have never been confirmed.

A recent provisional reinterpretation is that these abnormal corallites are a form of internal gall, an abnormal swelling or growth caused by infection by a parasite, rather than a neoplasm caused by mutation.



Thank you for purchasing Coral2, our most advanced product for mastering purposes.
While designing Coral2 we have given special consideration to creating an innovative product that would be unique from other software products currently on the market: not only have our hardware emulation techniques evolved so much to make us particularly proud of our creation, but we have also tried to go beyond simple hardware emulation and imitation (although the final result may easily deceive you and sound like a physical product).

The basic concept behind Coral2 was to establish a transparent process through a strategy that is not commonly used by other manufacturers. The EQ is unique and innovative, thanks to the high number of frequencies. The compressor is also unique and innovative. In particular, the compressor applies a soft-clipping strategy: compression applied to large dynamic areas is gentle and gradual, in order to preserve the transients from being cut off hard.

Conventional dynamic compressors usually use a hard-clipping strategy, which flattens short transients and peaks abruptly (kind of a limiting strategy): when applied to a large audio portion, the result may be a bright yet harsh sound.
The EQ's strategy is also based on being applied gently and gradually on large portions of the audio band (so a large and smooth bell), impacting the overall spectrum balance in the most transparent way.

We have also added an elliptical filter, which is often used in the vinyl mastering domain and is also appreciated in other fields for the low-frequency stereo control.
Coral would not be a complete product without a routing section, stereo link control and the mid-side processing.

CORAL (channel-strip) is available in 5 different skins:
NOTE: This feature will be available from August 2019

The DEFAULT skin & 4 ALTERNATIVE skins enhances the potential of this beautiful software for all owners.

CORAL²

1. System requirements and package contents

1.1 Sampling Process

The sampling process has been performed by Acustica. The unit was sampled with mastering quality converters, using a method which takes considerably more time than the normal sampling standard. This method improves the quality on the entire audio spectrum.
Native sample frequency was 96 kHz. The 44.1 kHz, 48 kHz, 88.2 kHz frequencies were derived from the native one by a down-sampling and up-sampling process.
This method avoids any negative sample rate conversion (SRC) artifacts when loading projects at different sample rates and gives faster project loading times as well.

1.1 Sampling Requirements

	Windows		OSX	
	Minimum	Recommended	Minimum	Recommended
Operating System	Windows 7 SP2	Windows 10	OSX 10.8	OSX 10.13
CPU	Quad Core	Latest Multicore CPU	Quad Core	Latest Multicore CPU
RAM	4 GB	16 GB to 128 GB	4 GB	16 GB to 128 GB
HDD / SDD	1700 MB	1700 MB	1700 MB	1700 MB
Screen Resolution	1024x768 (XGA)	1920x1080 (HDTV)	1024x768 (XGA)	1920x1080 (HDTV)
Audio Host	VST / AAX 64 bits	VST / AAX 64 bits	VST / AAX / AU 64 bits	VST / AAX / AU 64 bits

(1) Intel i7 generation 6 or newer is recommended.
(2) 3840x2160 UHDTV is also supported.

1.3 Sampling Rate

- 44,1 kHz
- 96 kHz

2. Sampling Process

The sampling process has been performed by Acustica Audio. The units were sampled with mastering quality converters, using a method which takes considerably more time than the normal sampling standard.

This method is of benefit to the entire audio spectrum.
Two sample rates are provided with Coral2; the native sample frequency was 96kHz. The 44.1kHz frequency was derived from the native one by a down-sampling and up-sampling process. This method avoids any negative sample rate conversion (SRC) artifacts when matching projects with different sample rates and also helps with project loading times.

CORALLIUM RUBRUM *Red coral*

CORAL2 EQUALIZER

Precious coral or red coral is the common name given to Corallium rubrum and several related species of marine coral.
Red corals grow on rocky seabottom with low sedimentation, typically in dark environments—either in the depths or in dark caverns or crevices. The original species, C. rubrum (formerly Gorgonia nobilis), is found mainly in the Mediterranean Sea.
It grows at depths from 10 to 300 meters below sea level, although the shallower of these habitats have been largely depleted by harvesting.

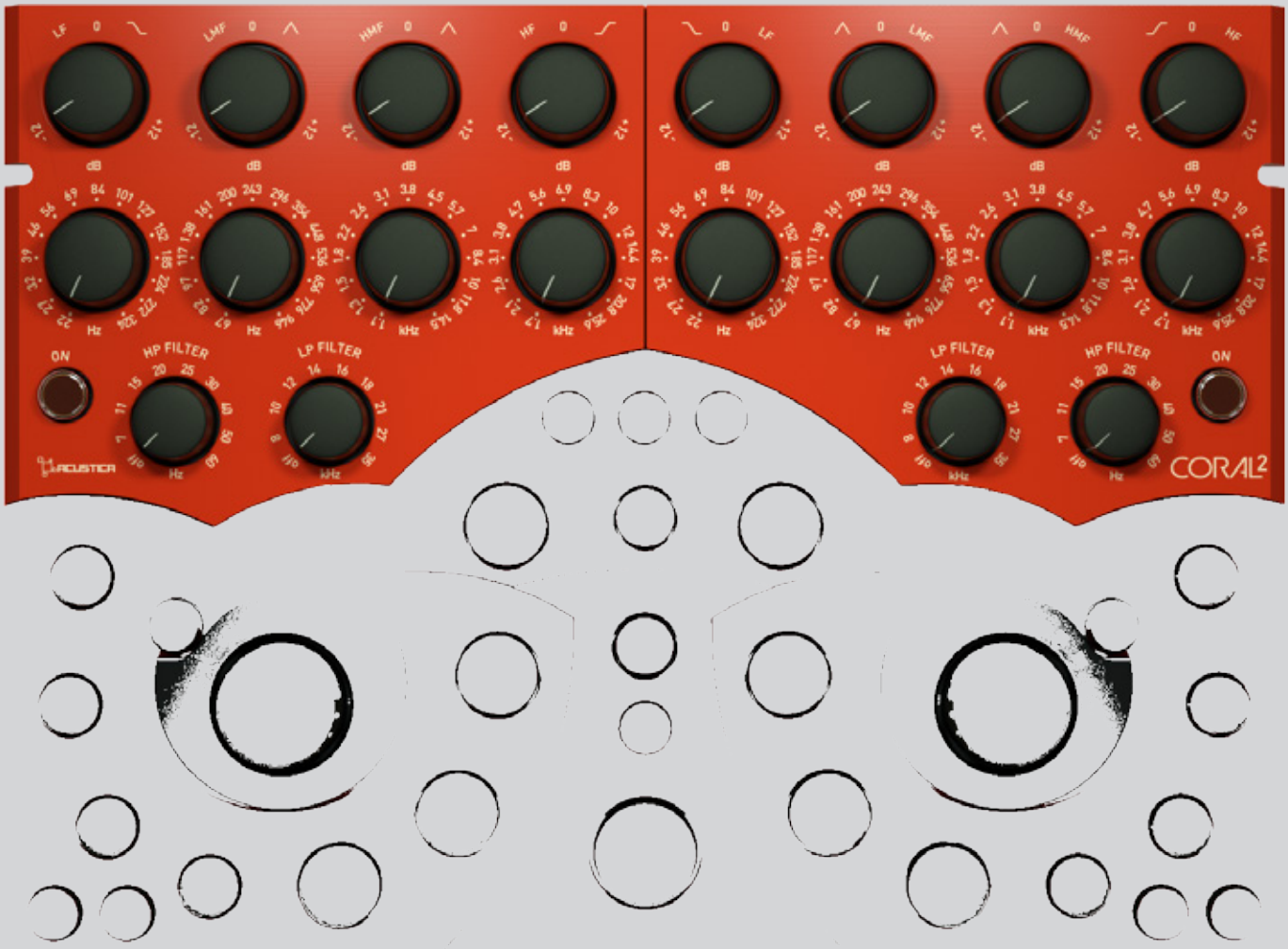
In the underwater caves of Alghero, Sardinia (the "Coral Riviera") it grows at depth from 4 to 35 meters. The same species is also found at Atlantic sites near the Strait of Gibraltar, at the Cape Verde Islands and off the coast of Southern Portugal.

Other Corallium species are native to the western Pacific, notably around Japan (Corallium japonicum) and Taiwan; these occur at depths of 350 to 1500 meters below sea level in areas with strong currents.

In common with other Alcyonacea, red corals have the shape of small leafless bushes and grow up to a meter in height. Their valuable skeleton is composed of intermeshed spicules of hard calcium carbonate, colored in shades of red by carotenoid pigments.
In living specimens, the skeletal branches are overlaid with soft bright red integument, from which numerous retractable white polyps protrude. The polyps exhibit octameric radial symmetry.

The hard skeleton of red coral branches is naturally matte, but can be polished to a glassy shine.
It exhibits a range of warm reddish pink colors from pale pink to deep

red; the word coral is also used to name such colors.
Owing to its intense and permanent coloration and glossiness, precious coral skeletons have been harvested since antiquity for decorative use. Coral jewellery has been found in ancient Egyptian and prehistoric European burials, and continues to be made to the present day. It was especially popular during the Victorian age.



An often over-used word can describe this equalizer: transparent.

It's based on a classic Baxandall configuration, a design which is highly prized for its clarity; its smooth slopes easily allow broad musical corrections with minimum phase smearing.

Baxandall low and high shelves can be found in several hardware devices (although usually they are preset on a fixed frequency), while Bax middle (bell) filters are certainly few and far between.

There's a practical reason behind this: in its simplicity, this design needs carefully selected component values, and each center frequency must be compensated differently in order to achieve an otherwise flat curve (on a technical side note, this is the reason behind the somewhat odd center-frequency values of the two middle cells in Coral). Another desirable feature of this bell eq is a proportional-q action, which gives extremely pleasant broad tonal corrections at small dB values. This is a field where Acqua technology really shines: it can take the best of an analog design (magnitude and phase response, non-linearities, dynamic behavior...) while overcoming all the impracticalities. In this specific case, it has been possible to build a complete eq section in a way that would have been very difficult to implement in the analog world, yet retaining the most desired sound traits of the original design.

In each of the four cells, the gain control ranges from -12 to +12dB. No intermediate dB values are shown on the GUI; this was chosen on purpose, in order to encourage a "Master with your ears, not with your eyes" attitude. The cut/center frequency controls are stepped.

The two filters are designed for mastering duties, rather than "sound sculpting"; thus they are very different from the ones generally found in mixing consoles. Their slope is gentle and the cutoff frequencies are chosen at the extremes of the audio range. The low- and high-pass filters have a 12dB/octave slope (2 pole), and are built in a sub-Bessel configuration. It's a design which trades some selectivity for a better phase response. It seemed to be the choice which best harmonized with the other sections of Coral.

CORAL2

EQUALIZER USER'S MANUAL


LMF
HMF
dB
LP FILTER
Hz
CORE9 - ULTRA

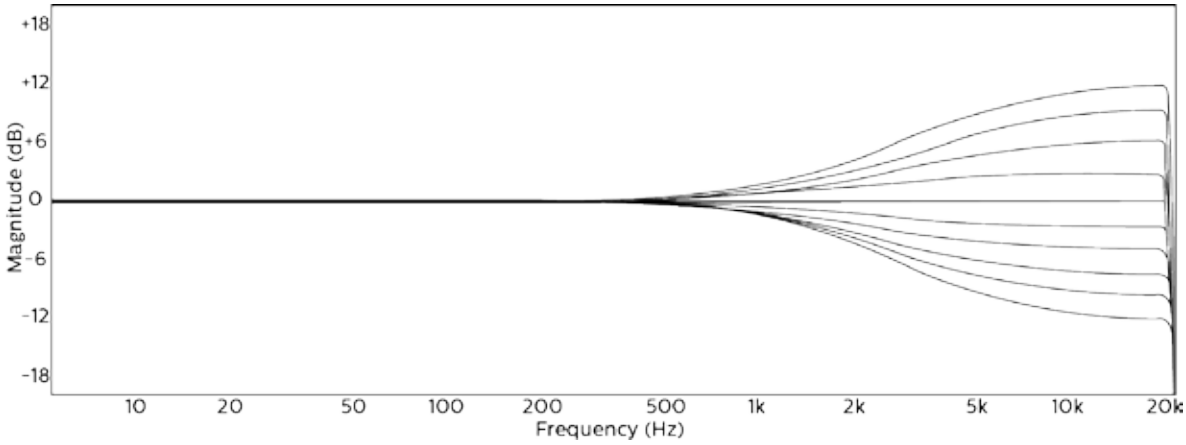
EQUALIZER

On

This button activates all EQ sections

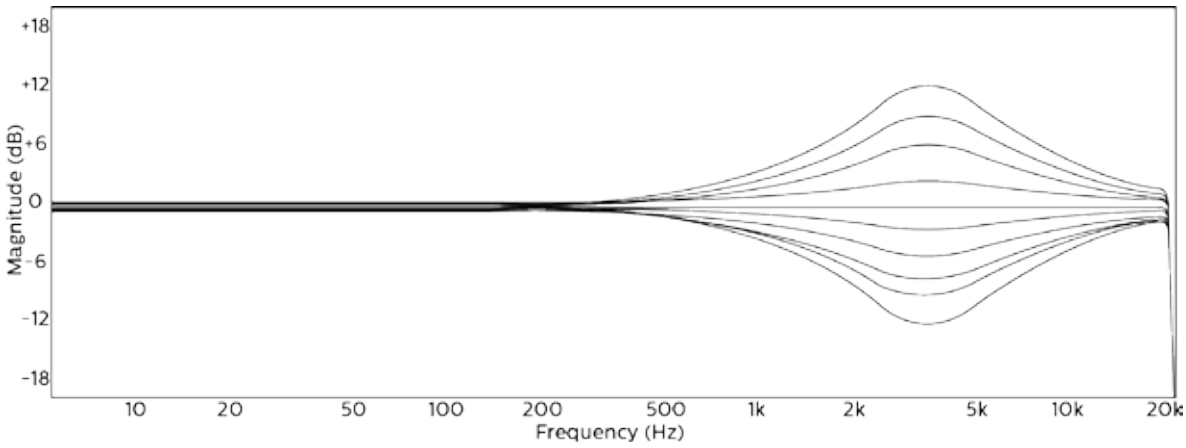
HF Shelf Section

HF Frequency: this stepped knob allows you to switch the frequency of the band between 15 steps from 1.7kHz to 25.6kHz
HF Gain: this knob is used to increase or decrease the gain of the band from -12dB to +12dB.
When the gain is set at the 0dB central position, the Eq section is bypassed.



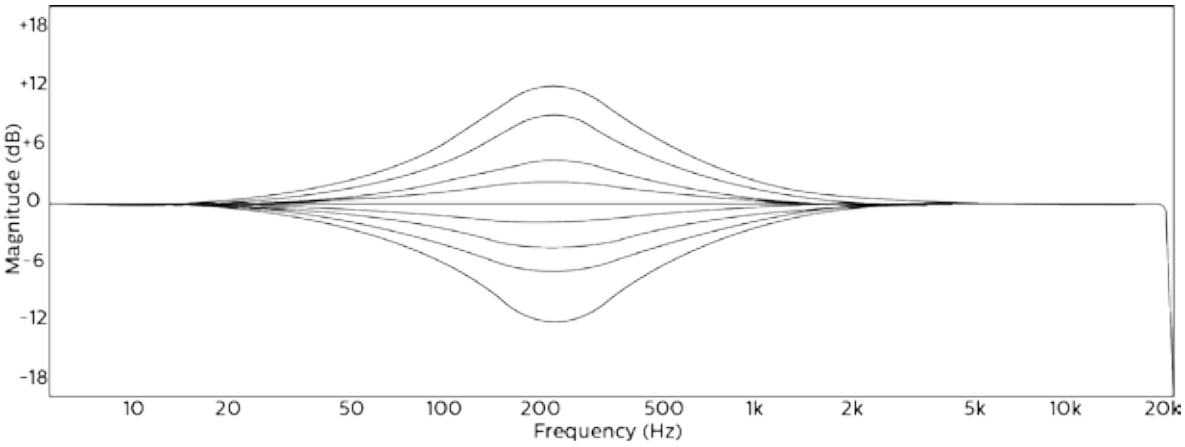
HMF Bell Section

HMF Bell Frequency: this stepped knob allows you to switch the frequency of the band between 15 steps from 1.1kHz to 14.5kHz
HMF Bell Gain: this knob is used to increase or decrease the gain of the band -12dB to +12dB HMF Bell Q (fixed value)
When the gain is set at the 0dB central position, the Eq section is bypassed.



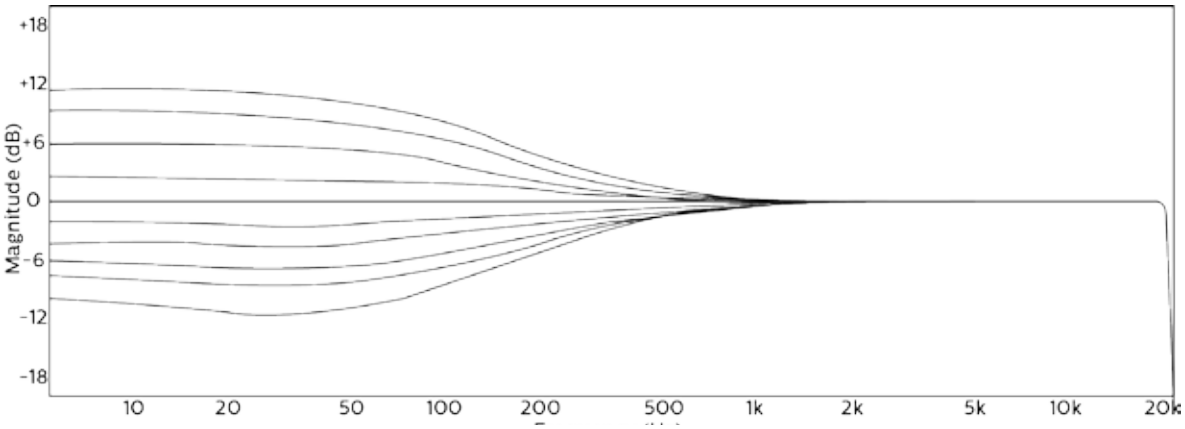
LMF Bell Section

LMF Bell Frequency: this stepped knob allows you to switch the frequency of the band between 15 steps from 67kHz to 945Hz
LMF Bell Gain: this knob is used to increase or decrease the gain of the band from -12dB to +12dB
When the gain is set at the 0dB central position, the Eq section is bypassed.



LF Shelf Section

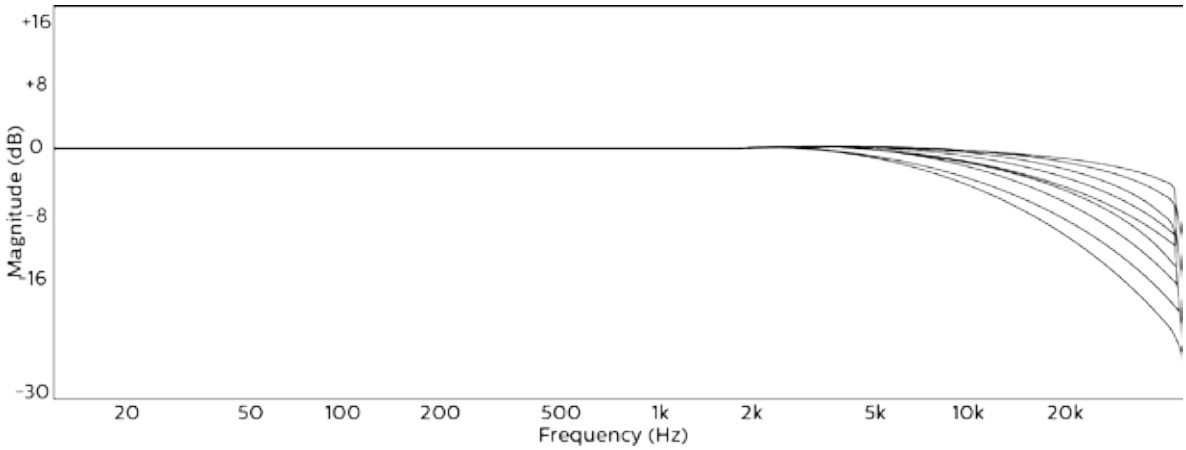
LF Frequency: this stepped knob allows you to switch the frequency of the band between 15 steps from 22Hz to 324Hz
LF Gain: this knob is used to increase or decrease the gain of the band from from -12dB to +12dB.
When the gain is set at the 0dB central position, the Eq section is bypassed.



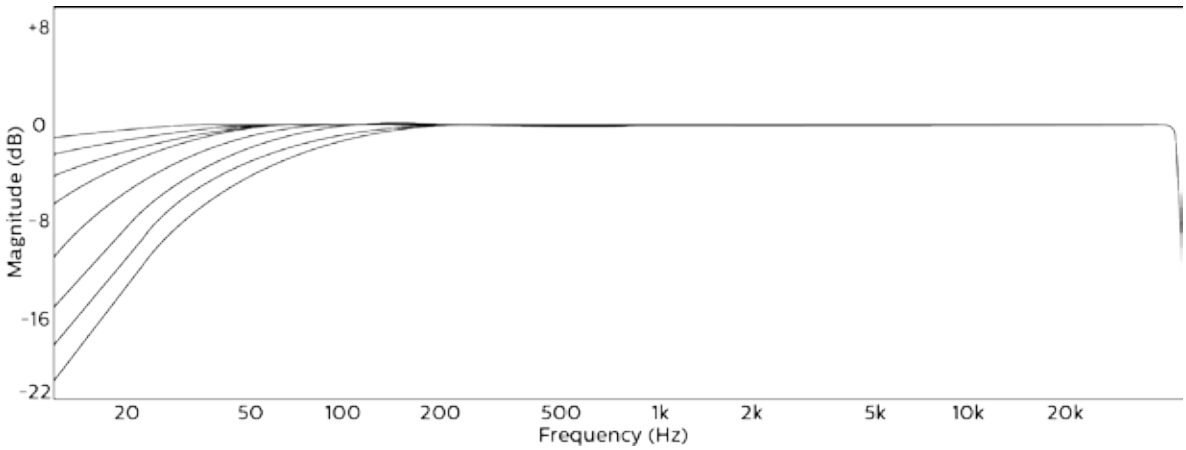
Cut Filters

12 dB per octave Low Pass Filter Frequency 8kHz to 36kHz.
12 dB per octave High Pass Filter Frequency 7Hz to 60Hz.

Each filter is disabled in the “Off” (default) position.



Low pass filter curves



High pass filter curves

Master settings

Artist:

Album:

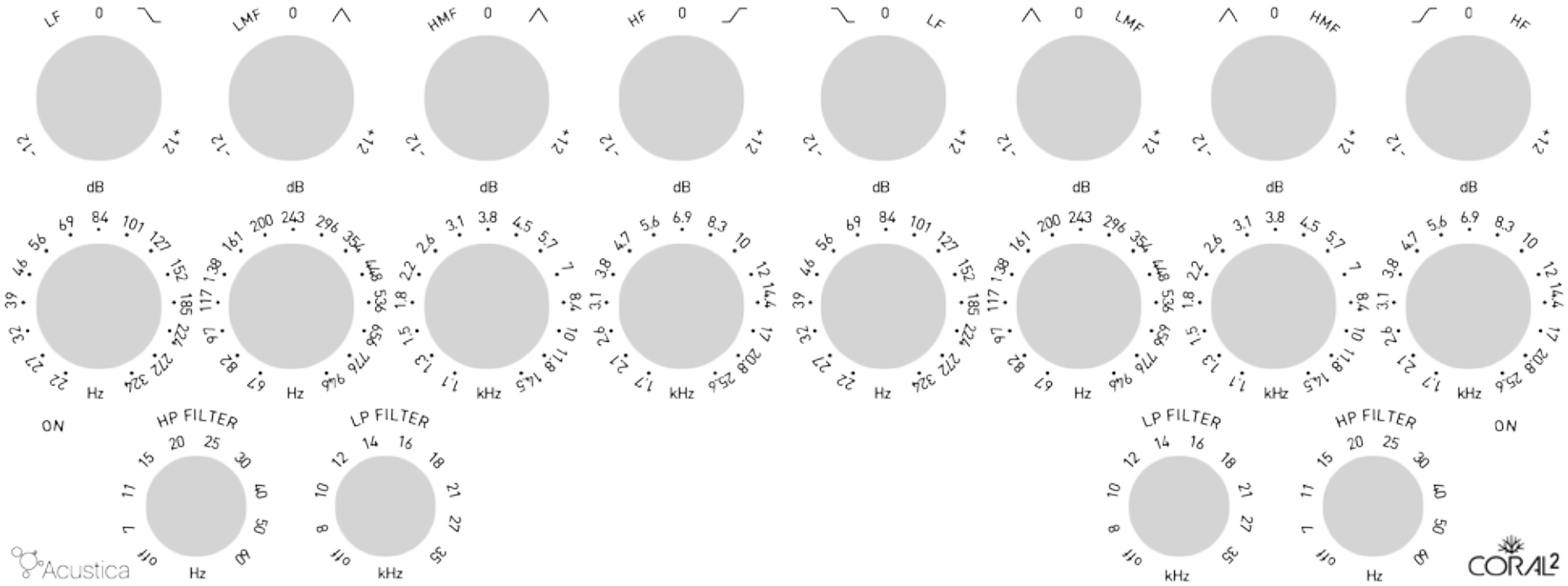
Track:

Engineer:

Studio:

Date:

Coral2



HELIOPORA CAERULEA *Blue coral*

CORAL2 COMPRESSOR

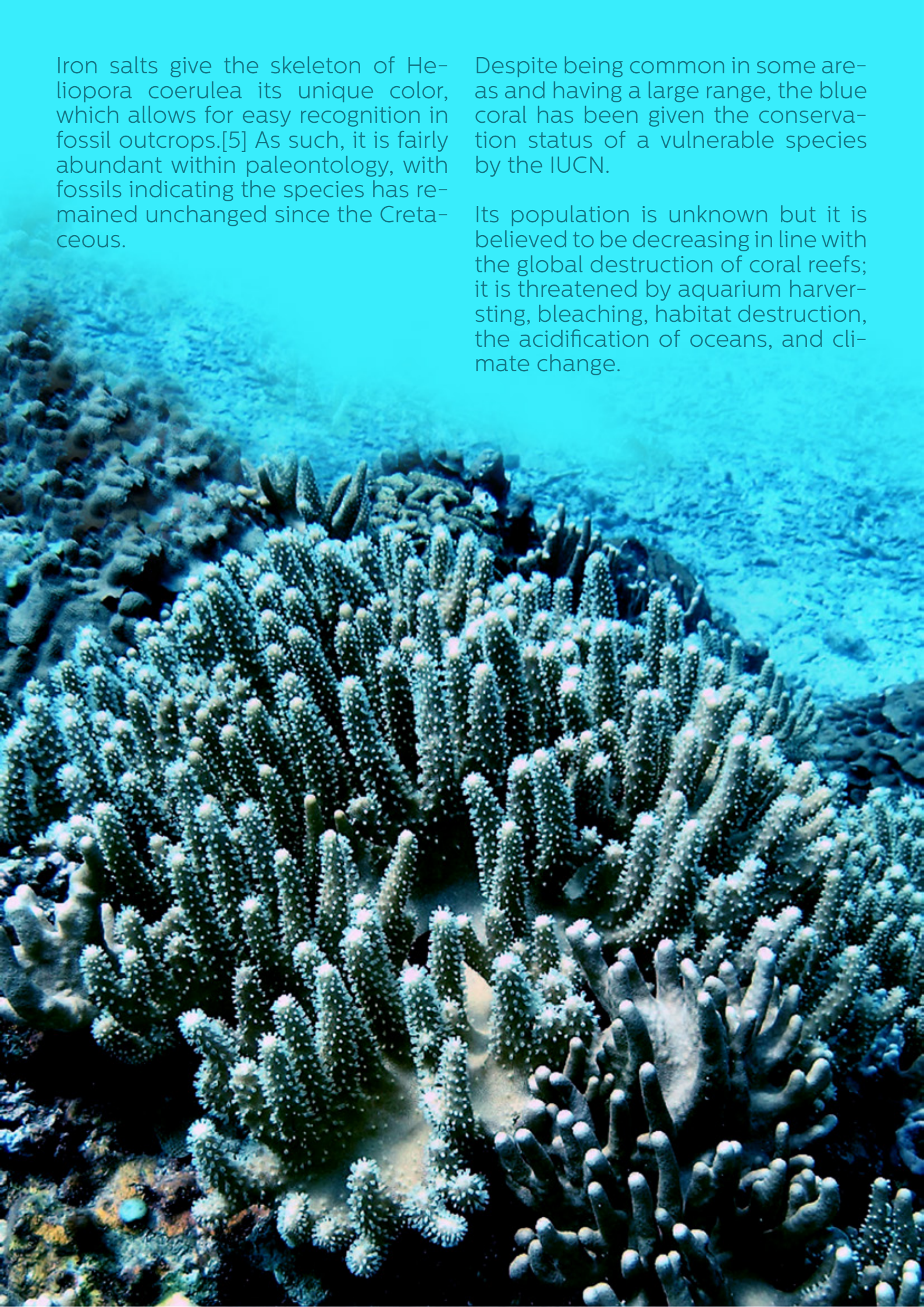
Blue coral (Heliopora coerulea) is a species of colonial coral and the only species in the family Helioporidae and the only Octocoral known to produce a massive skeleton.
This skeleton is formed of aragonite, similar to that of scleractinia. Individual polyps live in tubes within the skeleton and are connected by a thin layer of tissue over the outside of the skeleton. It was described by Pallas in 1766.

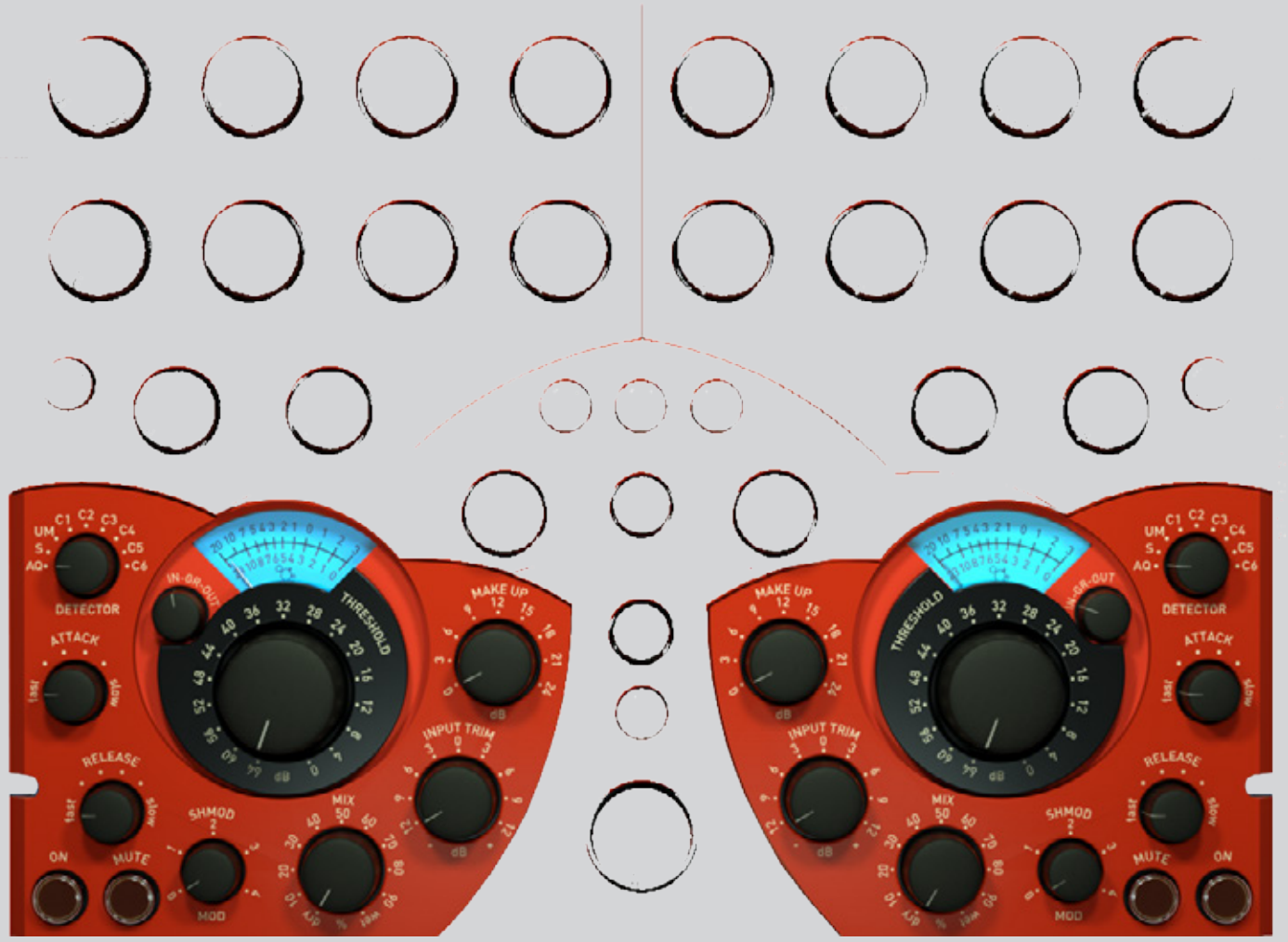
The blue coral is the only extant Octocoral with a massive skeleton, which is composed of fibrocrystalline aragonite (calcium carbonate). It is a hermatypic zooxanthellaete species with either blue or grey-grey polyps located within its skeleton, which each contain eight tentacles. Its colonies are either columnar, plates or branched. It is a tolerant species and is used in marine aquariums.

Iron salts give the skeleton of Heliopora coerulea its unique color, which allows for easy recognition in fossil outcrops.[5] As such, it is fairly abundant within paleontology, with fossils indicating the species has remained unchanged since the Cretaceous.

Despite being common in some areas and having a large range, the blue coral has been given the conservation status of a vulnerable species by the IUCN.

Its population is unknown but it is believed to be decreasing in line with the global destruction of coral reefs; it is threatened by aquarium harversting, bleaching, habitat destruction, the acidification of oceans, and climate change.





The compressor is Coral's most vital and innovative section.

All our latest products include a control knob called SHMOD: a modulation of the attack that increases its flexibility and moulds its shape. In the extreme upper position the attack time increases up to ten times. In the extreme lower position there is a lookahead, switching from an exponential, a linear, to a logarithmic form.

This kind of modelling allows a precise control of the transients. Coral2 has a very specific compression function: compression starts slowly (you need high threshold values for small amounts of compression) to have a soft knee and then a limiting section characterized by a high-ratio compression curve.

This helps contribute to maximum flexibility in the mastering process, shifting between very low-ratio and high-ratio curves depending on the threshold setting.

The detector section is what makes Coral2 so different from other compressors. It consists of 9 presets that model several rectifiers from different kinds of hardware. Each preset sets a different configuration of the attack and release curves: starting from the left the attack and release times increase (and are further split into individual attack and release settings).

Here is where the compressor is highly precise: significant changes in the threshold parameter produce extremely precise variations in the signal compression. You also have an important control on the attack and release times: you can change the macro group with the DETECTOR control knob. Within the macro group, you can then select the attack and release times from 6 different values. The attack time can also be changed with the SHMOD control knob.

CORAL2

COMPRESSOR USER'S MANUAL


SAND
MARINE
C5
C6
DETECTOR
ATTACK
fast
slow
MOD
RELEASE
fast
slow
THRESHOLD
MAKE UP
dB
C
E
IN-GR-OUT
THRESHOLD
MOD
RELEASE
slow
THRESHOLD
MAKE UP
ON
SIDECHAIN

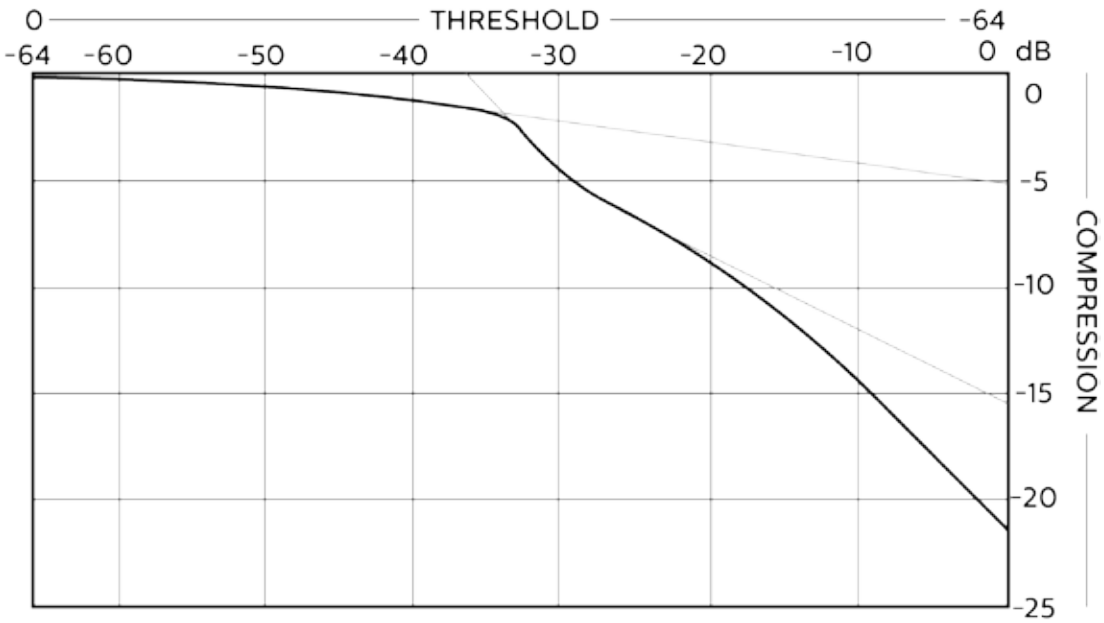
COMPRESSOR

The COMPRESSOR section is characterized by a Modern Design, Performance and Reliability.

The inclusion of a Compressor module in this plug-in provides a complete and powerful processor which retains all of the character and musicality of the original device while incorporating some exciting new features that belong to the sampled hardware.

The compressor section of CORAL2 is a masterpiece and it includes 9 detectors from different compressors!

Compressors transfer curve



THRESHOLD: This knob sets the threshold of the compressor from -64dBu to 0dBu;

Times

DETECTOR: Coral2 is equipped by with 9 different detectors. This control allows you to select between 9 presets that model the rectifiers of different hardware devices.

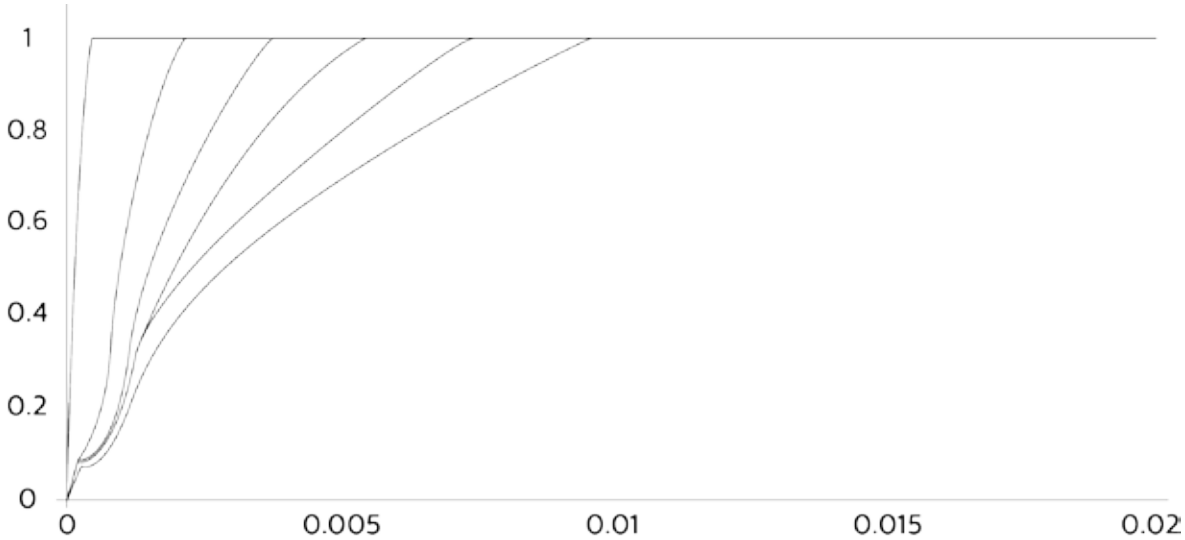
ATTACK: This knob sets the compressor's attack time that ranges from X* ms (fast) to X* ms (slow);

RELEASE: This knob sets the compressor's release time that ranges from X* ms (fast) to X* ms (slow);

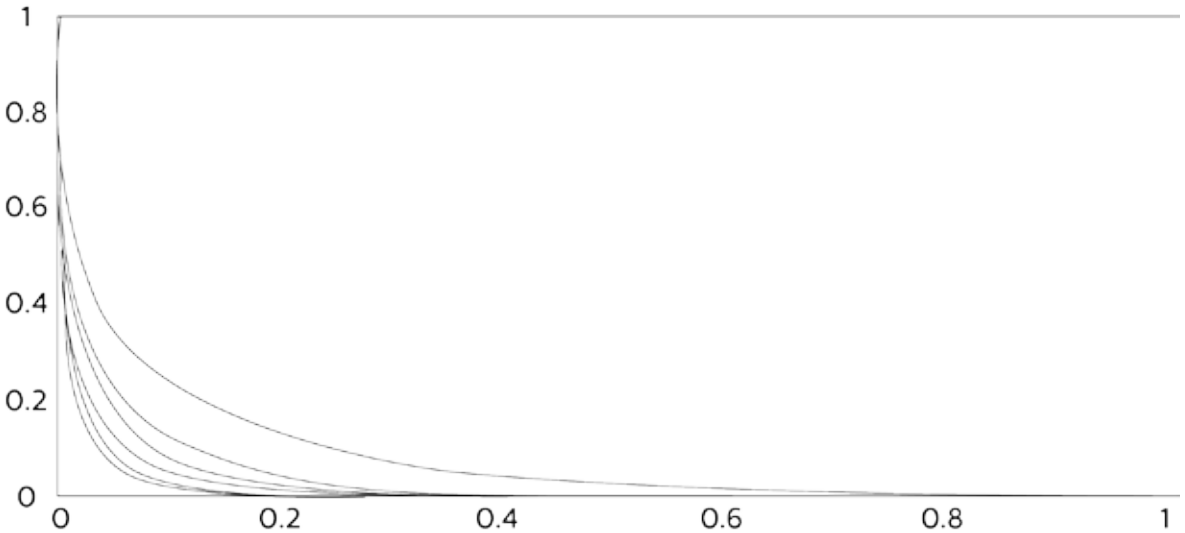
SHMODE this knob is a shape control for the compressor's attack behavior. It allows you to adapt the attack shape to any audio source.

N°	Compressor	Attack (ms)*						Release (s)*					
		step 1 (fast)	step 2	step 3	step 4	step 5	step 6 (slow)	step 1 (fast)	step 2	step 3	step 4	step 5	step 6 (slow)
1	Aquamarine (AQ)	*for details refer to the AQUAMARINE operating manual*											
2	Sand (S)	*for details refer to the SAND operating manual*											
3	Ultramarine (UM)	*for details refer to the ULTRAMARINE operating manual*											
4	C1	0,4	2,1	3,7	5,5	7,5	9,6	0,08	0,12	0,17	0,23	0,33	0,64
5	C2	0,4	4,1	7,6	11,14	15,5	19,4	0,08	0,10	0,13	0,14	0,15	0,18
6	C3	0,8	7,2	12,3	18,2	26,3	32,5	0,20	0,29	0,46	0,62	0,86	1,61
7	C4	0,99	19,3	33,5	47,17	60,5	85,5	0,38	0,51	0,64	0,72	0,81	0,94
8	C5	2,3	45,4	78,5	112	163	198	0,88	1,17	1,49	1,73	1,92	2,29
9	C6	3,3	67	118	162	239	292	2,21	3,51	5,58	7,68	9,43	9,47

COMPRESSOR C1

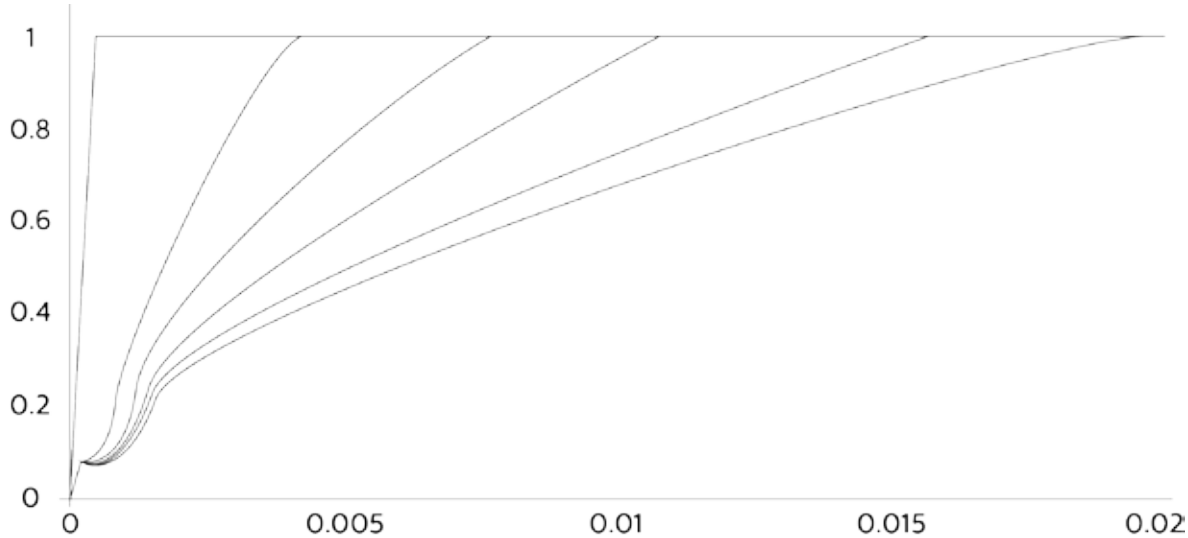


C1 attack curves

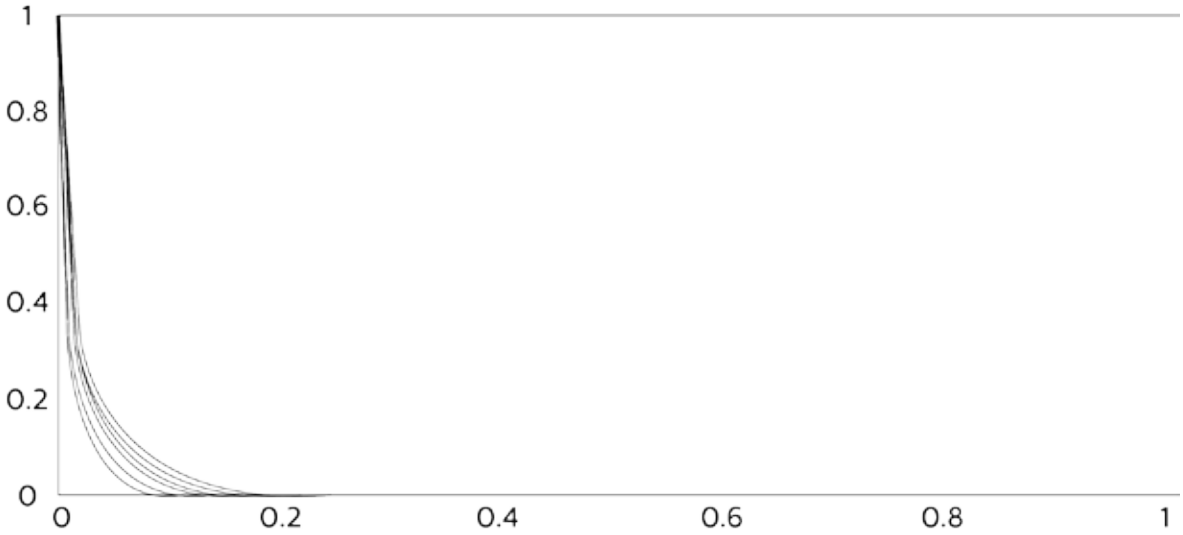


C1 release curves

COMPRESSOR C2

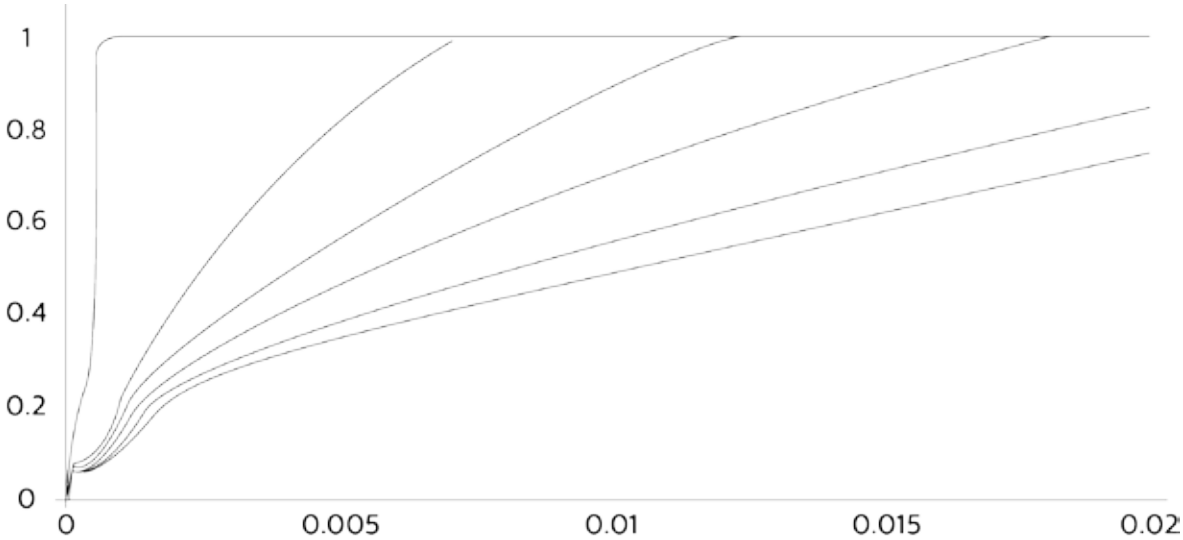


C2 attack curves

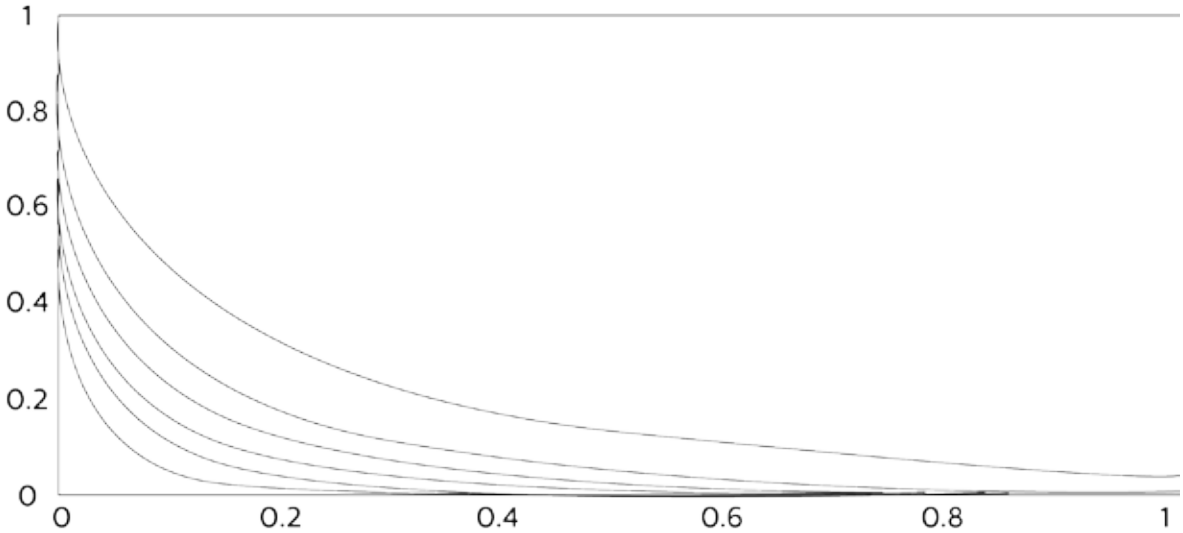


C2 release curves

COMPRESSOR C3

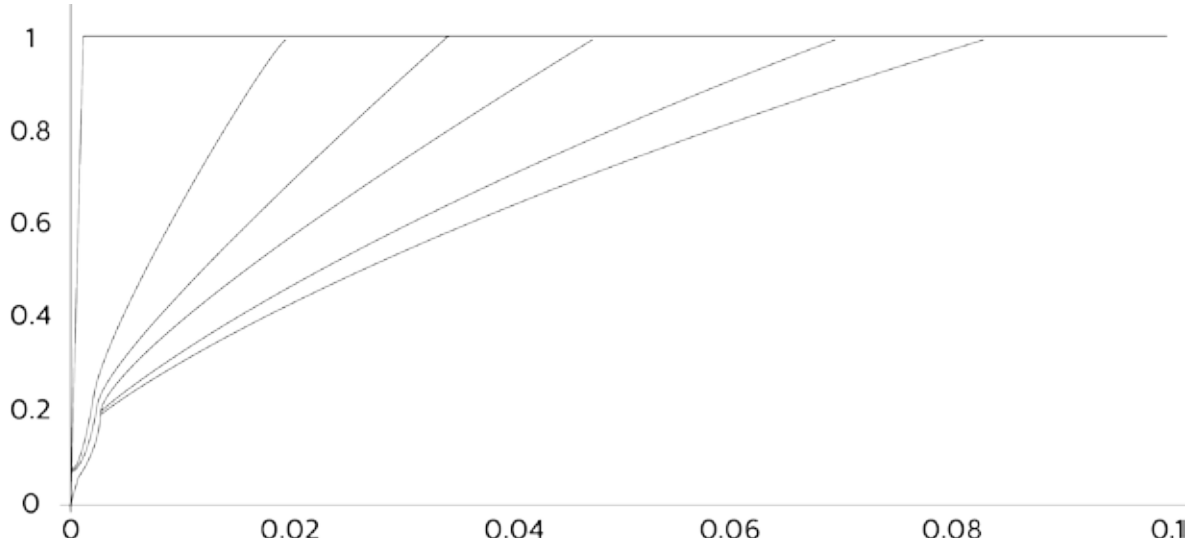


C3 attack curves

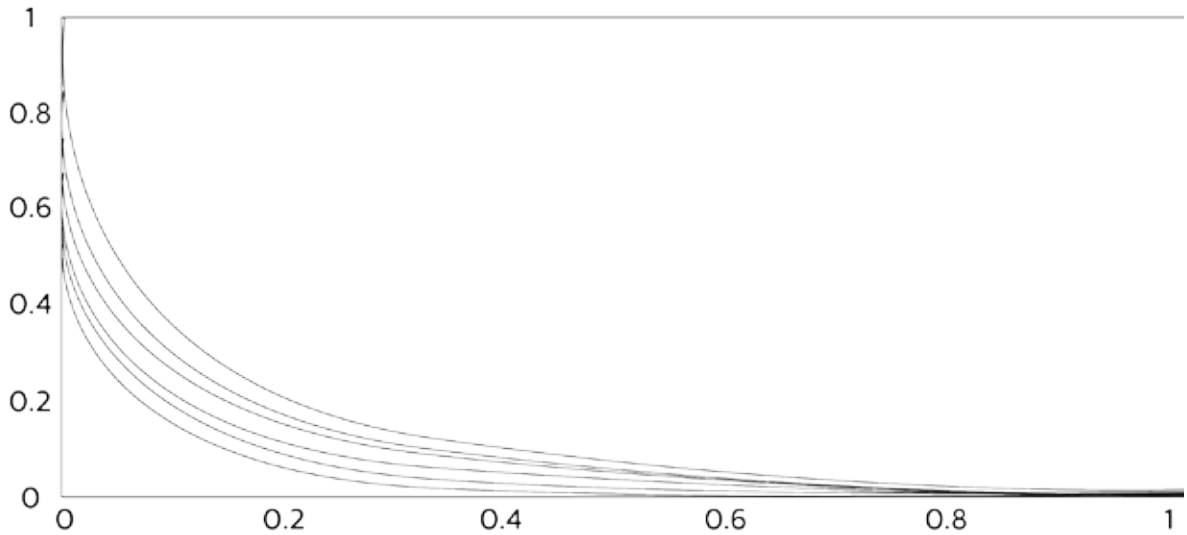


C3 release curves

COMPRESSOR C4

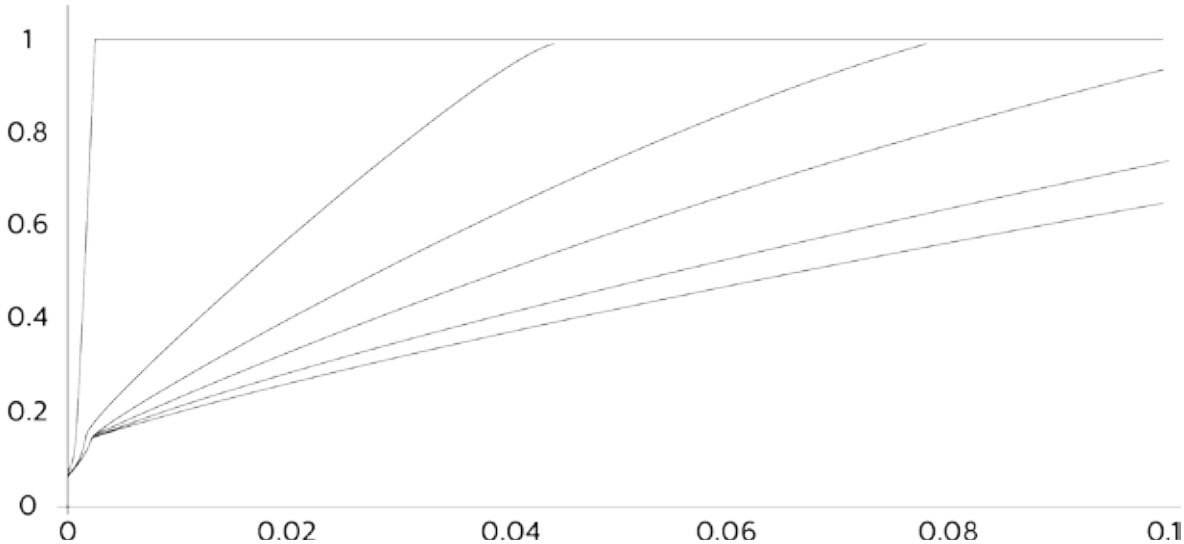


C4 attack curves

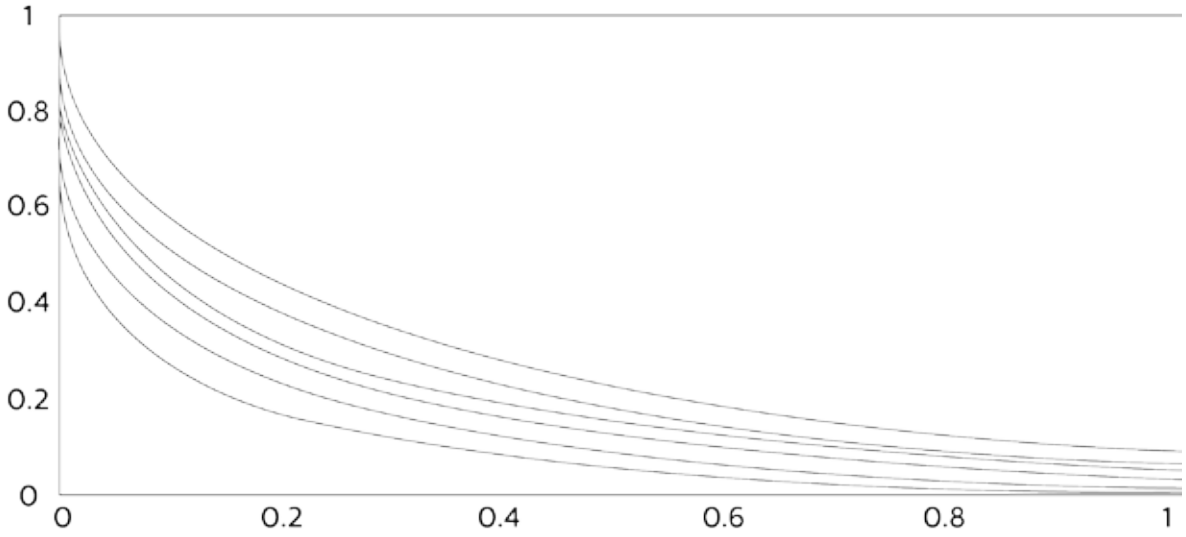


C4 release curves

COMPRESSOR C5

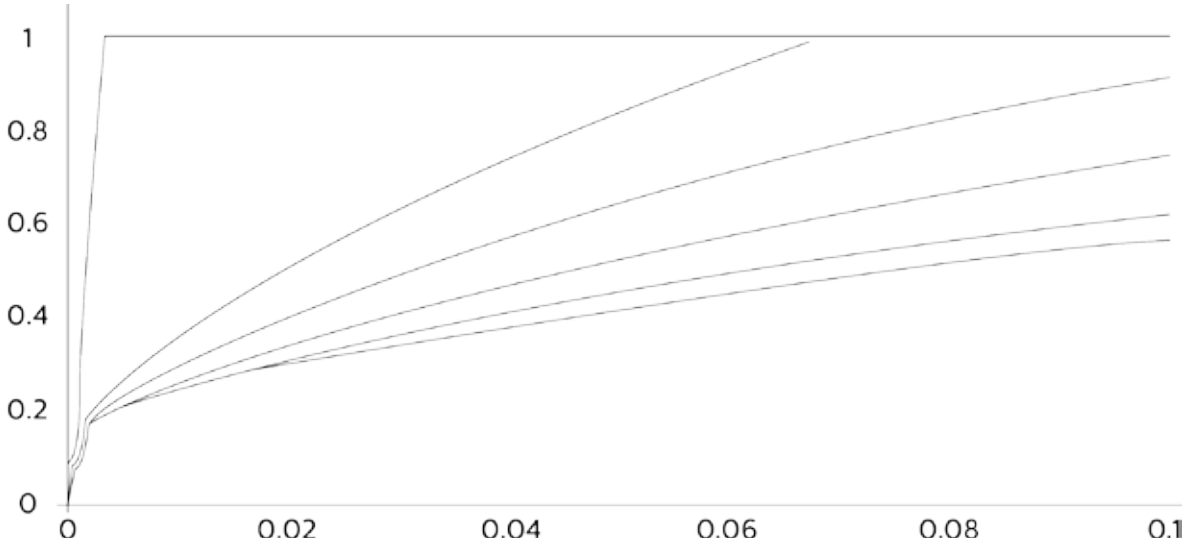


C5 attack curves

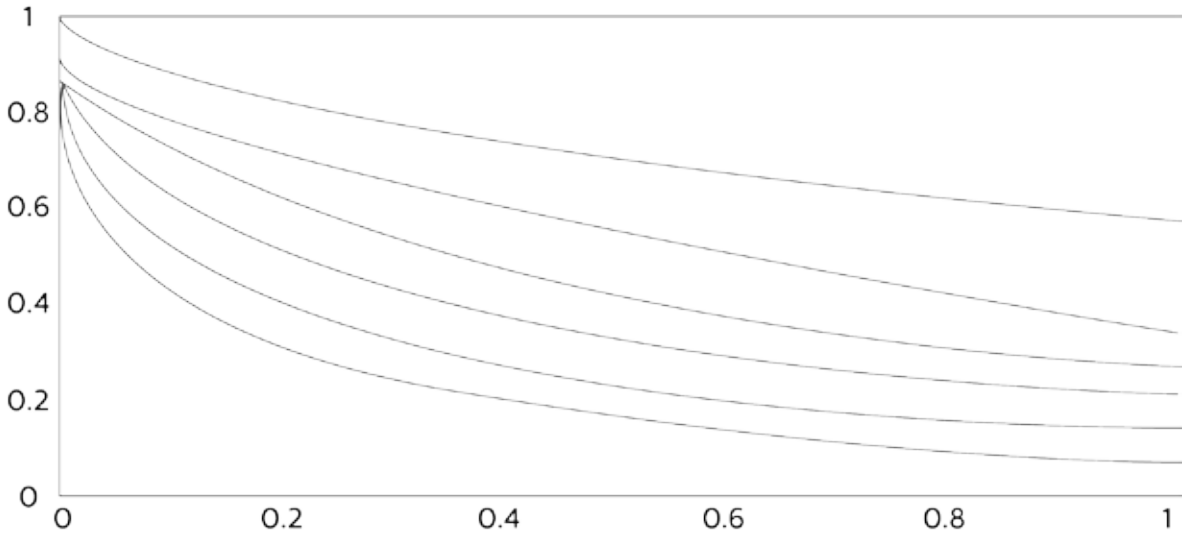


C5 release curves

COMPRESSOR C6



C6 attack curves



C6 release curves

Gain

MAKEUP: this knob sets the gain compensation and is designed to boost the compressed signal in order to match the level of uncompressed signal.

MIX: This control determines the mix proportion between the original (dry) and 'effected' (wet) signals. Here you'll find a very powerful and simple-to-use feature.

Other controls

ON: by pushing this button the Compressor is activated

MUTE: this button mutes the relative channel

INPUT TRIM: Sets the input level of the Comp from -12dB to +12dB, it is used to control the input signal level.

GAIN REDUCTION METER: measures the reduction level applied by the compressor, the meter indicates '0' in the absence of an input signal or any gain reduction. If the signal exceeds the compression threshold or limit level, the amount of gain reduction is displayed.

Master settings

Artist:

Album:

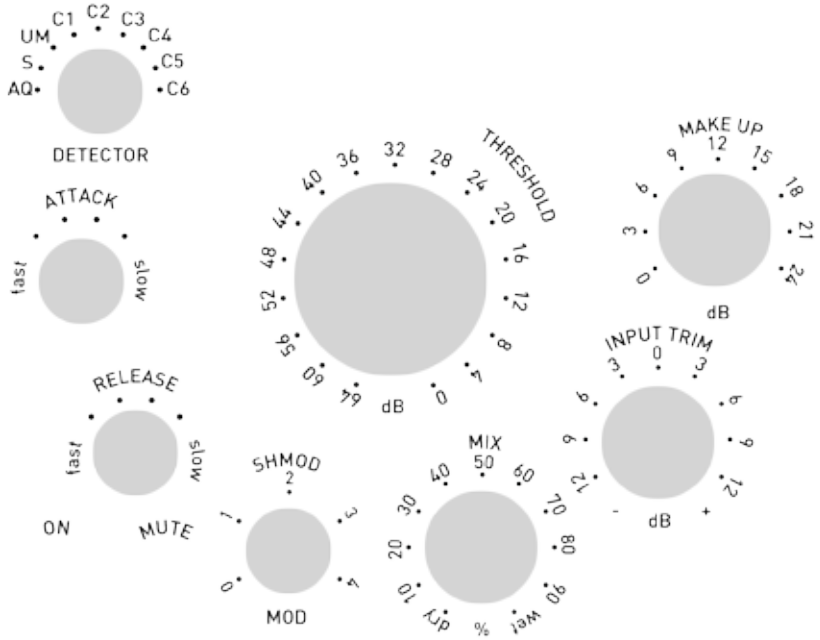
Track:

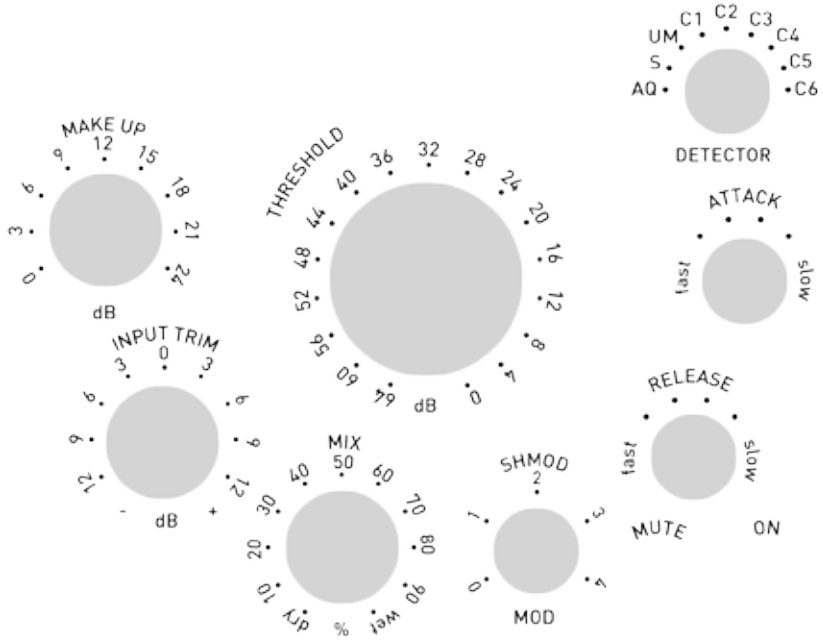
Engineer:

Studio:

Date:

Coral2





PLEROGYRA SINUOSA *Green coral*

CORAL2 CONTROL

Plerogyra sinuosa is a species of "bubble coral". It has grape-sized bubbles which increase their surface area according to the amount of light available: they are larger during the day, but smaller during the night, when tentacles reach out to capture food. This species requires low light and a gentle water flow. Common names for Plerogyra sinuosa include "grape coral", "bladder coral", "pearl coral" and "branching bubble coral".

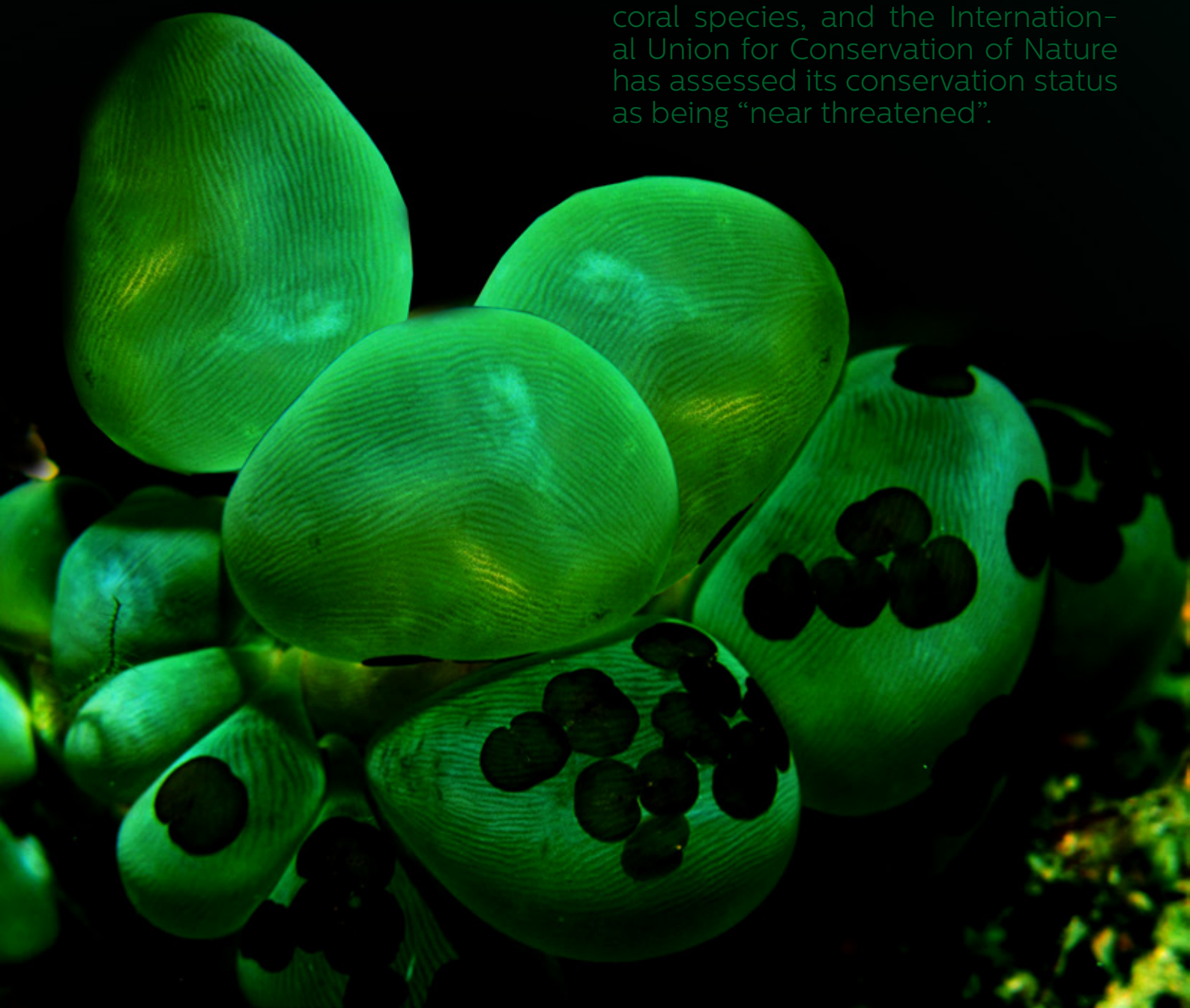
Colonies of Plerogyra sinuosa are in the form of an inverted cone that may be as much as a metre (yard) across. The corallites in small colonies are monocentric and trochoid, but become flabellomeandroiid (arranged in valleys, the neighbouring valleys having separate walls) in larger colonies.

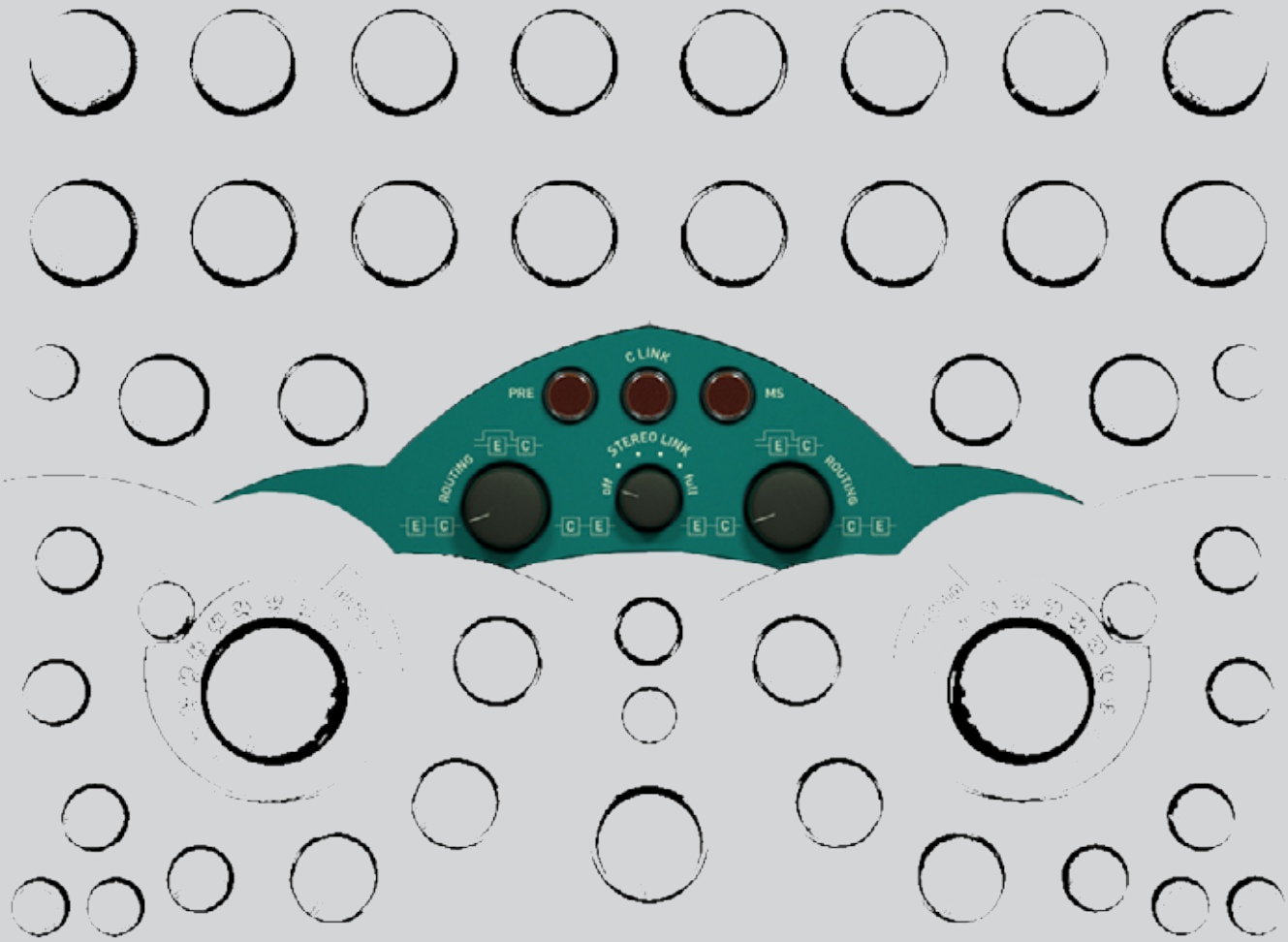
The septa have smooth margins but are irregularly arranged giving the colony an untidy appearance. The costae on young colonies sometimes form lobes which develop spines. These spines then elongate and a new polyp develops, this budding method being an unusual occurrence among corals.

In the living coral, Plerogyra sinuosa has vesicles resembling bubbles up to 2.5 cm (1 in) in diameter.
These enlarge during the day but retract to a certain extent during the night to expose the polyps and their tentacles.

Plerogyra sinuosa is a zooxanthellate species of coral. It obtains most of its nutritional needs from the symbiotic dinoflagellates that live inside its soft tissues including the walls of the vesicles. These photosynthetic organisms provide the coral with organic carbon and nitrogen, sometimes providing up to 90% of their host's energy needs for metabolism and growth. Its remaining needs are met by the planktonic organisms caught by the polyps.

This is a common, widely-distributed species in shallow reef environments. It is subject to the threats of climate change and destruction of its reef habitat common to other coral species, and the International Union for Conservation of Nature has assessed its conservation status as being "near threatened".





The idea behind Coral is to provide a mastering channel-strip.
The control section is the core of the system where: you can enable the preamp, or the mid-side mode.
Among other functions, you can change the compressor's stereo link control, enable the linking of the controls (in order to easily use the left-right or mid-side channels) and the routing. In this case you can work independently on both channels and determine the processing order between the EQ and compressor, or you can introduce the EQ in the control channel/sidechain of the compressor.

Coral Reef's standalone module also includes two additional preamps, with a strong and full sound and the option to use them in dual mono mode (an ideal preamp completely identical for both channels) or in stereo mode (a preamp with slight differences between the left and right channels, exactly like in the hardware domain).

CORAL2

CONTROL USER'S MANUAL


OFF
INPUT TRIM
MONO
STEREO
MONO
STEREO
MONO
AIR


MONO
STEREO

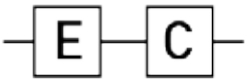

MONO
STEREO
MONO
STEREO
MONO
STEREO

CONTROL

This section was introduced for the first time in SAND. Also in the CORAL2 channelstrip it is possible to set the routing of the components.

ROUTING: The routing is controlled with a stepped knob, allowing you to adjust CORAL2's routings to its three positions. Each position sets a different block configuration explained below. The routing of the plugin's components can be MONO or STEREO so it is characterized by two different linked/unlinked controls.

CORAL Channel Routing Diagram
C: Compressor / F: Filter / E: Equalizer



1° STEP:
INPUT > EQ > COMP

2° STEP:
INPUT > EQ > COMP
INPUT SIDECHAIN > COMP (Comp in external side-chain on 3-4 channels)

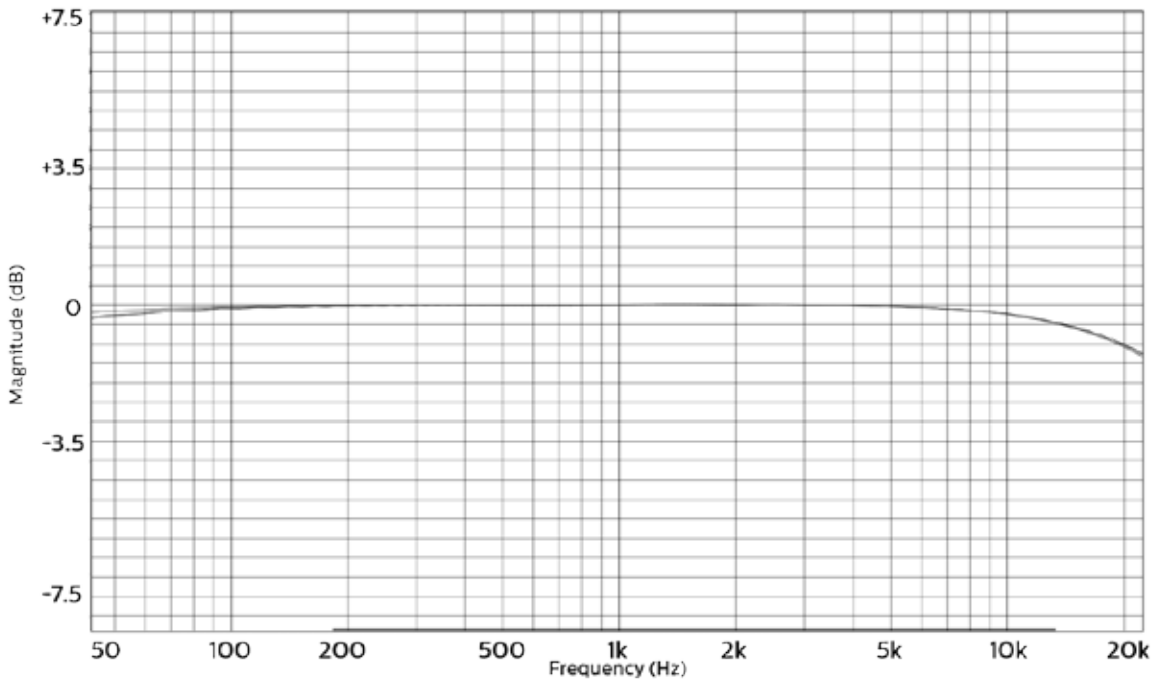
3° STEP:
INPUT > COMP > EQ

C LINK: This switch links the controls of left and right channels.

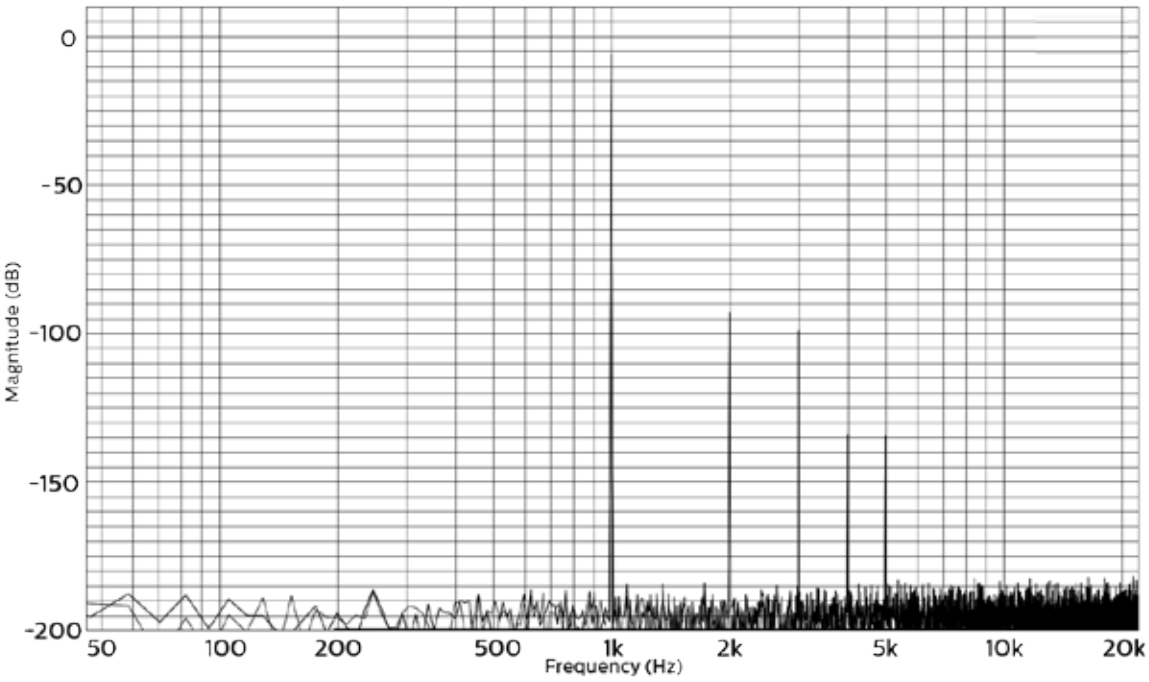
PREAMP: Press this button to activate the PREAMP of the plug-in.

(Coral2 Reef's standalone module also includes two additional preamps, with a strong and full sound and the option to use them in dual mono mode (an ideal preamp completely identical for both channels) or in stereo mode (a preamp with slight differences between the left and right channels, exactly like in the hardware domain).

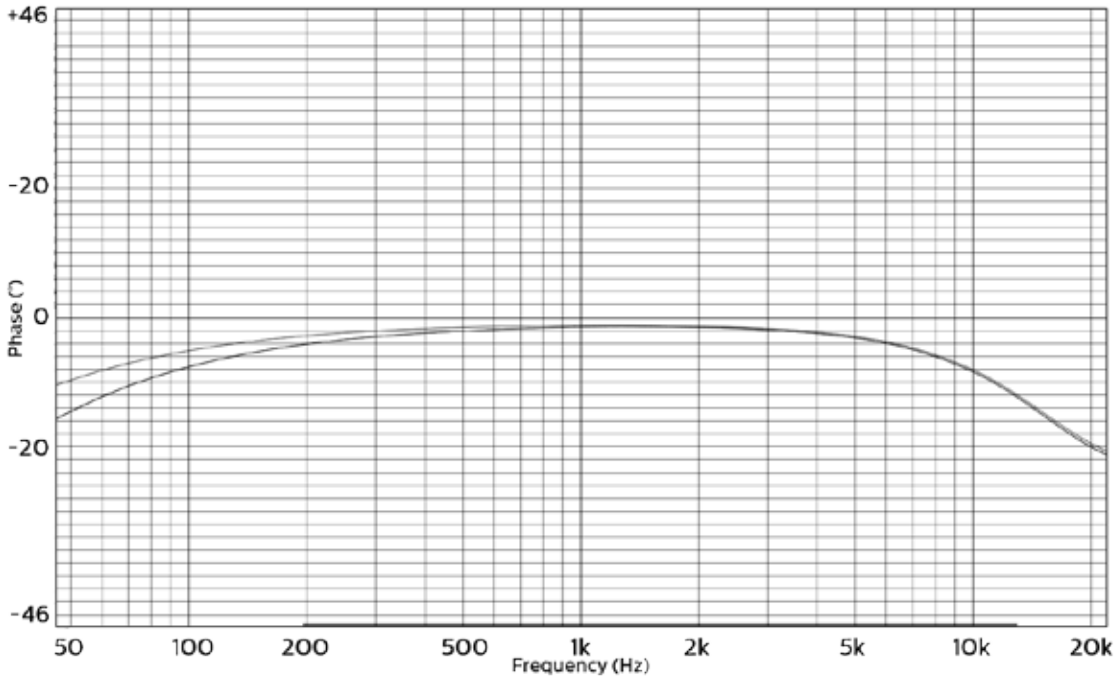
Here you can find the graphics of the preamps ("coral", "tape" and "air") contained in Coral2 Reef standalone module.



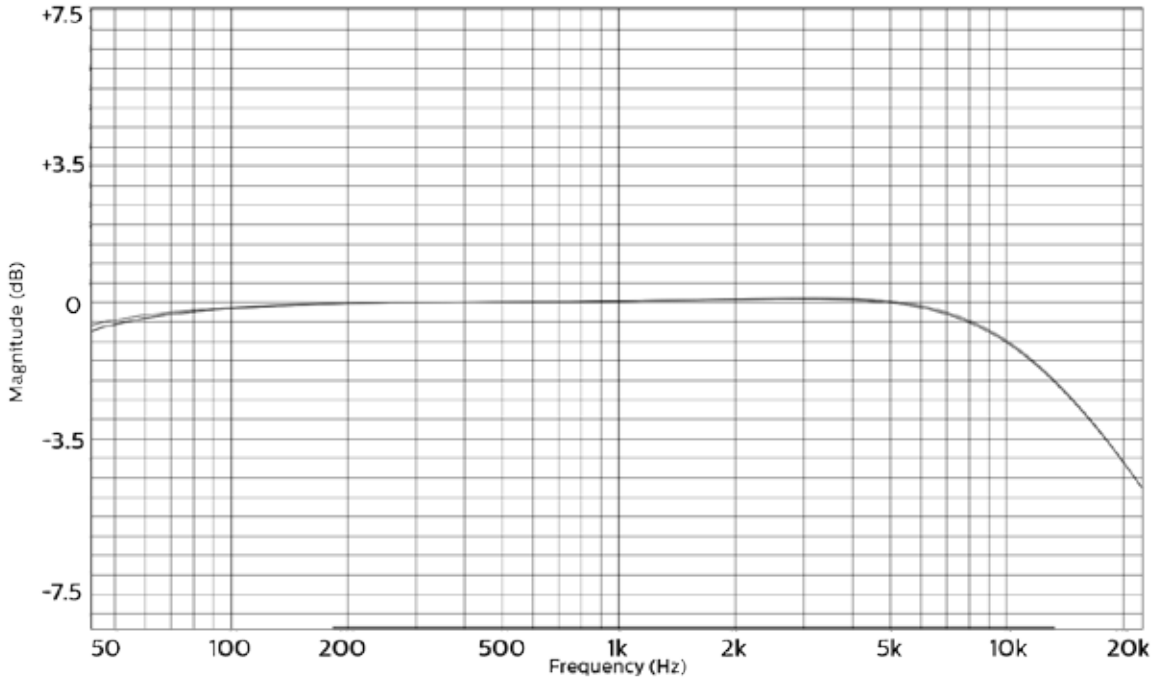
CORAL2 preamp graph



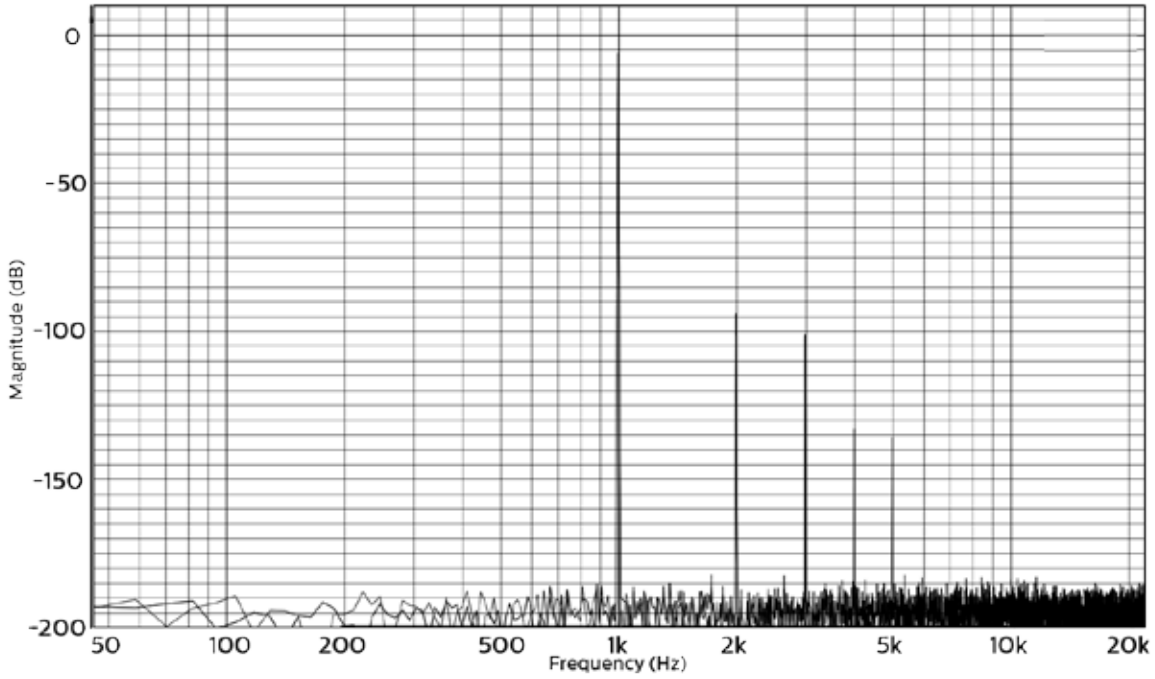
Distortion graph for CORAL2 preamp



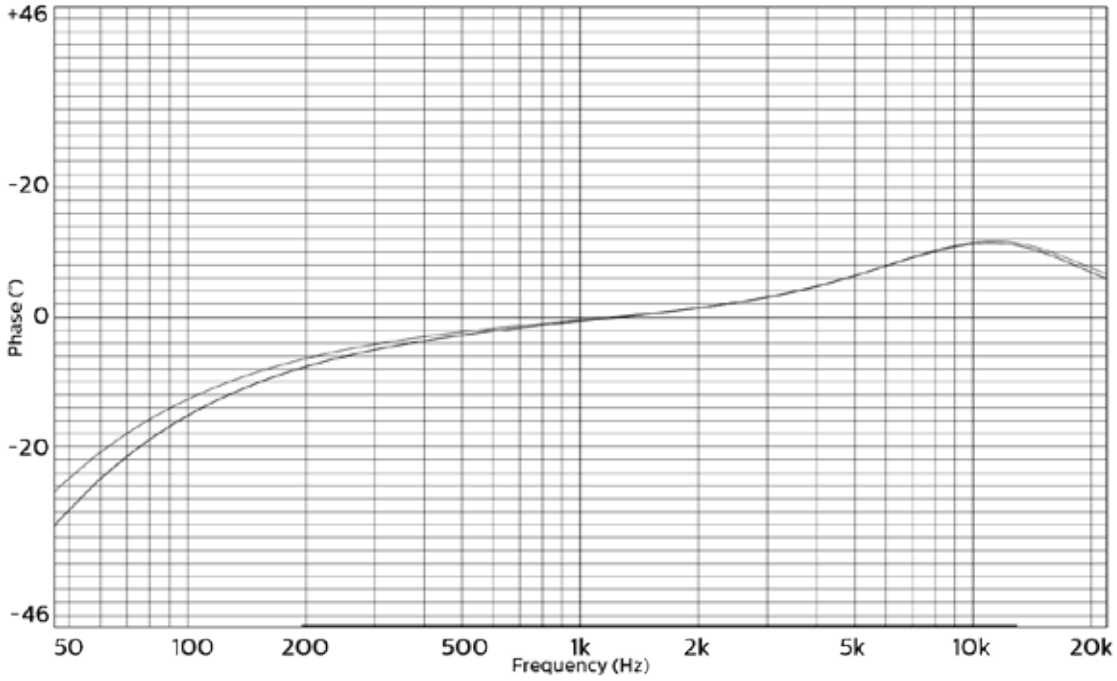
Phase graph for CORAL2 preamp



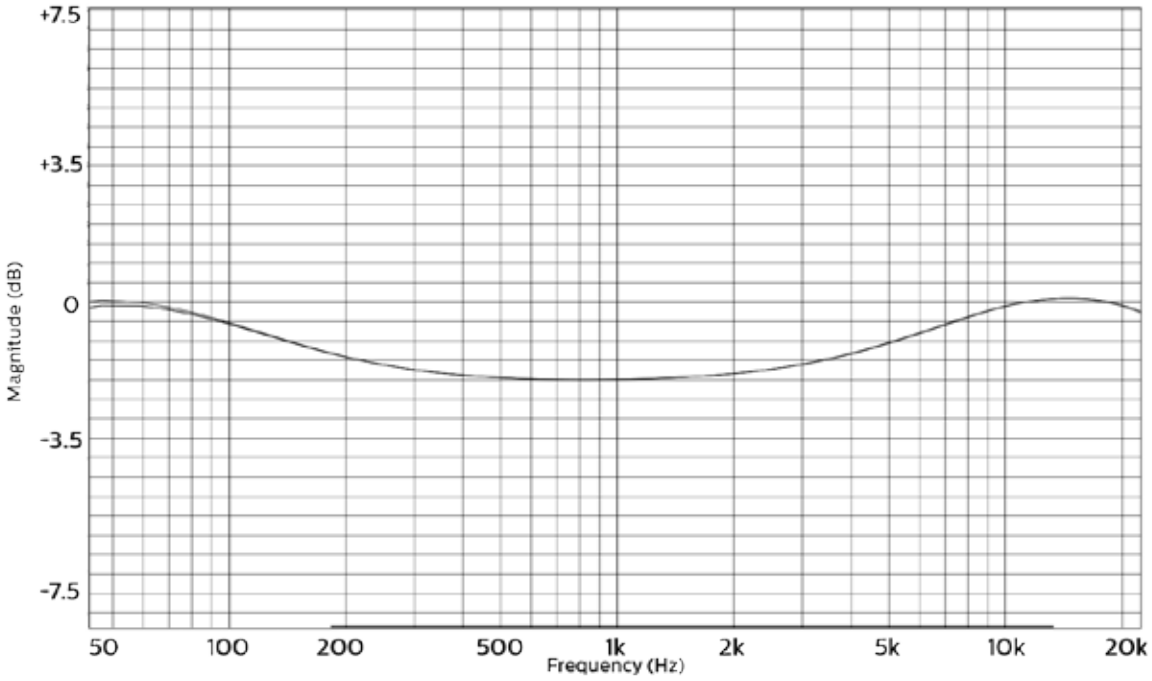
TAPE preamp graph



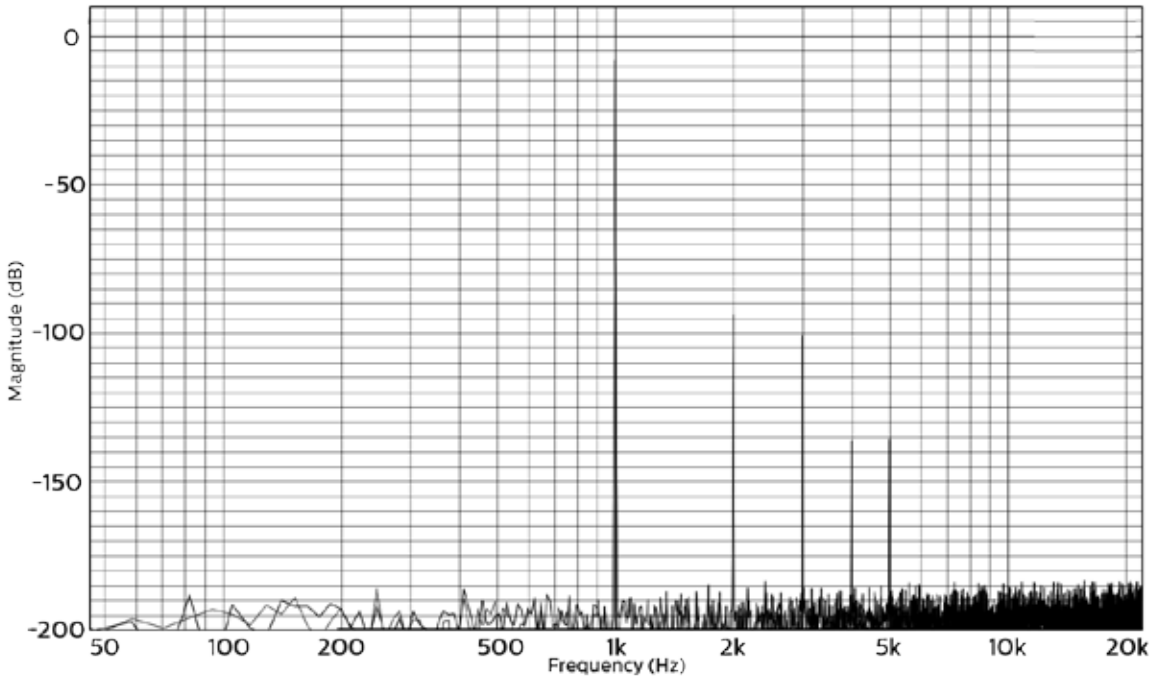
Distortion graph for TAPE preamp



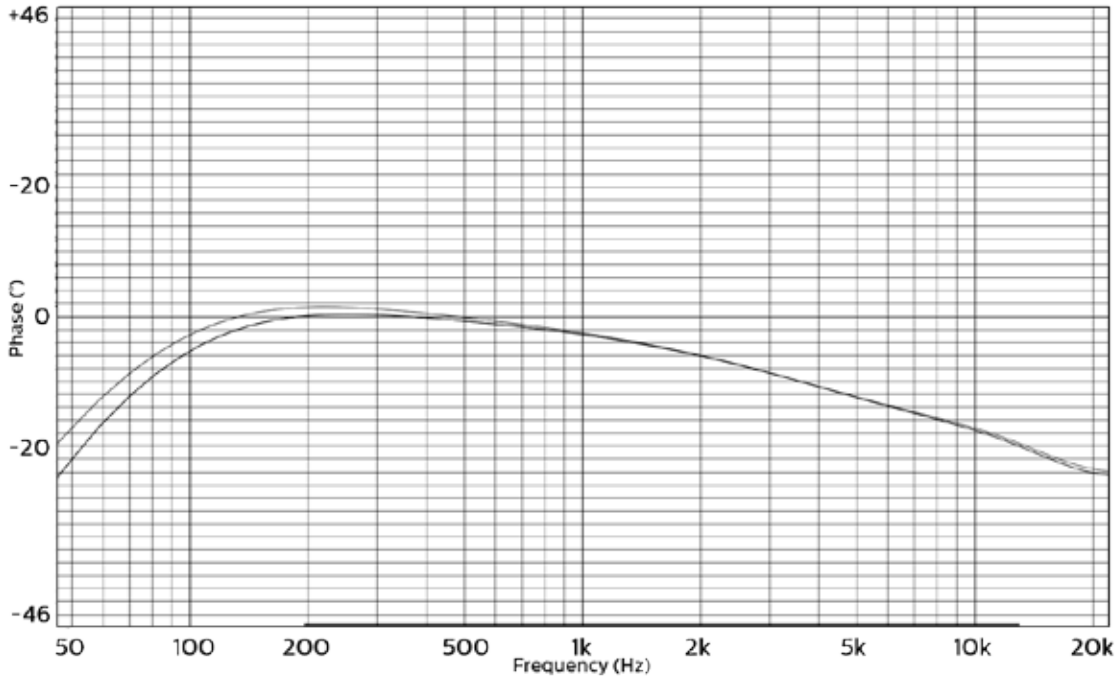
Phase graph for TAPE preamp



AIR preamp graph



Distortion graph for AIR preamp



Phase graph for AIR preamp

STEREO LINK: this knob allows you to determine the stereophonic behaviour of the compressor.
Starting from the left (OFF step) the signal is STEREO.
MS: This knob allows you to choose the MID-SIDE configuration of the plug-in.
So each MONO-channel can be controlled independently or dependently by an identical set of controls.

Master settings

Artist:

Album:

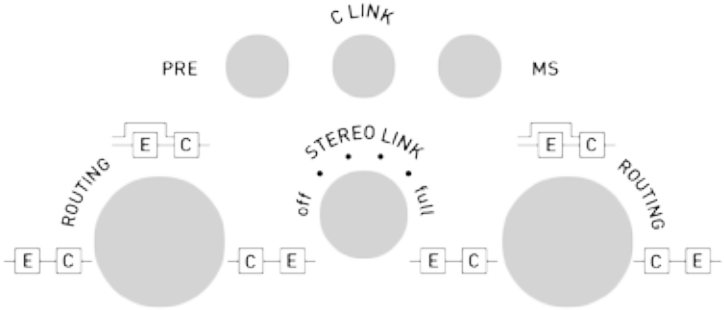
Track:

Engineer:

Studio:

Date:

Coral2



Coral2 Reef EQ

ANTIPATHELLA SUBPINNATA *Black Coral*

CORAL2 ELLIPTICAL FILTER

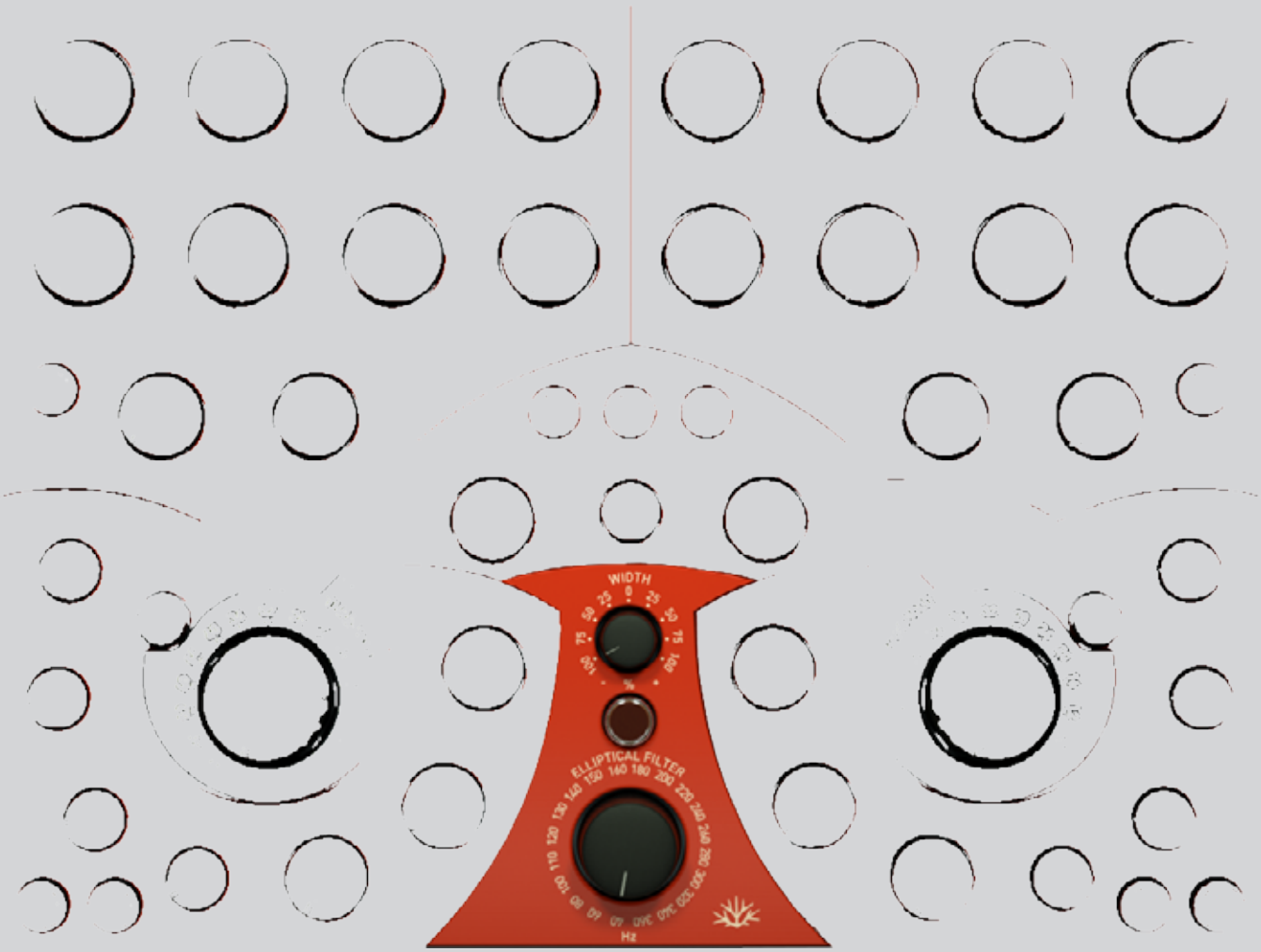
The black coral (Antipathella subpinnata (Ellis & Solander, 1786)) is a hexacoralia of Myriopathidae Family (Antipatharia order).

Onl the skeleton is black, while living organisms are white; consists hexatentacles polyps, with short tentacles and not finned, and comes up with highly branched tufts.

It is a very rare coral and protected. Not to be confused with Gerardia savaglia (false black coral).

In the Mediterranean Sea is present starting from 50 meters to over 200 meters deep.

The March 19, 2009 was discovered the largest black coral forest existing in the world in the sea of Scilla at depths between 80 and 150 m.



The Elliptical Filter (or Elliptical Eq, not to be confused with the signal processing filter characterized by “equiripple” behavior) is a crossover filter followed by a stereo image controller. It allows you to change the stereo width of the incoming signal below a user-defined frequency.

The elliptical filter takes its name from the way a stereo signal is phisically coded into a vinyl groove (the LR signal is tranformed into MS format, then M = lateral modulation, S = vertical modulation). Several classic vintage mastering consoles adopted such terminology for this type of processing.

The use of an elliptical filter is mandatory when the mastering process is intended for vinyl-cutting. In cutting vinyl discs, any low frequency imbalance between L and R channels must be avoided, otherwise the phonograph stylus might literally jump out of the groove.

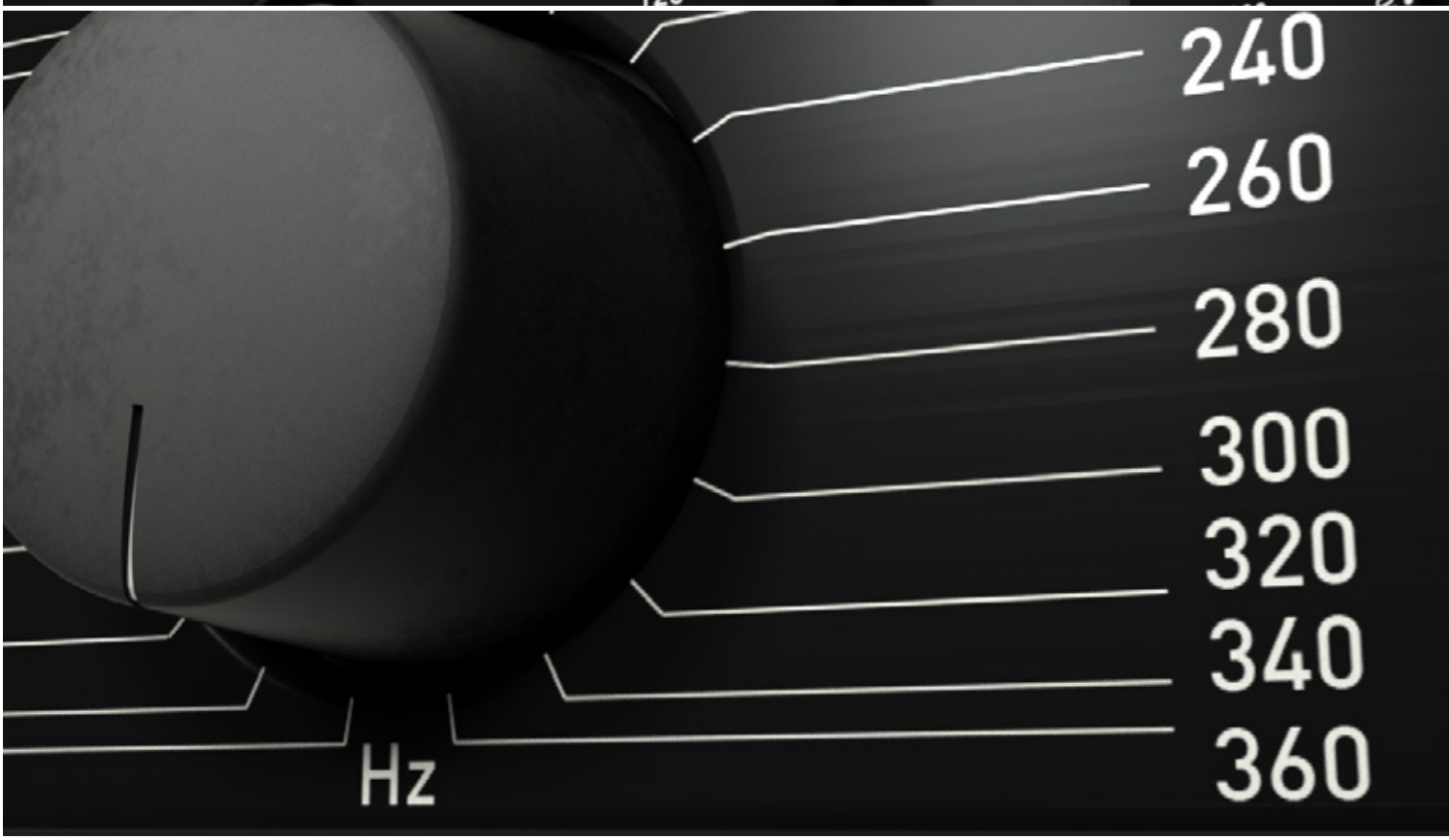
An elliptical filter can be beneficial in many other situations, as well.

A 6dB/octave crossover filter has been chosen for this processor, since it's the only analog filter that gives an absolutely transparent reconstruction of the recombined signal, both magnitudo- and phase-wise. The cutoff frequency can be selected from 20 stepped values. The low-pass output of the filter is followed by a stereo width control, whose range goes from -100% (mono), through 0 (original stereo image), to +100% (extra-wide stereo).

CORAL2

ELLIPTICAL FILTER USER'S MANUAL


ON
160
150
140
130
120
180
200
220
240
260
280


240
260
280
300
320
340
360
Hz


180
200
220
240
260
STEREO
WIDTH
0
25
50

ELLIPTICAL FILTER

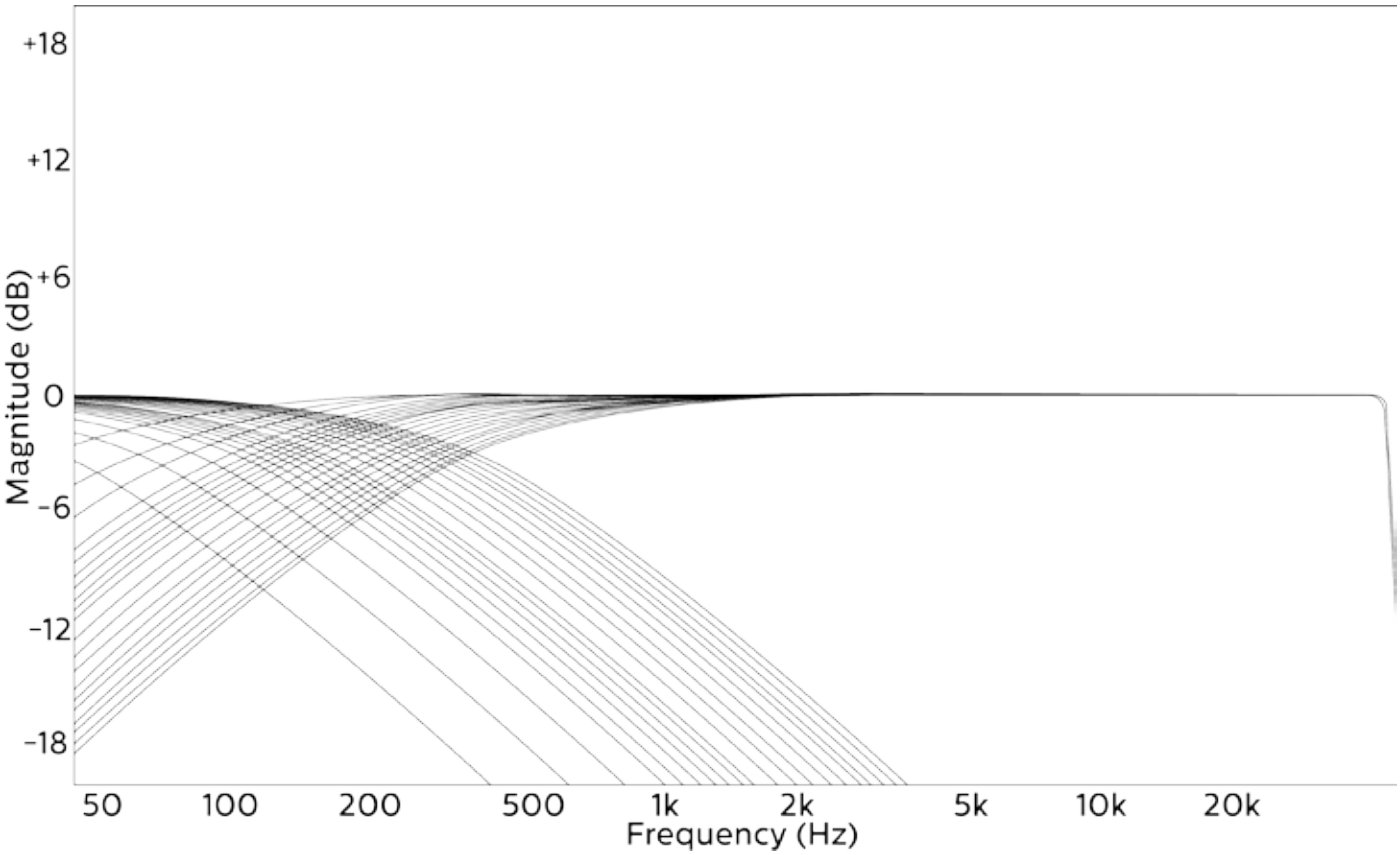
ELLIPTICAL FILTER

The Elliptical Filter is a crossover filter followed by a stereo image controller. It alters the stereo width of the incoming signal below a user-defined frequency.

The cutoff frequency can be selected from 20 stepped values (from 40 Hz to 360 Hz).

WIDTH

The low-pass output of the filter is followed by a stereo width control, whose range goes from -100% (mono), through 0 (original stereo image), to +100% (extra-wide stereo). The resulting signal is then recombined with the unaltered high-pass output of the crossover filter.



Master settings

Artist:

Engineer:

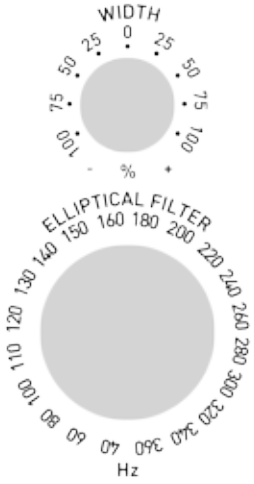
Album:

Studio:

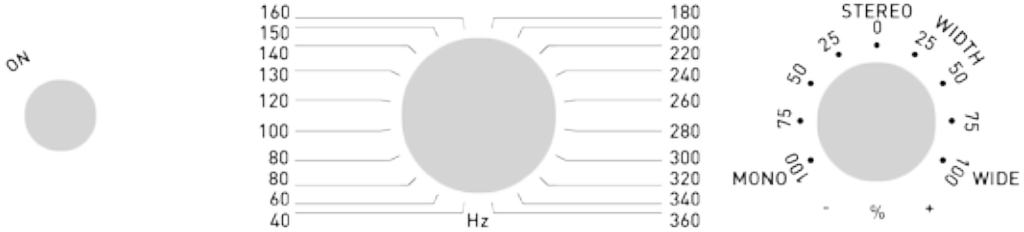
Track:

Date:

Coral



Coral Reef FILTER



Core 13 (version 13.5)

Coral is based on our Core 13engine:

-NEW: Our new Core 13 engine improves on the previous versions by introducing our new VLATM technology (Vector Loading Acceleration), which makes the response of the plugin much faster;

-Upgraded SASM (Symmetric & Asymmetric Saturation Modeling). A high-performance saturation algorithm;

-Introduction of new post-production sample de-noising tech for cleaner deconvolved impulses called STT (Super transient technology);

-Full compatibility with Client/Server architecture integrated by default in Acqua plugins;

-Engine optimization introducing a new highly efficient algorithm. This innovative technique is applied to all the deconvolved impulses for further de-noise processing and subsequent elimination of any in-correct low-level behavior (including the so-called “echo bug”).

Core 13 allows performance improve-ments for each plug-in of the Acqua Effects series, while at the same time preserving all the features already supported in previous CORE upgrades.

Acustica Audio's plug-ins come in two versions: ZL (zero latency) and normal (non ZL).
While the ZL version does not introduce any latency to your system, the standard version does.This buffer varies in size for each plug-in and helps to significantly reduce the CPU and system load of your computer. For this reason we recommend that you use a ZL instance whilst tracking.
Keep in mind that anything that can reduce the CPU load on your system should be considered. For example the track count of your session, the number of plug-in instances used, sample rate, etc.

You could also consider theuse of direct monitoring or double the buffer/hybrid audio engine in your host if available.
Basically both plug-in instances are identical but the current Acqua engine can work with a long audio buffer or without any audio buffer. The instance without audio buffers, "ZL", or zero latency, do not have any audio buffer pre-loaded, and will process the audio without any delay, so at the same time the CPU load will be higher compared to the standard non ZL instance. The idea behind a ZL instance is to give users the option to run Acqua Effect products with minimal latency, which is useful for direct monitoring for example.

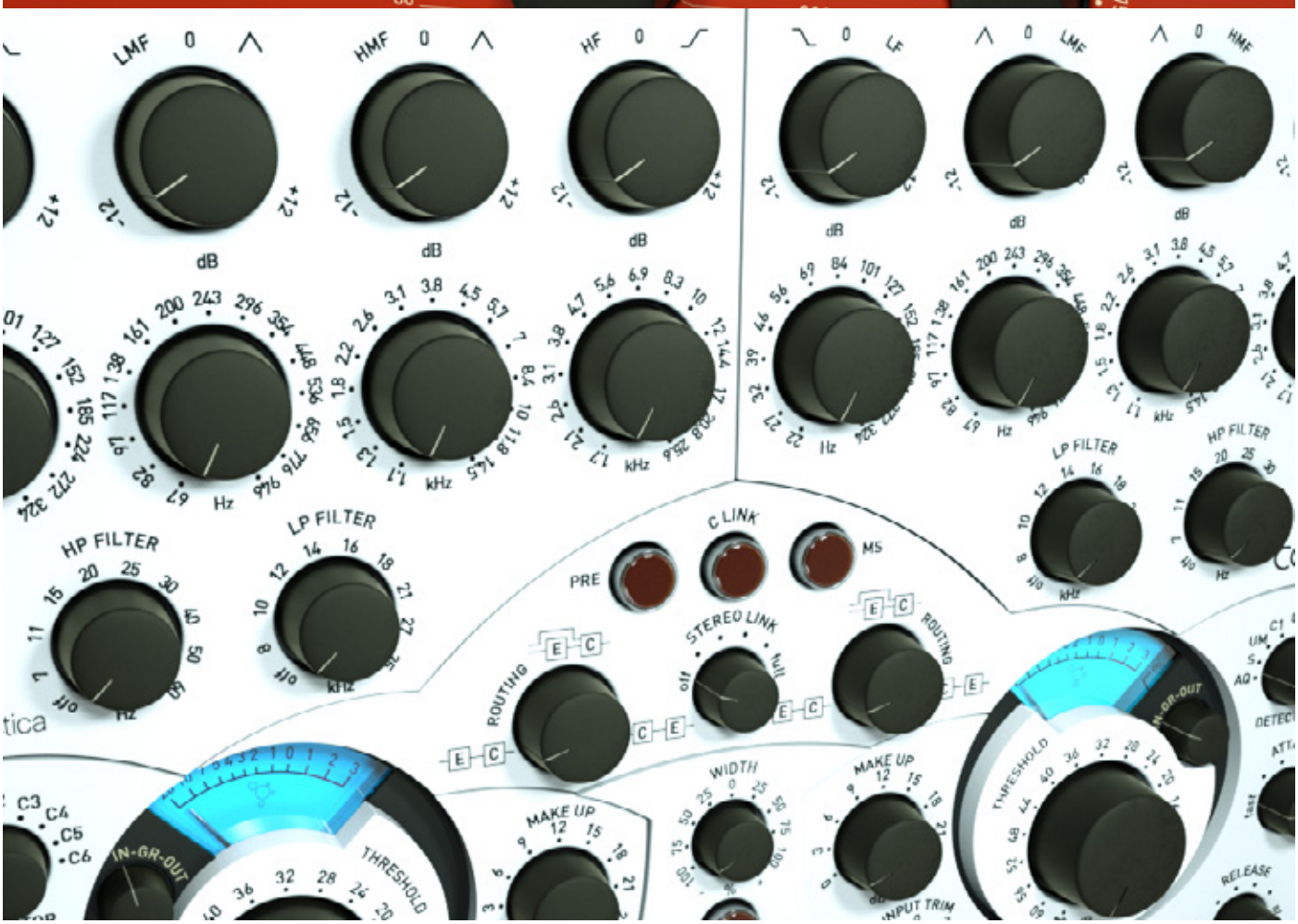
Performance caution

In order to maximize performance and usability of Coral on your computer, we suggest you follow some precautionary rules that will help you save precious CPU cycles.
-First of all, set your buffer size setting as large as possible. There is generally no specific reason for using a low buffer size setting during mixing or mastering sessions. Increasing buffer sizes (hence al-so latency) highly decreases required CPU power.
-You should also consider only using the necessary features. We do not ensure the complete absence of bugs or the perfect operation of the product. Before purchasing, we suggest you download the Trial version to verify the behavior of the plug-in with your system.
Trial products are fully-functional versions of the relative commercial plug-in.
The trial period expires 30 days after activation.
We do not take any responsibility for misuse of the product, or collateral problems derived from it. Normally the Early Access period ends within 30 days from the publication on the product page but this period may vary at our discretion.
This manual includes a description of the product but gives no guarantee for specific characteristics or successful results. The design of our products is under-continuous development and improvement. Technical specifications are subject to change.

For some years now at Acustica we have devoted much of our time to the writing of our user manuals. If you find errors or inaccuracies please don't forget to report it. We always write our manuals like they are an artistic/creative product, as if we were painting a canvas or writing a song. For us, the manual is something more than just a manual, just as our users are something more than just users.


HP FILTER
Acustica
OUTPUT
LP FILTER
Hz
C2
C3
C4
C5
C6
SHMOD
MOD
DETECTOR
ATTACK
RELEASE
THRESHOLD
STEREO
MONO
STEREO
MONO
STEREO
CORAL
HIGH R
MASTERING
280
300
320
340
360
Hz


slow
fast
slow
dB
MAKE UP
dB
SIDEC
LMF
HMF
HF
HP FILTER
Acustic
dB
Hz
kHz
LP FILTER
dB
CORE9 - ULTRASYNC TE
ON
STEREO
WIDTH


LMF
HMF
HF
LF
dB
Hz
kHz
HP FILTER
LP FILTER
C LINK
PRE
MS
STEREO LINK
ROUTING
WIDTH
MAKE UP
THRESHOLD
IN-GR-OUT
INPUT TRIM
RELEASE

Appendix

-CORAL2 BAXTER M/S EQUALIZER

Acustica took inspiration from the classic Baxandall shelving curves of the 50s and created a unique powerful and smooth Equalizer designed as a "finishing EQ". The added M/S features make this a great master buss EQ and a perfect equalizer for tracking, mixing and mastering.

Details:

•Stepped controls for the EQ curves, known as Baxandall curves, they are famous for their unique sound-sweetening properties.
•8-position High and Low Frequency Select.

-Low Freq ranging: 74Hz to 361Hz
-High Freq equivalent provides shaping between: 1.6kHz and 18kHz

•Broad Q Shelving.
•7-position High Pass and Low Pass Filters–2-pole Butterworth configuration (12 dB/oct) with OUT (bypass).

-Low-pass filter switchable from 7.5kHz up to 70kHz.
-High-pass filter with detents at 12, 18, 24, 30, 36, 43 or 54Hz.

•+/- 5dB Cut and Boost controls in 1/2 dB steps.
•a faithful Preamp stage of the EQ.

•L-R button.
Left/Right processing is enabled by selecting the L-R button (the default processing mode).
When this button is enabled, the input signal to the plugin is split into two processing channels, Left & Right. The signal is 'summed' back to Stereo at the plugin's output.

•MID and SIDE buttons.
When the MID button is selected, EQ processing is applied to the center of your soundstage. On the contrary when the SIDE button is selected, processing is applied to the edges of your soundstage.
NOTE: MID and SIDE buttons are mutually exclusive, this doesn't allow you to make changes to both the Mid and Side channels at the same time.

Preset Management

The CORAL BAXTEREQ includes AI Presets. The presets are present by default in both the commercial and the trial version of the this plugin.
A normal preset simply loads the same settings each time you use it. Our AI presets assess the audio being fed into the plugin and then based on data stored in it's memory from a "sampled" mix engineers knowledge it will make an eq change.
For the best results loop a short section of audio you think is best suited for the AI evaluation. The timeframe is quite short, only a couple of seconds, so different points in the audio will obviously give different results. Then click the preset you would like to use and watch as the eq changes. It works very well on individual tracks and groups, whereas results on the master may vary.

Extra

-CORAL2 BAXTER EQUALIZER - (For Free!)

We did it again...

The Acustica Audio team would like to surprise you again by bringing you a truly special gift. We celebrate this important upgrade with a brand new, useful and practical piece of dreamware for your studio, welcome the Coral2 BAXTER Equalizer! Furthermore it contains presets utilizing our new AI technology.
What are you waiting for? Hurry up and download it now, it's FREE!

AI Preset Management

Coral Baxter M/S and Coral Baxter (Free version) include AI Presets.

The presets are present by default in both the commercial and the trial version of the Coral Baxter M/S and Coral Baxter (Free version).
By clicking the "PRESET" drop down menu on the right hand side of the Baxter EQ you can select a preset from the displayed list. You can choose between several presets. Details in the following Chapter ("AI PRESET LIST & CREDITS")

A normal preset would simply load the same settings each time you use it. Our AI presets will assess the audio being fed into the plugin and then based on the data stored in it's memory from a "sampled" mix engineers knowledge it will make an Eq change.

For the best results loop a short section of audio you think is best suited for the AI evaluation. The timeframe is quite short, only a couple of seconds, so different points in the audio will obviously give different results. Then click the preset you would like to use and watch as the eq changes. It works very well on individual tracks and groups, whereas results on the master may vary.

AI Presets list and credits

01. AI ALL

The "Super Experience" AI Preset it's the result of combined learning by ALL the sound engineers who have worked for this intense project

02. AI ACUSTICA

Preset Technique (used in the AI capture phase)
This Preset is the result of the accurate and intense learning sessions by Giancarlo del Sordo.

The idea behind this product

Giancarlo Del Sordo: “This product represents the culmination of the research I have carried out for 14 years, a search that began back in 2005. Coral Baxter is a concentrate of complex technology and, at the same time, it is as incredibly simple to use as it is elegant to look at. On the one hand Baxter is light, fast, effective, and it sounds just like the hardware, on the other hand its usability is made even simpler thanks to it’s artificial intelligence. Not only do we sample the machines - built by humans - but now we ‘sample’ humans themselves and their interaction with these machines, which means we capture their own experience, built over years of professional work. Baxter is Art and Magic combined.”

03. AI ALEX TRECARICHI

Preset Technique (used in the AI capture phase)

- EQ for individual tracks, in particular voice and drums
- EQ for Mix Bus purposes

Alex Trecarichi - Class 1977, Alex Trecarichi has been involved in countless productions for recording, mixing, mastering, arranging, producing and playing instruments for some of the most famous Italian artists and TV Shows.

Alex has toured as FOH engineer with some of the best Italian acts and travelled the world for passion, getting in touch with thousands people, learning languages and.. life! Loving sharing his knowledge, Alex took the opportunity to teach at SAE Insitute, IED and in many other schools all over his country.

Co-founder of the RESET! collective, in 2007 he started organizing huge parties and producing electronic music, remixing and working with international dance artists such as Fatboy Slim, Cassius and many more.

In September 2012 Alex opened Monodynamic Studio, where he has produced and mixed several multiple platinum hits

Alex Trecarichi
www.alextrecarichi.it

04. AI BIGBIZ

Preset Technique (used in the AI capture phase)

- EQ used on individual tracks
- EQ for Mix Bus purposes for the following genres: House Music, Pop-House, Commercial Deep House, and Tech-house.

BigBiz Studio is located in the heart of Brescia, Italy. Focused on the mixture of Electronic Dance Music and the state of art of digital technology, it was founded by Paolo Aliberti and Dario Khademi.
Their portfolio includes works for major labels like Warner or Sony and several labels like Saifam, Media Records, Time Records, IHU music group, Nervous Records, and many more.
Their studio has proudly worked on many double Platinum and Gold Awarded tracks.
Dario, the Mixing and Mastering engineer, had the opportunity to work on the AI presets of Coral Baxter. The presets were trained on channels, busses and stereo busses of several tunes within the House Music genre: from Pop-House to Commercial Deep House, and more technical tech-house.

www.bigbizstudio.com

05. AI MAX PAPARELLA

Preset Technique (used in the AI capture phase)

- EQ for Master Bus purposes

Max Paparella - born in 1975, is a Hammond organist with a great passion for vintage musical instruments. For over 20 years in the music industry he has collaborated over the years both in Europe and in the USA, working on the creation of numerous albums as a composer, musician, remixer and ghost producer.

In 2010 he founded the Groove Sound Design studio, starting a solid partnership with the guitarist and producer Valerio Fuiano (member of Mind Music Labs in Sweden), working for singers, artists and record labels on productions as a mixing & mastering engineer.
In 2011 he became a member of AES (Audio Engineering Society). In 2014, as part of his professional training, he took two courses for mastering engineering at the SAE Institute in the UK, passing both with full marks (100/100).

He has been working as a mastering engineer and musician with many record labels such as BMG Production Music (UK), Good Looking Records (UK), Cabana Recordings (USA), Selekta Recordings (USA), IRMA Records (IT).

Groove Sound Design
https://www.groovesoundesign.com/

Acustica **2019**