

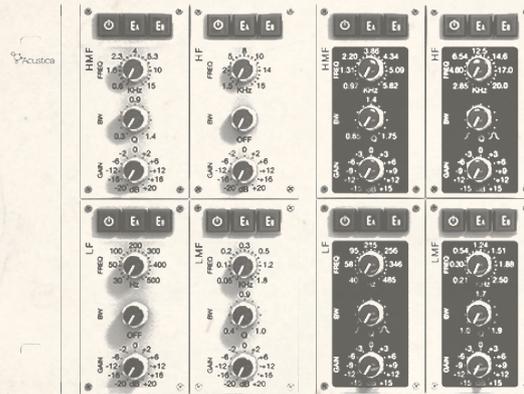
# SAND

## OPERATION MANUAL

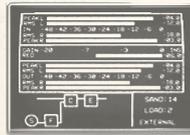




# Introduction



2 impressive EQS (A-B)  
switchable for band



Digital RMS and PEAK stereo meters



14 different routings coexisting in one control panel  
5 smooth and clean preamps



2 distinct cut FILTERS (A-B)



2 powerful COMPS (A-C)  
to glue your sound

SAND is a channel-strip featuring a combination of many devices into a single one. We have faithfully recreated the sound characteristics of classic British high-end mixing consoles and recording studio hardware. It is characterized by a unique color with new incredible features, first of all the “Control” of the routing of the plugin components.

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Another consolidated feature that is new to the software is what we call the “ShMod”. This is a shape control for the compressor’s attack behavior. It allows you to fine-tune the attack shape so you can really customize the attack behavior for any audio source!

SAND is the natural choice for all those who “mix in a box” and musicians in need of authentic emulations of classic devices improved with Acustica technology and equipped with new parameters.

It consists of four main components:

- EQs (A mode, B mode)
- Filters (A mode, B mode)
- Comps (A mode, C mode)
- Control

## Why SAND?

SAND is derived from the term “AUX-SEND” (short for “Auxiliary Send”) [ˈɔːgˈzɪljəri//sɛnd/]: it is an electronic signal-routing output used on multi-channel sound mixing consoles used in recording and broadcasting settings and on PA system amplifier-mixers used in music concerts. The signal from the auxiliary send is often routed through outboard audio processing effects units and then returned to the mixer using an auxiliary return input jack, thus creating an effects loop. This allows effects to be added to an audio source or channel within the mixing console (source: Wikipedia). The analogy with this term in our case is that the signal is routed to an external bus to the same channel which the effect is applied to. SAND is an authentic bus compressor coming with a complete console, the routing being the cornerstone of this plugin.

S-AND deriving from “SUPER-AND” [ˈsuːpə/ænd/]: in “Boolean algebra” the values of the variables are the truth values true and false, usually denoted 1 and 0 respectively. One of the main operations of Boolean algebra is the conjunction and denoted as  $\&$ . So the and of a set of operands is true if and only if all of its operands are true (source: Wikipedia). In our case this term denotes a “super-conjunction” to define a set of modules merged into a single product.

# MADAGASCAR NOSY BE

## CONTROL SECTION



Madagascar is an island nation in the Indian Ocean with unique peculiarities.

Clever habits, interesting peoples, strange customs, exotic animals and multiplespecies of baobab trees. As for the inhabitants, Madagascar is home to many different tribes with countless beliefs and customs and even different somatic characteristics.

Madagascar is a republic, but each tribe is ruled by a king representing the connection between God and men and between the past and the present. Different ethnic groups and peoples coexist in the same environment.





One actually wonders whether the marginality of this people and their customs will resist the pressure to adapt to innovation and productivity. However, the mutual respect and peaceful coexistence between the tribes is admirable.





*This same principle inspired us and was applied to SAND. The innovative idea was to create one unique control that simplifies the plugin's routing operation by switching between the programs; 14 different routings coexisting in one control panel, which can be selected by the user through a stepped knob. Thanks to this, defining the internal chain of the plugin's components is easy and intuitive!*





*This section also includes 5 switchable preamps and one control of input and output.*

*Making the best use of this control section may seem difficult at the beginning, however all your efforts will be paid off once you enjoy its sound effects, as varied as the attractions you can enjoy in the fourth largest island in the world just waiting to be discovered!*



### CONTROL section

This section has been introduced in SAND for the first time to control the routing of the plugin.



INPUT knob sets the input level from -24dB to +24dB and is used to control the plugin's input signal level

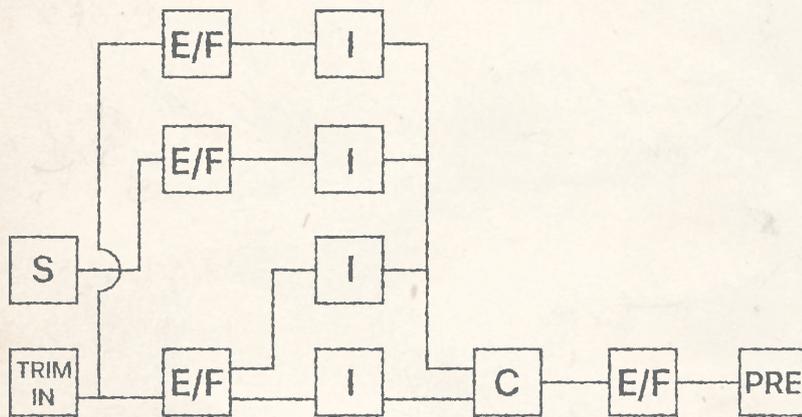
OUTPUT knob sets the output level from -24dB to +24dB and is used to control the plugin's output signal level

POWER button to bypass the preamp section

The routing is controlled with a stepped knob, allowing you to adjust SAND's routings to its fourteen positions. Each position sets a different block configuration displayed on the "control monitor". This way the routing is simple and intuitive. We believe it's a simple and innovative idea to create one control that simplifies the plugin's routing operation by switching between the programs. Each block configuration is explained below.

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SAND Channel Routing Diagrams



- C: Compressor
- F: Filter
- E: Equalizer
- S: Sidechain
- I: Selector

SAND: Each position of the stepped knob corresponds to a different routing configuration (from 1 to 14)

LOAD: It displays the number of NEBULA instances loaded. A higher value indicates high CPU usage

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## INTERNAL/EXTERNAL (SIDECHAIN)

Basically a sidechain compressor uses another signal other than the main input, the first one going through a sidechain channel, to control the amount of audio compression.

The dynamic compressor has two type of channels, the audio channels (1-2 input) and the sidechain channels(3-4 input).

The routing control configurations allow to choose between the internal, or the external side chain input.

We use the term “internal sidechain” to specify that the compressor is fed internally (it means it has an internal routing) and the signal comes from the plugin itself.

It is called “external sidechain” when the input (entering the plugin and not necessarily the compressor, as it can be filtered or EQed before the dynamic section) goes through the sidechain channels (not the plugin’s channels), the signal sent to the sidechain is then the “control signal”.

Explanation of the Sidechain behaviour on different formats:

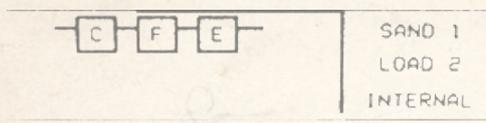
VST: the plugin supports four input channels (Quadro Mode). We say that the first two channels represent the audio channels (1-2), the last two channels are the sidechain channels (3-4).

AAX: the external sidechain routing controls a key input parameter to selectively modify the sidechain in PT. Audio channels (1-2), Sidechain channels (3-4).

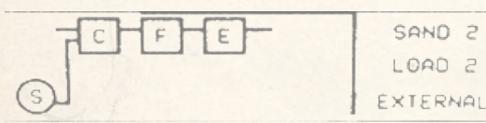
Some hosts do not support the channels 3 – 4 to avoid any crash: you can set the TAG: LEGACYSTEREOCHANNEL in the plugin’s XML Master which allows the old hosts to correctly transmit the requested channels (when the tag is set at 0 = 2 channels, when it’s set at 1 = 4 channels).

Users may contact our technical support for more details.

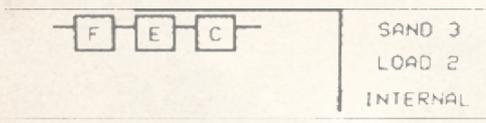
The external sidechain is not supported in AUDIO UNIT (AU), it will be implemented in the future.



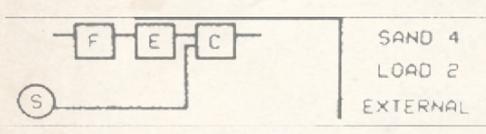
1° step:  
input 1+2 > compressor



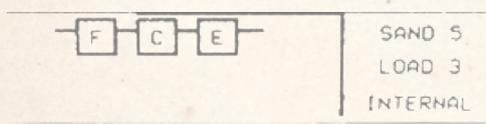
2° step:  
input 1+2 > compressor input (audio signal)  
input 3+4 > compressor sidechain (control signal)



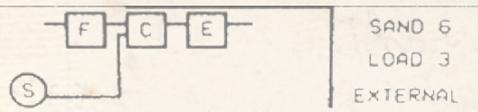
3° step:  
input 1+2 > filter > equalizer > compressor input



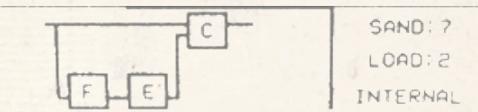
4° step:  
input 1+2 > filter > equalizer > compressor input (audio signal)  
input 3+4 > compressor sidechain (control signal)



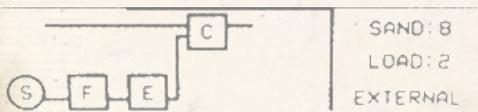
5° step:  
input 1+2 > filter > compressor



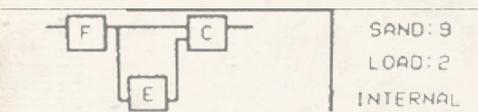
6° step:  
 input 1+2 > filter > compressor input (audio signal)  
 input 3+4 > compressor sidechain (control signal)



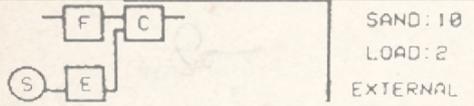
7° step:  
 input 1+2 > compressor input (audio signal)  
 input 1+2 > filter > equalizer > compressor sidechain (control signal)



8° step:  
 input 1+2 > compressor input (audio signal)  
 input 3+4 > filter > equalizer > compressor sidechain (control signal)



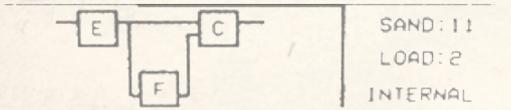
9° step:  
 input 1+2 > filter > compressor input (audio signal)  
 input 1+2 > filter > equalizer > compressor sidechain (control signal)



10° step:

input 1+2 > filter > compressor input (audio signal)

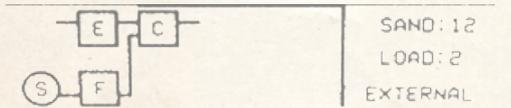
input 3+4 > equalizer > compressor sidechain (control signal)



11° step:

input 1+2 > equalizer > compressor input (audio signal)

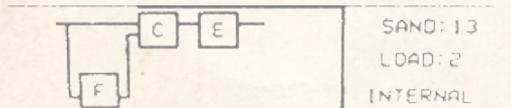
input 1+2 > filter > compressor sidechain (control signal)



12° step:

input 1+2 > equalizer > compressor input (audio signal)

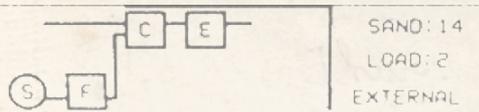
input 3+4 > filter > compressor sidechain (control signal)



13° step:

input 1+2 > compressor input (audio signal)

input 1+2 > filter > compressor sidechain (control signal)



14° step:

input 1+2 > compressor input (audio signal)

input 3+4 > filter > compressor sidechain (control signal)

DRY/WET 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.

Introducing the DRY/WET control in this section is reasonable because it significantly changes the type of compression used (parallel or sidechain compression), which is strictly connected to the signal routing control. The routing setting and correct use of the DRY/WET control are essential for different sound qualities.

## PREAMPS

SAND is equipped with five different smooth and clean preamps sampled from different consoles to give you a complete preamp section. All preamps are STEREO except for BUS C. The description provided below is only intended as a guide, not a restriction.

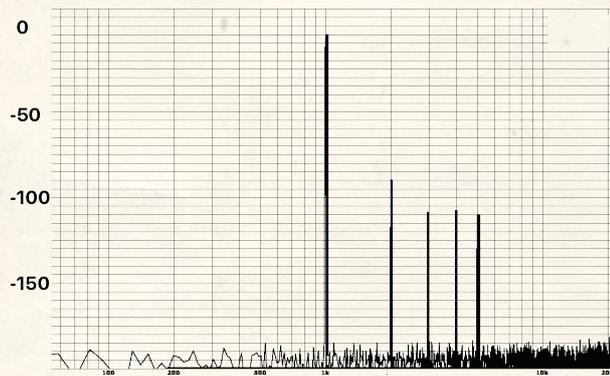
MIX = These preamps were sampled directly from a channel-strip of the consoles (LINE-IN). They don't include the colour of the original compressor modelled here.

BUS = Designed as a Bus emulation with pronounced time domain distortion.

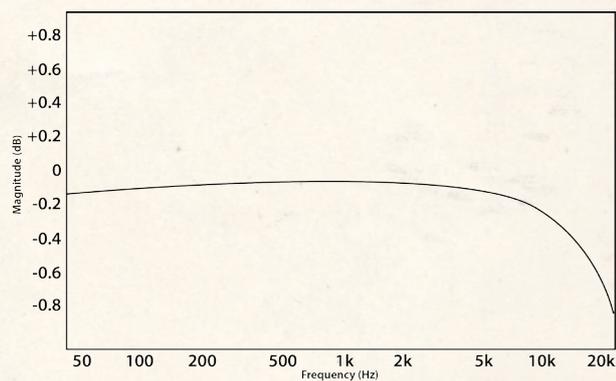
A mode: A Mic pre offers accurate transient reproduction (and has the best sounding and most transparent VCAs in the channels). It's an excellent choice if you are looking for a cleaner sounding mic pre for vocals.



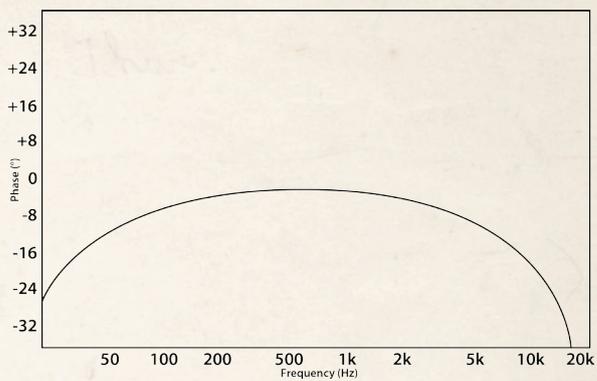
MIX A distortion



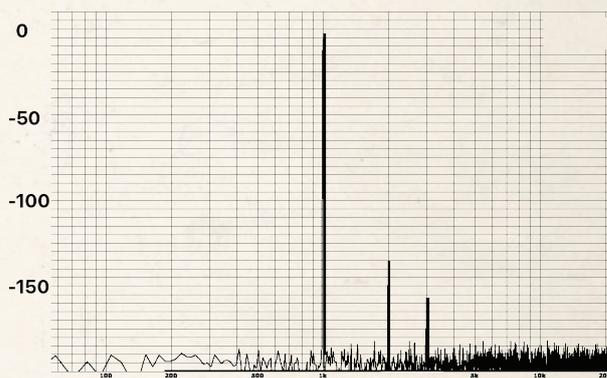
MIX A magnitude (zoomed)



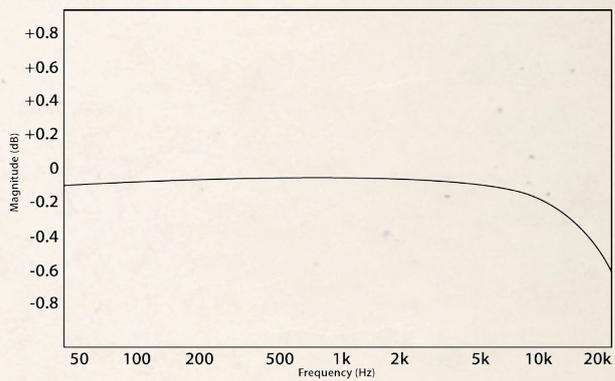
MIX A phase (zoomed)



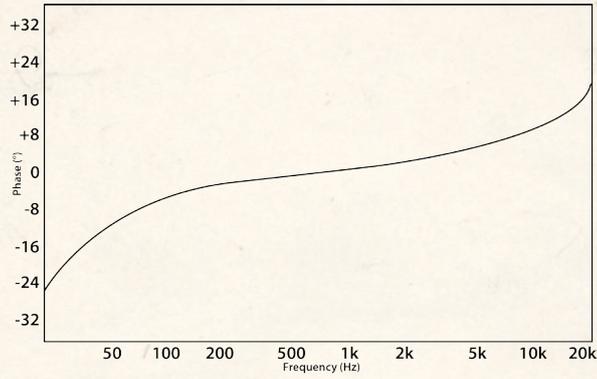
BUS A distortion



BUS A magnitude (zoomed)



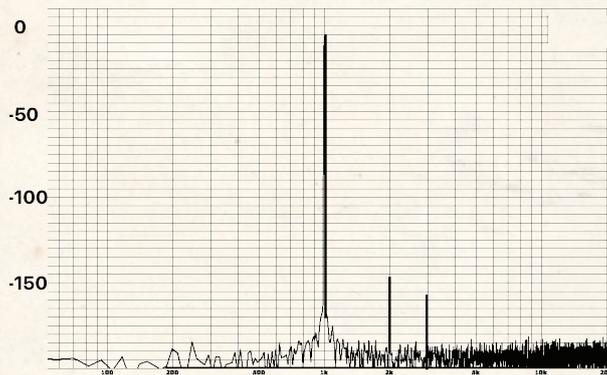
### BUS A phase (zoomed)



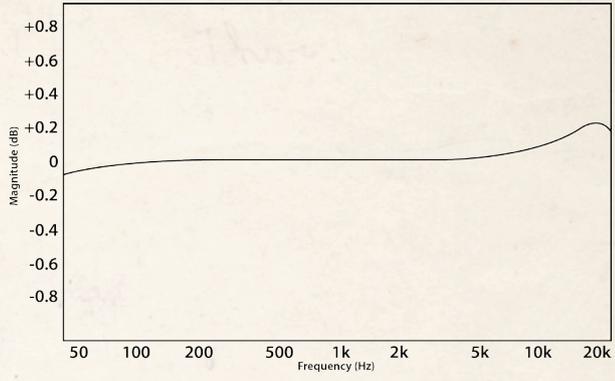
B mode: B Mic pre is a masterpiece sampled directly from a rare console. Higher harmonic distortion and well defined analog transient response.



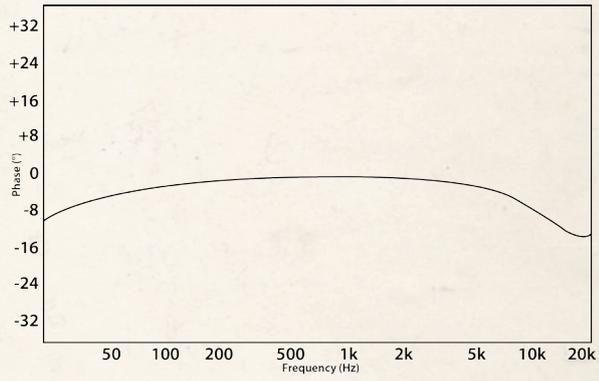
### MIX B distortion



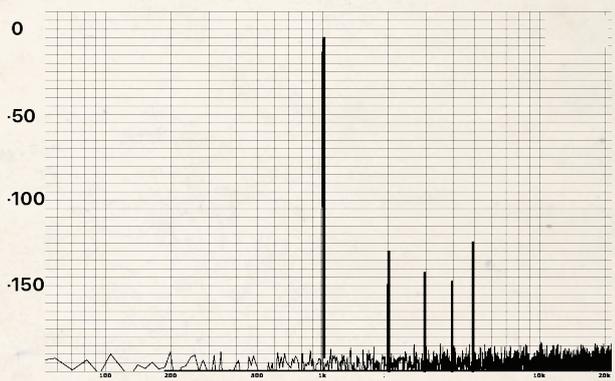
### MIX B magnitude (zoomed)



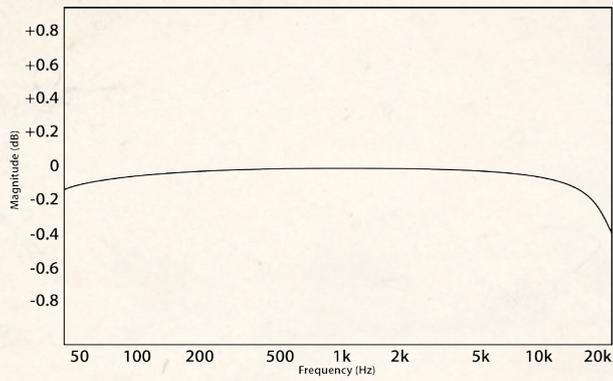
### MIX B phase (zoomed)



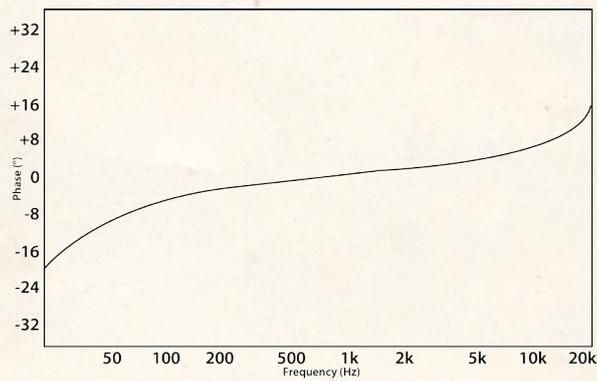
### BUS B distortion



BUS B magnitude (zoomed)



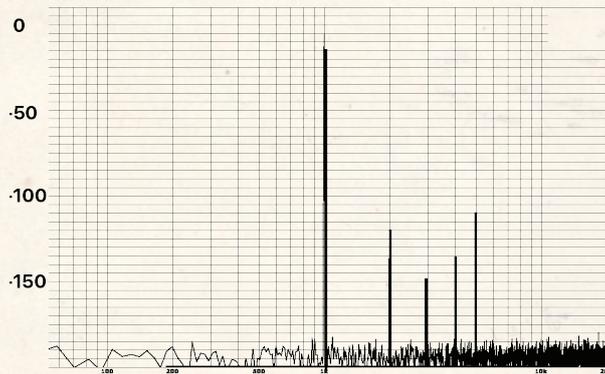
BUS B phase (zoomed)



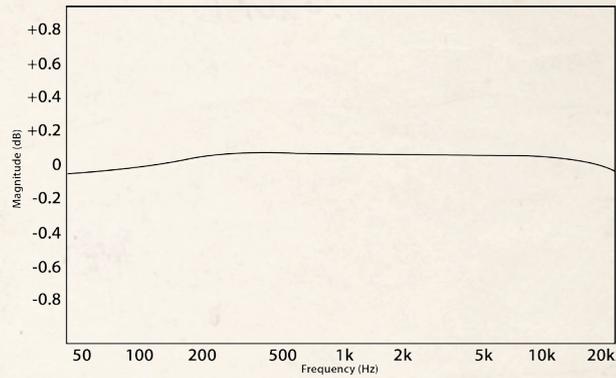
C mode: Emulation of the Quad Bus Compressor's preamp.



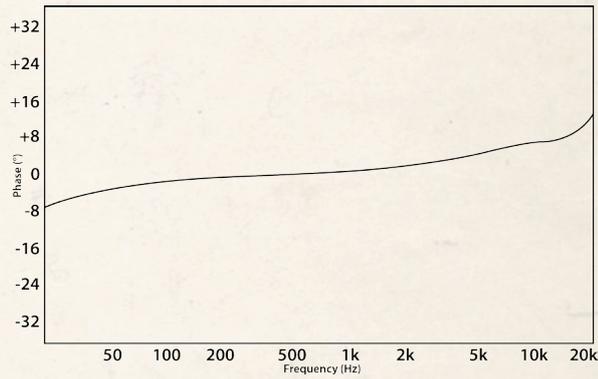
BUS C distortion



BUS C magnitude (zoomed)



BUS C phase (zoomed)



Preamps CPU usage table

	CPU USAGE
MIX A	● ◐ ○ ○ ○ ○
MIX B	● ● ◐ ○ ○ ○
BUS A	● ● ◐ ○ ○ ○
BUS B	● ● ◐ ○ ○ ○
BUS C	● ● ◐ ○ ○ ○

# HAWAII MAUI

## EQ SECTION



Maui is the second largest island in the state of Hawaii. Here you find a place which will certainly fascinate you with its wild, colourful landscape of forests and an amazing coastline of bays, cliffs and beaches. The 81 idyllic beaches offer some of the best surfing and snorkelling in the world for those who love water sports.

Two large volcanoes sit side by side, the West Maui Mountains, whose highest point is Pu'u Kukui, and Haleakala, the larger of the two, located on the eastern part of the island. These huge geological structures are amazing.

*Our hope is that SAND, with its dual switchable EQ section, may evoke the same feelings. You won't realise how amazing it is until you fully explore the potential of this section and let the music flow after you've tried this powerful channel strip, that will take you on a one-of-a-kind sound trip. Among its peculiarities is the "Q morphing", a special effect which allows you to turn the Q knob from Shelf to Bell mode through a smooth transition, without pressing any other button.*





The island's oldest volcano, the West Maui Mountains, has been significantly affected by weather conditions and landslide events, but they only made it more charming.

*This perfectly reflects our B MODE, a faithful vintage British emulation that will preserve its charm intact for many years to come.*



Haleakala is the largest and youngest volcano in the East of the island. Rising to over 3,000 metres above sea level, and counting more than 8 km from the coast to the top, it's one of the largest volcanoes on Earth.

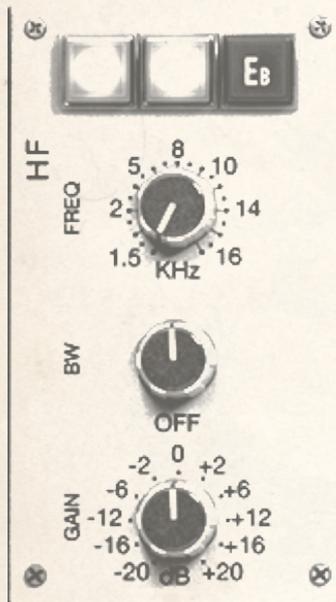
*It's represented by SAND's A MODE, one of the most desirable EQ sections in the world.*



## EQ SECTION

The EQ section consists of two switchable EQs (modA and modB):

Eq A mode



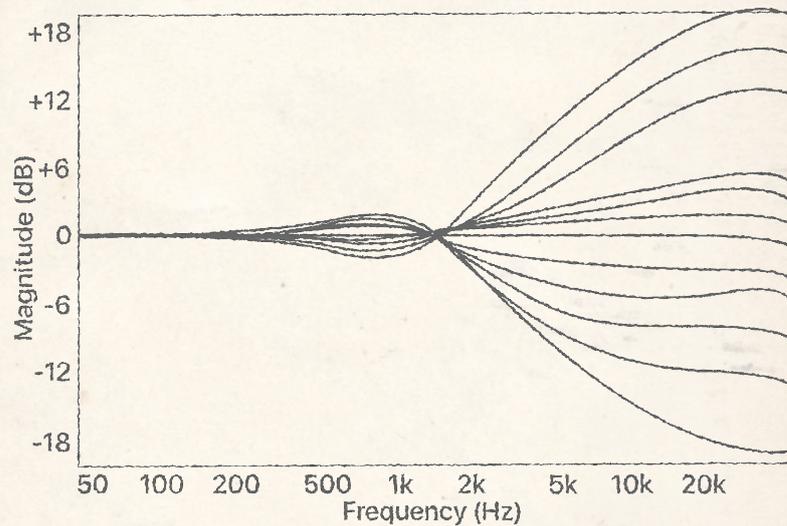
HF Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 1.5KHz to 16KHz

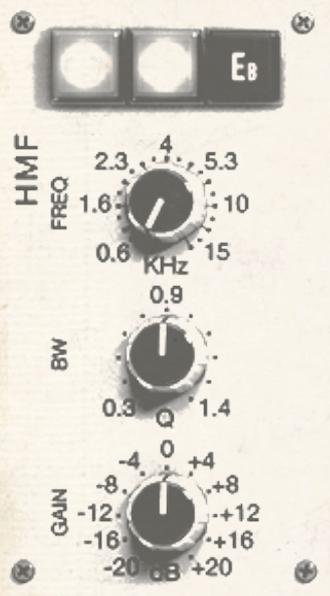
HF Gain: this knob is used to increase or decrease the gain of the band from -20dBu to +20dBu

HF Shelf (fixed value)

Power button to activate the HF section

HF curves



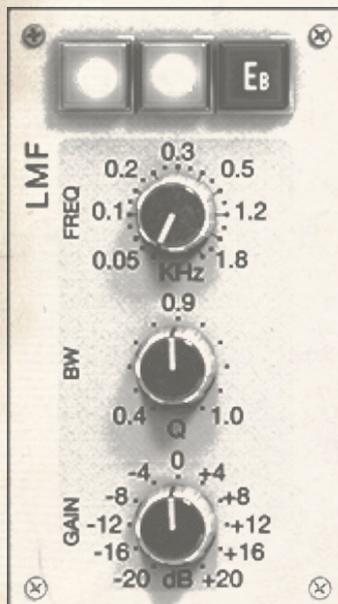


HMF Bell Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 0.6KHz to 15KHz

HMF Bell Gain: this knob is used to increase or decrease the gain of the band from -20dBu to +20dBu

HMF Bell Q .3 to 1.4

Power button to activate the HMF section



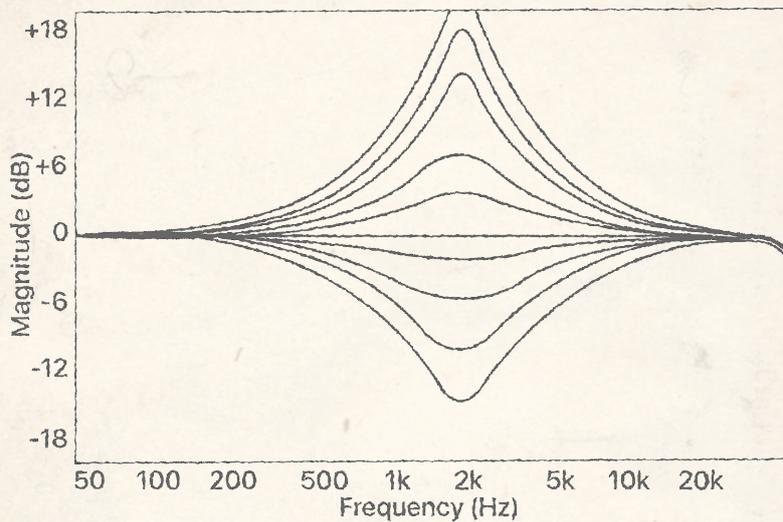
LMF Bell Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 0.05KHz to 1.8KHz

LMF Bell Gain: this knob is used to increase or decrease the gain of the band from -20dBu to +20dBu

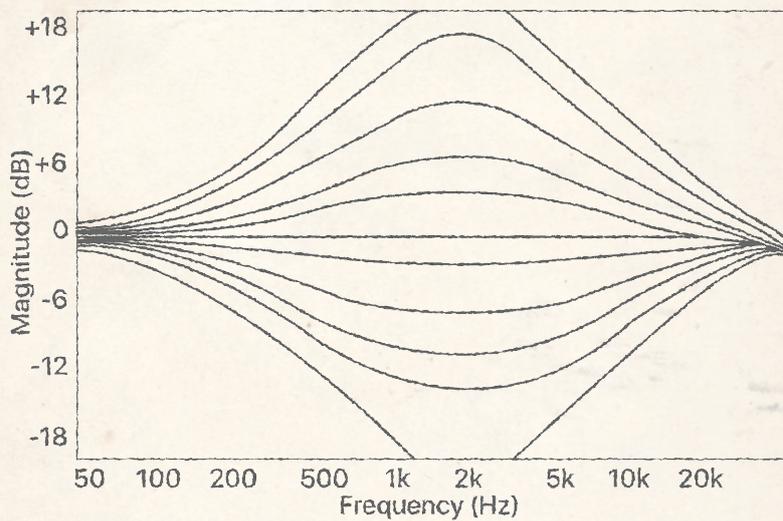
LMF Bell Q .4 to 1.0

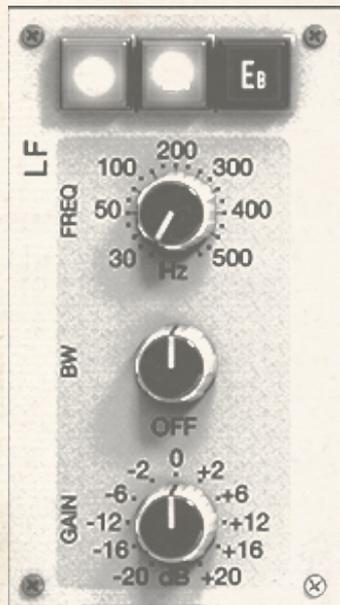
Power button to activate the LMF section

HMF/LMF curves - Q: 1.4



HMF/LMF curves - Q: 0.3





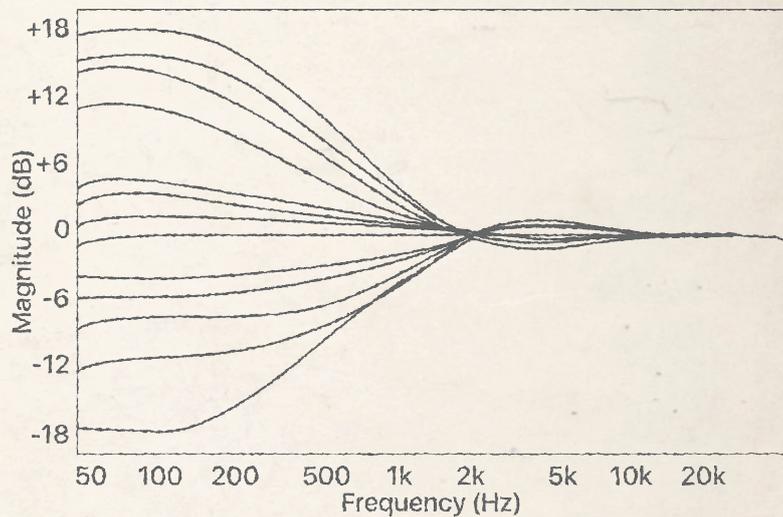
LF Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 30Hz to 500Hz

LF Gain: this knob is used to increase or decrease the gain of the band from -20dBu to +20dBu

LF Shelf (fixed value)

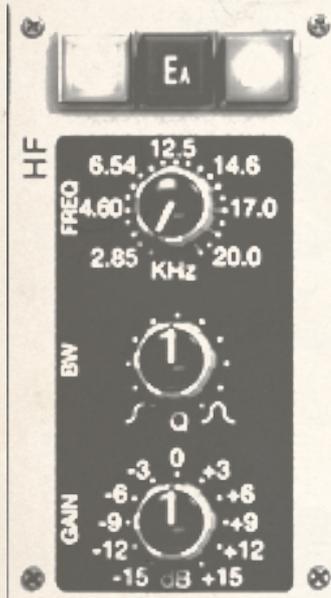
Power button to activate the LMF section

LF curves



## EQ SECTION

### Eq B mode



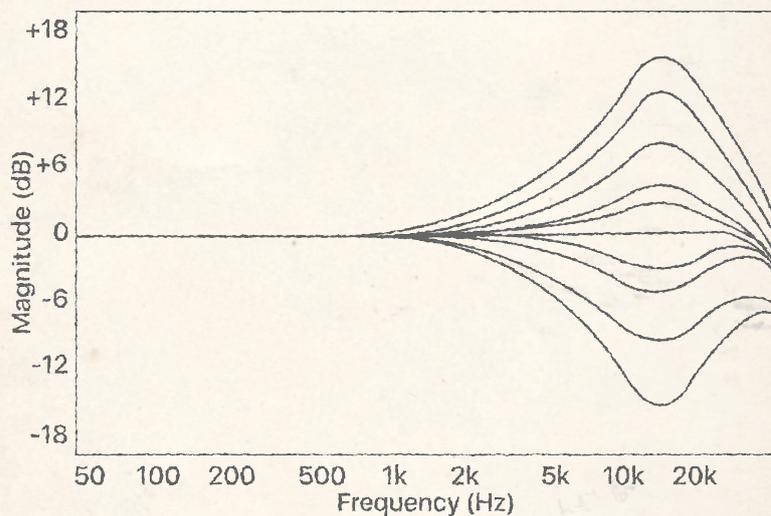
HF Filter Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 2.85KHz to 20KHz

HF Filter Gain: this knob is used to increase or decrease the gain of the band from -15dBu to +15dBu

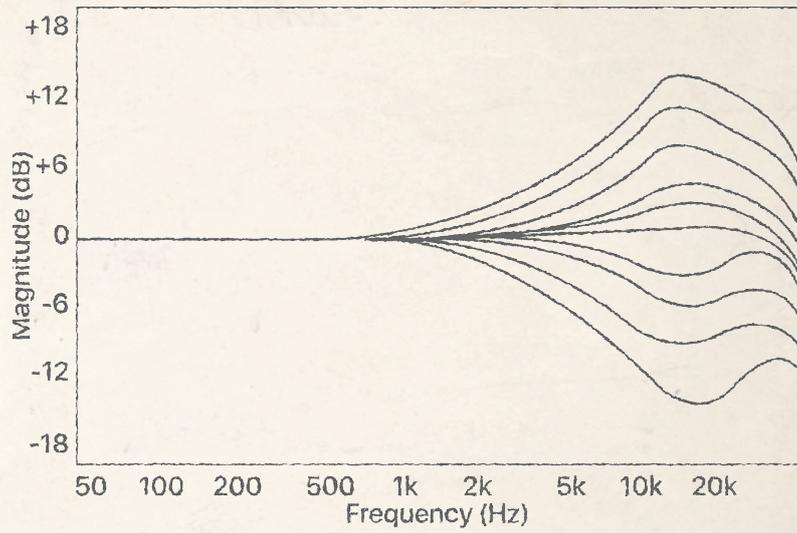
HF Filter Type knob allows to turn the Q knob from Shelf to Bell mode through a smooth transition ("Q morphing")

Power button to activate the HF section

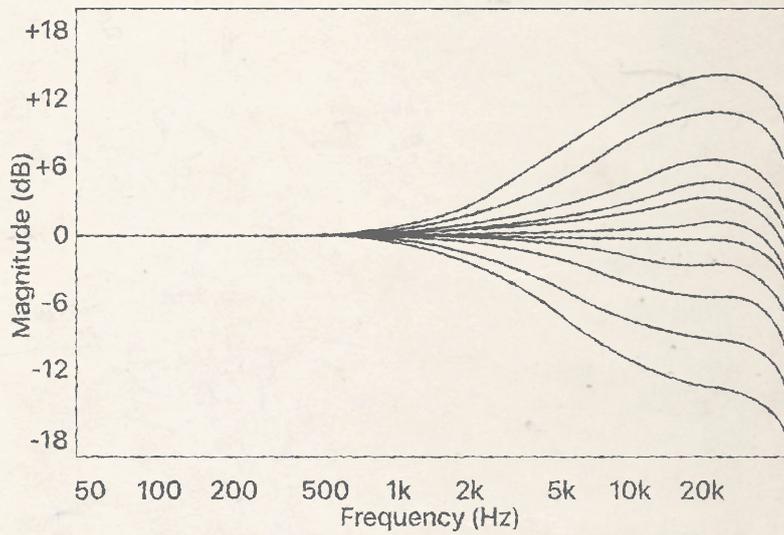
HF curves - Q: bell

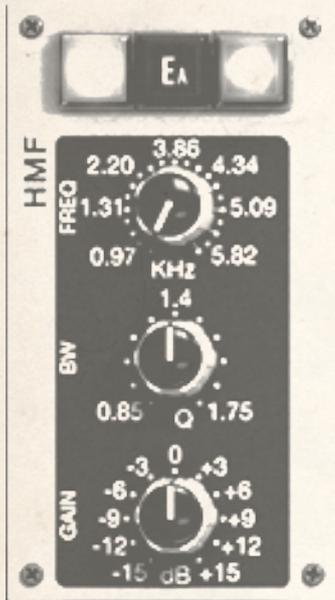


HF curves - Q: mixed



HF curves - Q: shelf



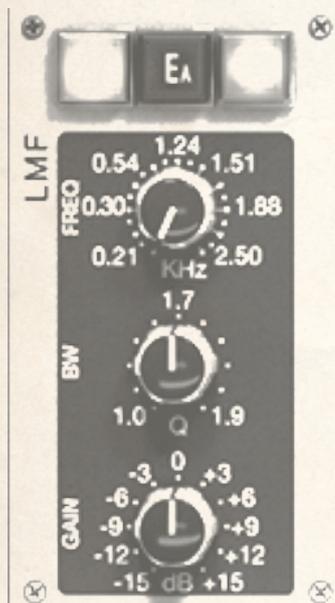


HMF Bell Filter Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 0.97KHz to 5.82KHz

HMF Bell Filter Gain: this knob is used to increase or decrease the gain of the band from -15dBu to +15dBu

HMF Bell Filter Q .85 to 1.75

Power button to activate the HMF section



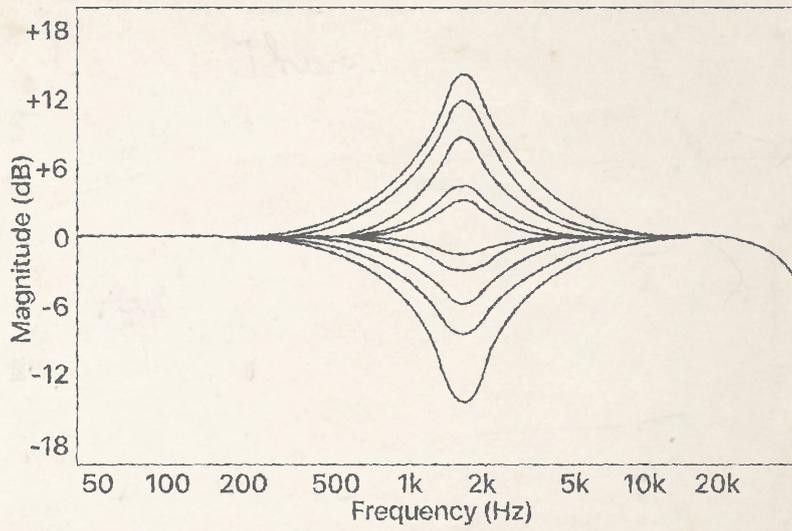
LMF Bell Filter Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 0.2KHz to 2.5KHz

LMF Bell Filter Gain: this knob is used to increase or decrease the gain of the band from -15dBu to +15dBu

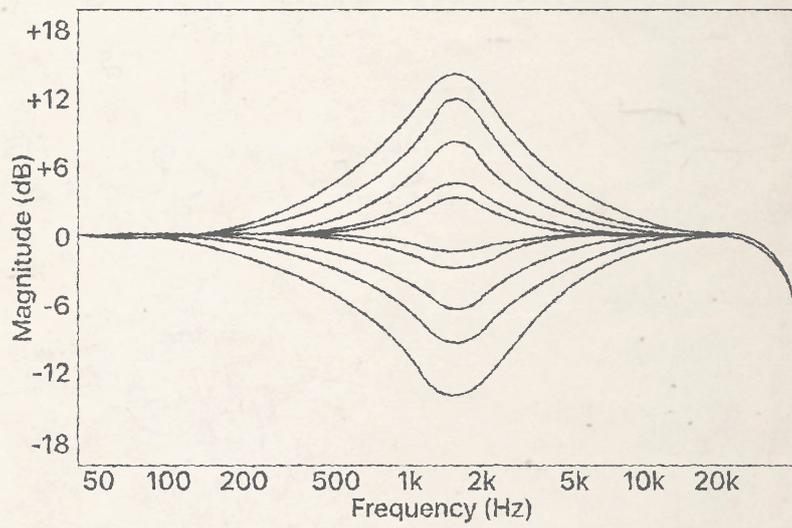
LMF Bell Filter Q 1.0 to 1.9

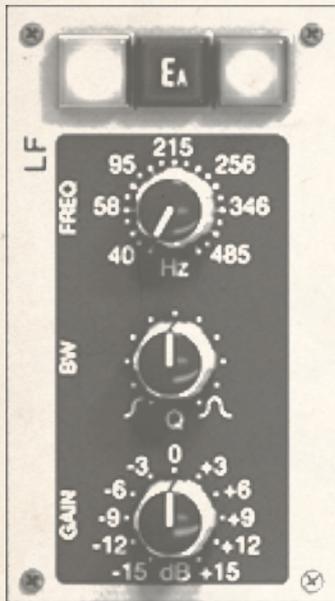
Power button to activate the LMF section

HMF/LMF curves - Q: 1.75



HMF/LMF curves - Q: 0.85





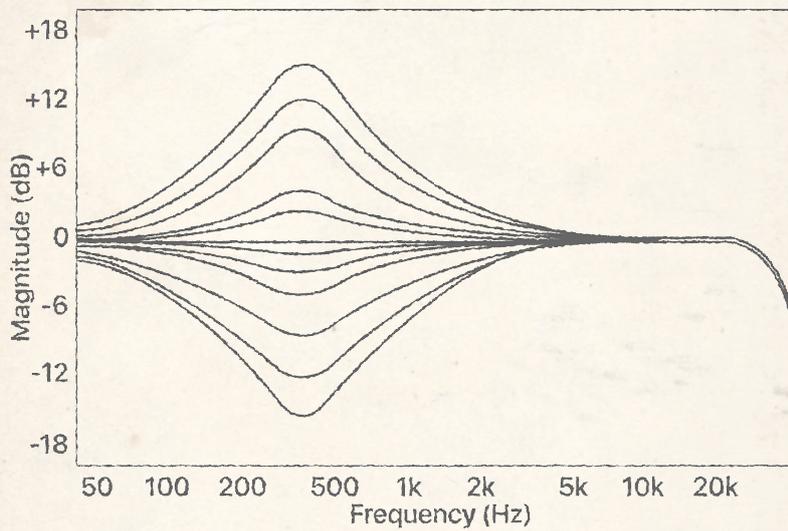
LF Filter Frequency: the stepped knob allows to switch the frequency of the band among 21 steps from 40Hz to 485Hz

LF Filter Gain: this knob is used to increase or decrease the gain of the band from -15dBu to +15dBu

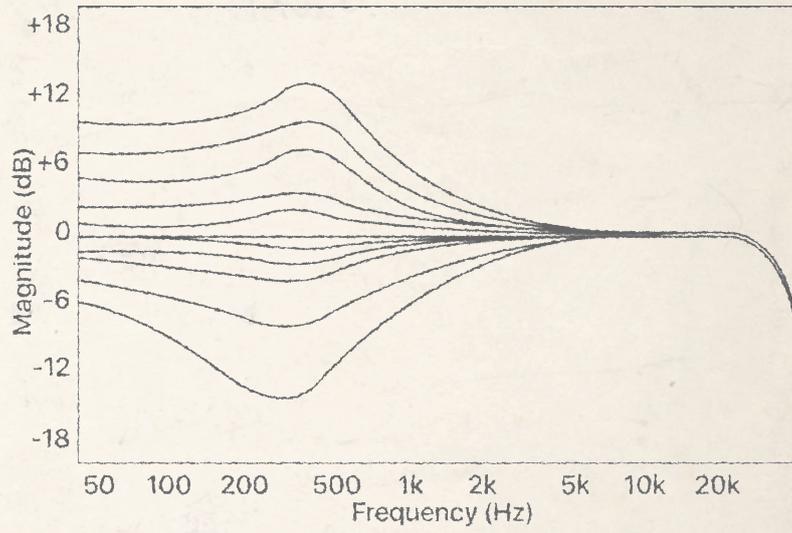
LF Filter Type knob allows to turn the Q knob from Shelf to Bell mode through a smooth transition ("Q morphing")

Power button to activate the LF section

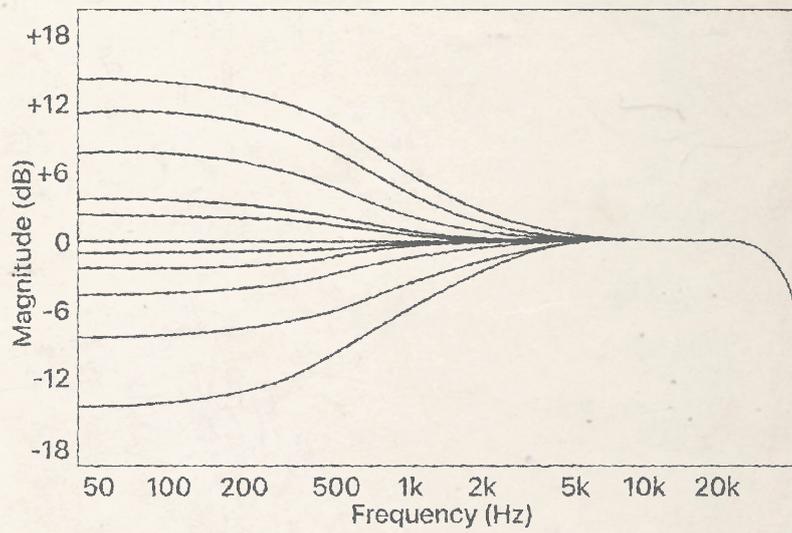
LF curves - Q: bell



LF curves - Q: mixed



LF curves - Q: shelf



## FILTERS SECTION



Among the most desirable sea-side locations in Egypt, with its forty kilometres of coastline, Hurghada is considered one of the country's leading holiday resorts. During the Pharaohs' age, it was already known for its golden beaches and turquoise waters.

Besides the amazing seaside locations, more than 90% of Egypt consists of desert areas. Located in Northern Africa and extending from the Atlantic Ocean to the Red Sea, the Sahara Desert is the largest desert in the world. Think of it as an endless sea of sand dunes and oases, reminiscent of a lunar landscape.



Dunes are shaped by the wind just as sea-beds are moulded by the water; however, water flattens down whereas wind builds up. The sand is extremely fine, it sneaks in everywhere. The predominant color ranges from red through varying shades of brown.

The scenery also changes depending on where you are: the rolling and seemingly never ending dunes move and disappear in consecutive loops. They are never the same, always changing, moving faster than your eyes can follow. You can watch the countless grains as they are carried by the wind.





*Our hope is that SAND may evoke the same feelings as when watching the desert dunes: two filters that, just like dunes, may look the same at first glance but they are not. The distinguishing features of this switchable filter section make it a must-have channel strip.*



*The two seemingly identical filters, like deserts, feature unique details bringing different sound feelings, depending on the user's choice...*



## FILTERS SECTION

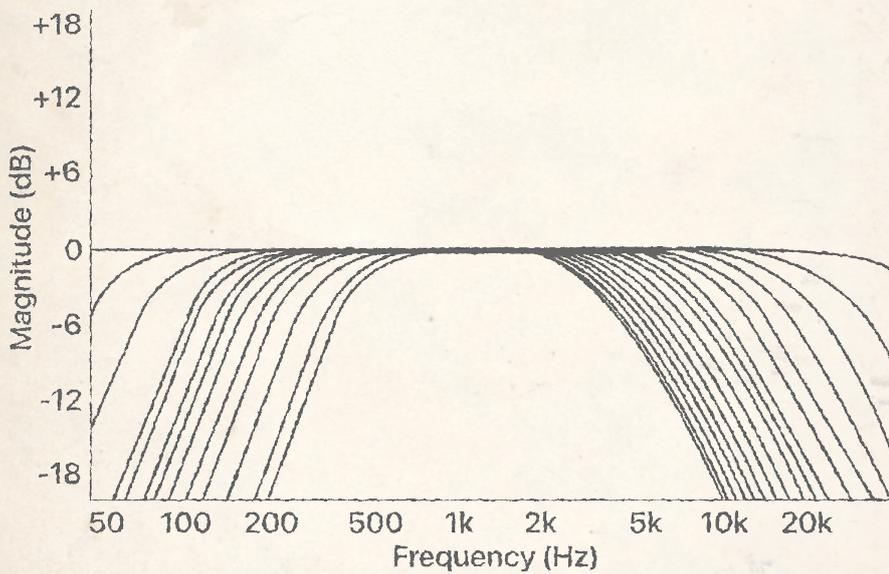
SAND includes two different Filters:

Cut filters A mode



12 dB per octave Low Pass Filter Frequency 22KHz to 3KHz, Out  
18 dB per octave High Pass Filter Frequency 16Hz to 350Hz, Out  
Power button to activate the Filter section

Filter A curves

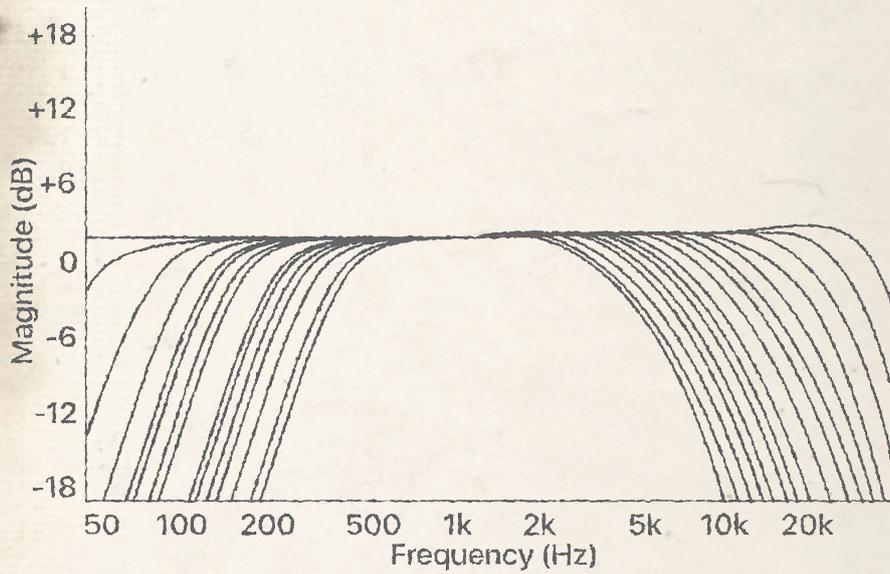


Cut filters B mode



12 dB per octave Low Pass Filter Frequency 16KHz to 3KHz, Out  
12 dB per octave High Pass Filter Frequency 20Hz to 350Hz, Out  
POWER button to activate the Filter section

Filters B curves



# CUBA CAYO LARGO

## COMPRESSOR SECTION



Cuba is an archipelago composed of a principal island and about 1,600 islets called "Cayos" surrounding it. Cayo Largo is the second-largest coral island in the archipelago. With its sugar-white sand and turquoise waters, this paradise has become the ideal destination for beach worshippers.

This island never fails to amaze visitors, snorkellers and divers. The reaction after they see its clean environment and crystal-clear blue sea offer proof that Stendhal syndrome exists.

*Our hope is that SAND may provide a “crystal-clear” and smooth compression, and the best possible stereo image.*





*The Comp section of this channel strip captures the unmistakable sound of the input circuits of the emulated console and its distinct design of the double VCA gain reduction amplifier.*



*The circuitry of the original machines has been faithfully sampled, which means that compression, just like in the original machine, may be applied before or after the EQ and filter sections, thanks to the components' routing operation.*



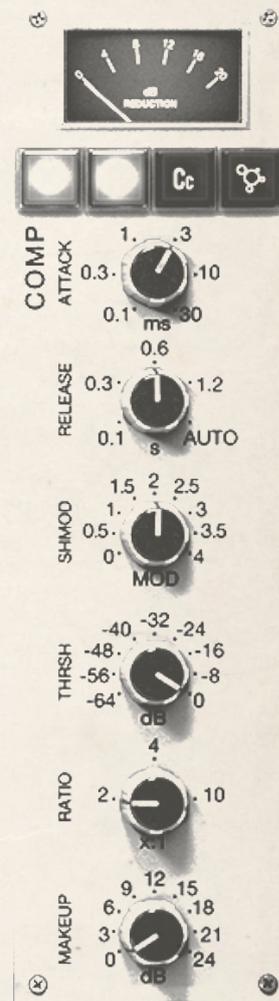
## COMPRESSOR section

SAND is equipped with two different compressors, Comp A mode and Comp C mode.

Comp A mode is an emulation of VCA stereo units. It's a bus compressor and captures the unique British sound of one of the best mixing consoles from the '80s. We chose to sample the best hardware out there to give you a perfect solution.

Comp C mode is the result of careful research and improvements to have a dynamic processor characterized by accuracy and versatility. The attack times of this dynamic range compression are close to some other familiar software compressors.

It reigns supreme for 'glue' purposes! We believe we are delivering a sublime plugin that "does both transparency and glue with panache, making a mix louder and punchier while imparting an expensive, modern-sounding cohesiveness that has probably shaped the sound of more hit records than any other over the past three decades".



---

**RATIO:** This knob sets the compression ratio, available values range from 2:1 to 10:1

**MAKEUP:** This knob sets the gain compensation and is designed to boost the compressed signal from 0dB to +24dB

**RELEASE:** This knob sets the compressor's release time from 0.1s to AUTO

**ATTACK:** This knob sets the compressor's attack time from 0.1ms to 30ms

**THRESHOLD:** This knob ranges from -64dBu to 0dBu

**SHMOD:** this is the Shape modulation of the attack envelope.

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

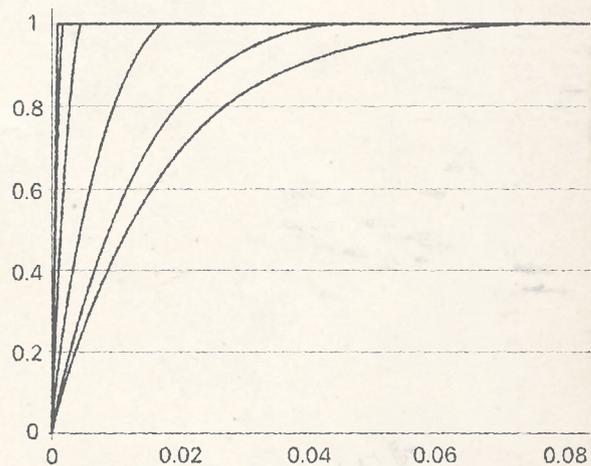
**POWER BUTTON** to activate the COMP sections

**"ACUSTICA" BUTTON** engages the INSANE mode of the compressor

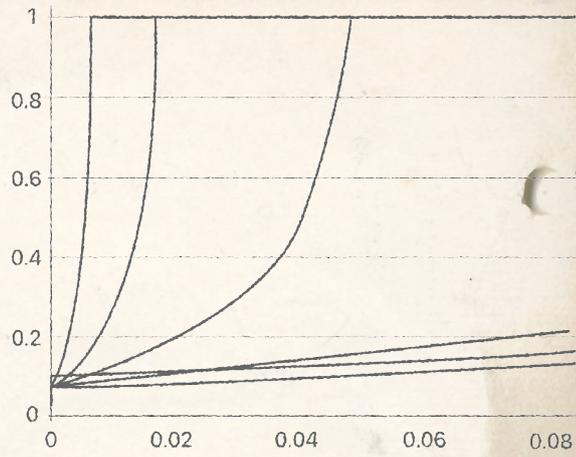
**SHMOD:** this is the Shape modulation of the attack envelope

This mode has been implemented to increase the accuracy and speed of the compressor but it's more expensive (in terms of CPU usage).

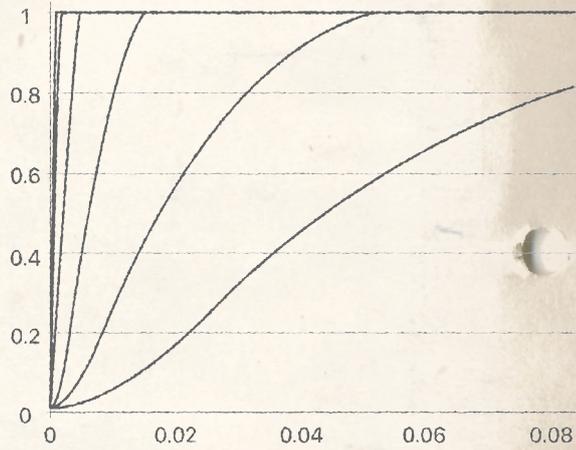
A-C mode compressor  
attack - SHMOD 1



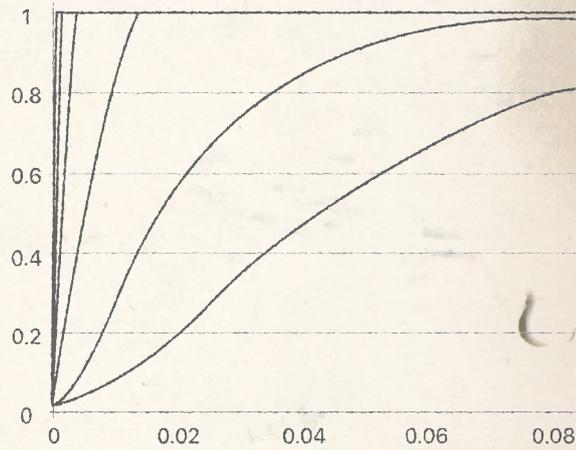
A-C mode compressor attack - SHMOD 4



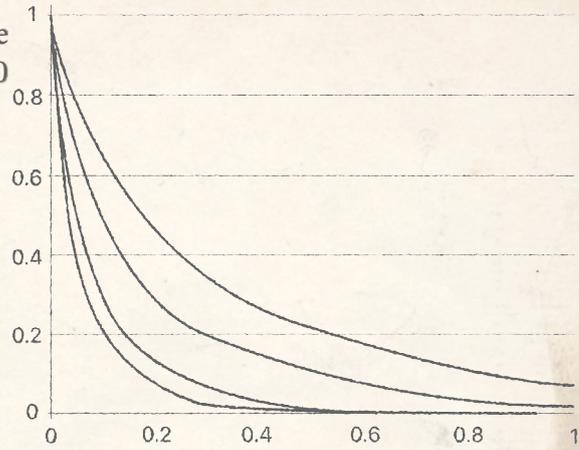
A mode compressor attack



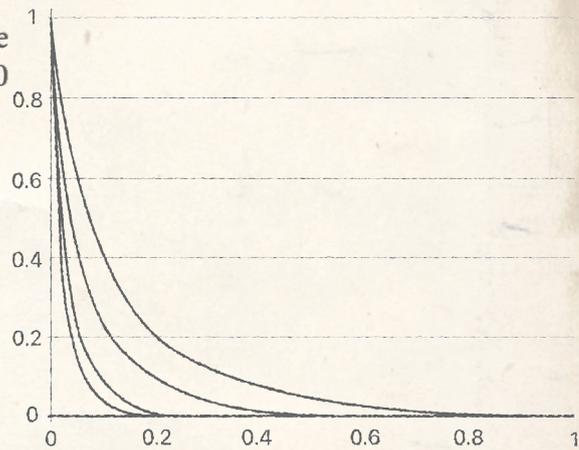
C mode compressor attack



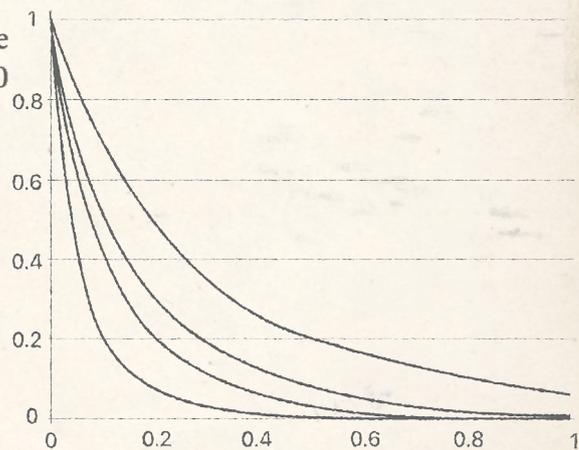
A mode compressor release  
threshold value -20



A mode compressor release  
threshold value -40

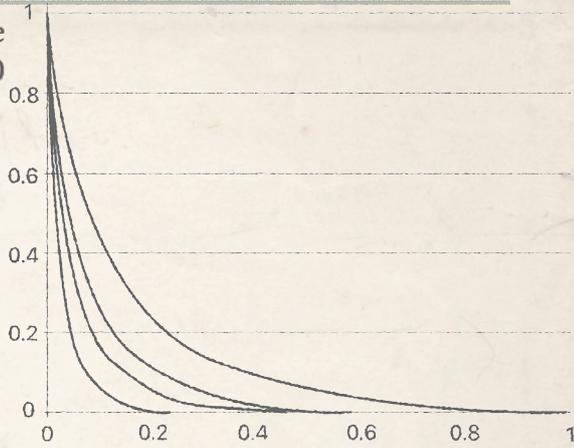


C mode compressor release  
threshold value -20

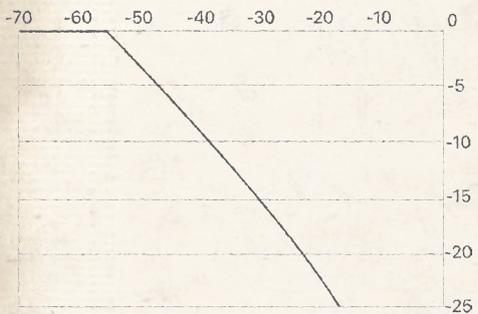
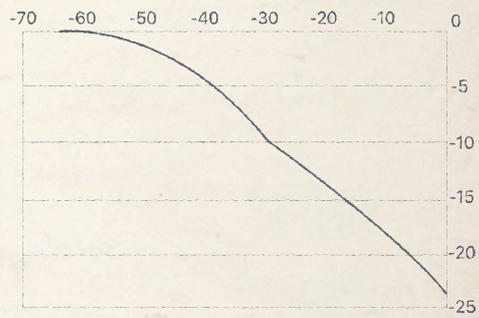


5-4

C mode compressor release  
threshold value -40

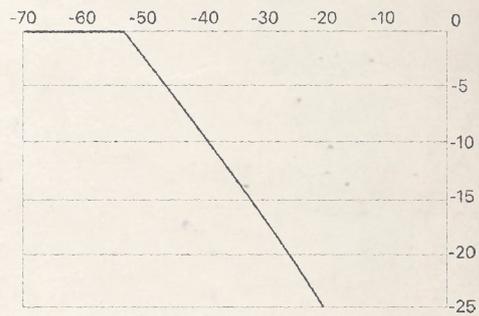


Ratio 2



Ratio 4

Ratio 10



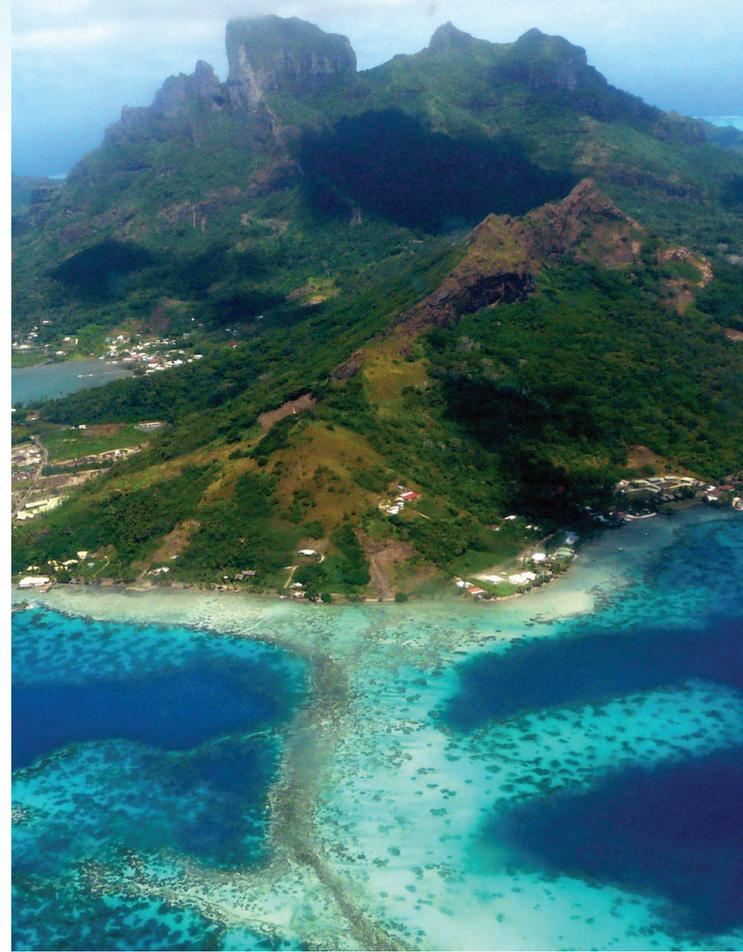
5-5

# BORA BORA VAITAPE

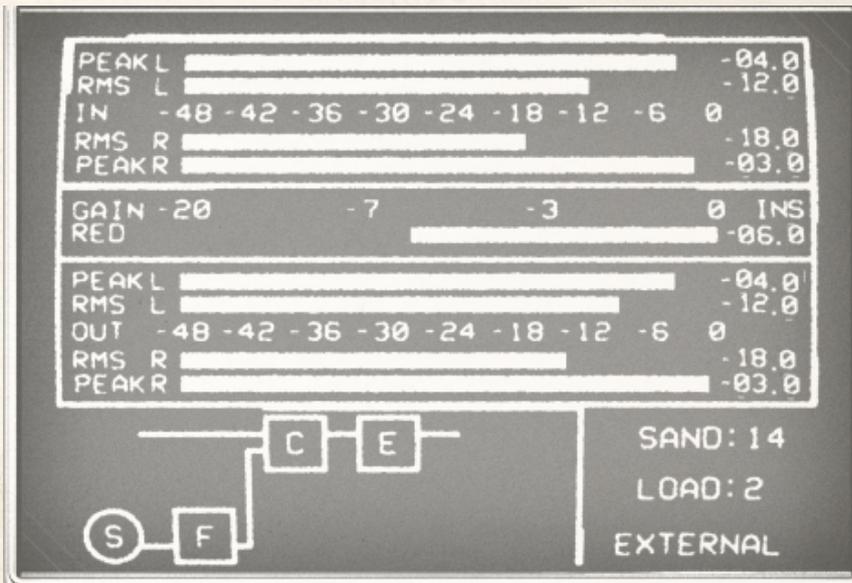
## MONITOR SECTION



PEAKL	[Progress Bar]								-04.0
RMS L	[Progress Bar]								-12.0
IN	-48	-42	-36	-30	-24	-18	-12	-6	0
RMS R	[Progress Bar]								-18.0
PEAKR	[Progress Bar]								-03.0
GAIN	-20								
RED		-7				-3			0
INS									
PEAKL	[Progress Bar]								-04.0
RMS L	[Progress Bar]								-12.0
OUT	-48	-42	-36	-30	-24	-18	-12	-6	0
RMS R	[Progress Bar]								-18.0
PEAKR	[Progress Bar]								-03.0



MONITOR section



GAIN REDUCTION METER TIMES		
	ATTACK	RELEASE
VUMETER	60.000 ms	100.000 ms
RMS	300.000 ms	300.000 ms

IN / OUT METER TIMES		
	ATTACK	RELEASE
PEAK	100.000 ms	100.000 ms
RMS	300.000 ms	300.000 ms

# AEGADIAN ISLANDS

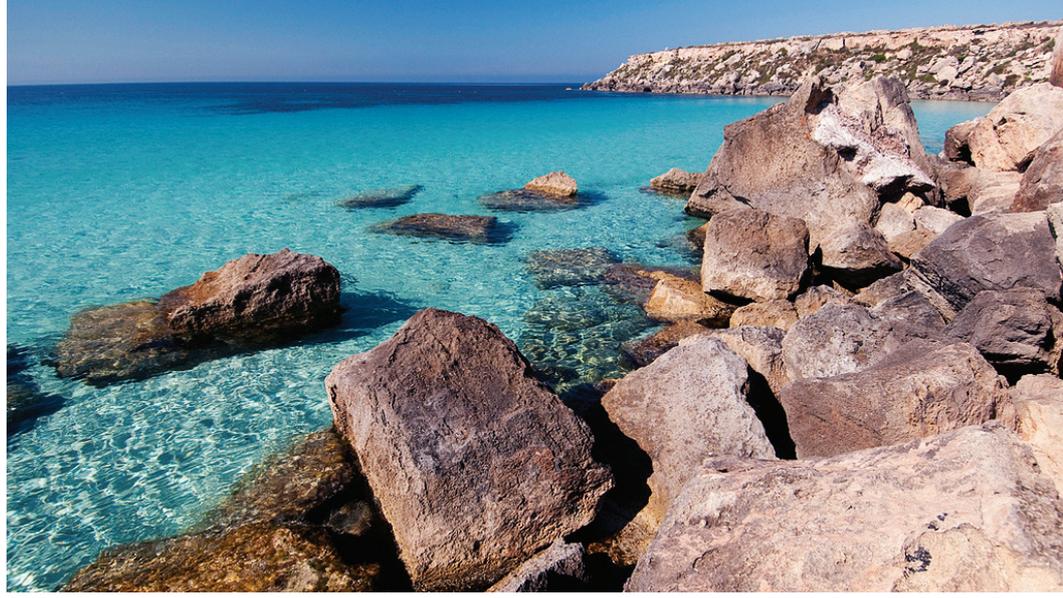
FAVIGNANA-LEVANZO-MARETTIMO

## FAB4 SECTION



The Aegadian Islands (Italian: Isole Egadi) are a group of three small mountainous islands in the Mediterranean Sea off the northwest coast of Sicily close to Trapani and Marsala.

The main islands of the archipelago are Favignana, Levanzo and Marettimo; there are also two minor islands, Formica and Maraone, lying between Levanzo and Sicily.



*As well as sand channel-strip we offer other 3 plugins of the highest quality and excellence included in the best mixing bundle!*

*We hope you will find the quality “made in Italy” represented of these plug-ins comparable only to our beautiful Aegadian islands. Enjoy!*

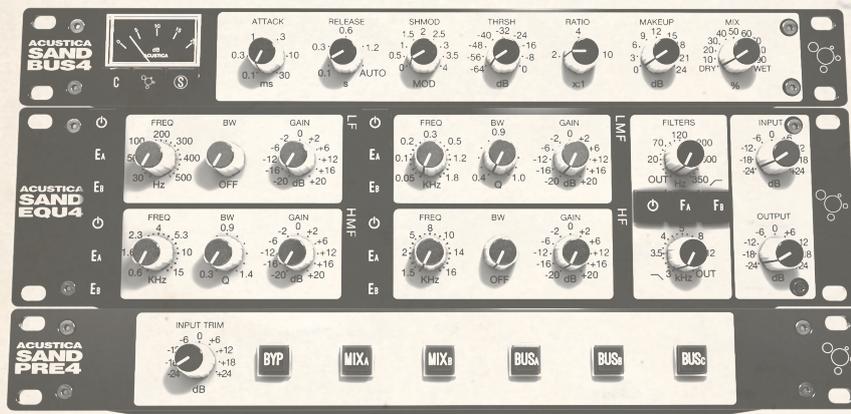


# SAND FAB4

SAND FAB4 is a bundle consisting of SAND channel-strip, SAND BUS4, SAND PRE4, SAND EQU4.

To help unleash the incredible potential of our SAND's modules, we have created a BUNDLE including SAND channel-strip and each individual module, enabling sound engineers to use each component separately, with a significant saving in terms of CPU. This will help enhance your mixes ensuring quality, versatility and the distinctive sound peculiar to Acustica's plugins.

We hope FAB4 will meet our most demanding customers' requirements.



What's new?

In these plugins you'll find the same features as SAND channel-strip (please see the OPERATION section above for further details). We guarantee you'll still get the same sound performance for each module.

Besides new GUIs, you'll find improved designs to enable easy use of the plugins.

Please find a list of the changed/new controls here below:

### SAND BUS4 SECTION



A/C button to switch from A COMP to C COMP.

S button: to activate the external side-chain of the compressors.

### SAND EQU4 SECTION



Here you'll find the same features as SAND channel-strip.

### SAND PRE4 SECTION



INPUT TRIM knob sets the input level from -24dB to +24dB, and it is used to control the signal level of plug-in.

# MALDIVES MEERU ISLAND





The Maldives, officially the Republic of Maldives, is a South Asian island country, located in the Indian Ocean. With an average ground-level elevation of 1.5 metres above sea level, it is the world's lowest country.

Maldivian waters are home to several ecosystems, but are most noted for their variety of colourful coral reefs, home to 1100 species of fish, 5 species of sea turtles, 21 species of whales and dolphins, 187 species of corals, 400 species of molluscs, and 83 species of echinoderms.



Crystal clear waters, long stretches of white sand, transparent lagoons, sky colors that blend with the sea, the many colors of the coral reefs, fish and marine life ... still doubts that heaven exists?

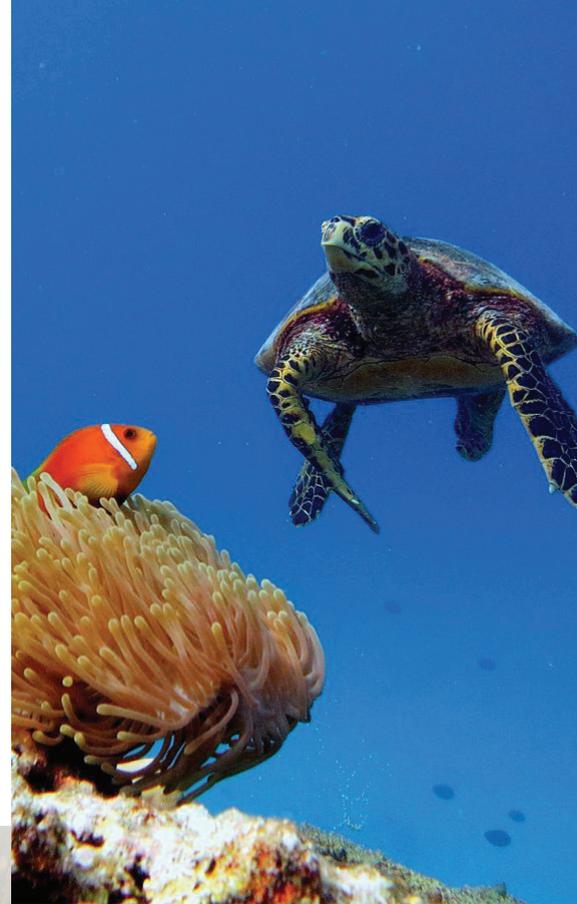


*We hope this plugin will deliver excellent sound performance, offering quality in the tracks' mix and improving the performance of the "effected" signals. It "glues" the sound!*





*The unique experience you'll live from the moment you start to use SAND can be compared only to one of the most beautiful destinations (and our favorite too!) in the world!*



*It's time for you to give it a try! Maybe while you're enjoying the sun, sea and SAND... in the Maldives!*

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## CONTENTS

### 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.

#### 1.2. Sampling Requirements

	WINDOWS		OSX	
	Minimum	Recommended	Minimum	Recommended
Operating System	Windows 7	Windows 10	OSX 10.8	OSX 10.11
CPU	Dual Core	Latest multicore CPU (1)	Dual Core	Latest multicore CPU (1)
RAM	4 GB	16 GB to 128 GB	4 GB	16 GB to 128 GB
HDD/SDD	1000 MB	1000 MB	1000 MB	1000 MB
Screen Resolution	1024 x 768 (XGA)	1920x1080 (HDTV) (2)	1024 x 768 (XGA)	1920x1080 (HDTV) (2)
Audio Host	VST2/AAX 32 bits	VST2/AAX 64 bits	VST/AU/AAX 32 bits	VST/AU/AAX 64 bits

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(1) Intel i7 generation 6 or newer is recommended.

(2) 3840x2160 UHD TV is also supported.

### 1.3. Sampling rate

- 44,1 kHz

- 96 kHz

## 2. Product installation

### 2.1. Introduction

Acqua Effects plug-ins are released with an installer program for Windows and OSX. The installer contains plugin specific files and system files. Please

run OS X (1) or Windows (2) installer depending on your OS and your audio host plug-in supported formats. During the installation, use a true administrator

account or make your OS acknowledge that you have a user account with full administrator privilege.

If you don't understand what we are talking about, please contact your system administrator for more information.

. In VST-AU OSX installer, Skin and Vector files are shared between AU and VST format and are installed in Acustica (VST 32 bits) folder.

. In AAX OSX installer, Skin and Vector files are not shared with other formats and/or architectures due to a limitation of the AAX format. Co-installation of Pro Tools 10 (32 bits) and Pro Tools 11/12 (64 bits) it isn't possible.

. In VST Windows installers, Skin and Vector files are not shared between VST 32 bits and VST 64 bits.

. In AAX Windows installer, Skin and Vector files are not shared with other formats and/or architectures due a to limitation of the AAX format. Co-installation of Pro Tools 10 (32 bits) and Pro Tools 11/12 (64 bits) it isn't possible..

---

## 3. Product authorization

### 3.1 Introduction

Acustica Audio products use a protection based on a challenge-response authentication system that needs two main steps: Computer Identification creation and Computer Identification on-line request.

If your audio/video host refuse to create Acqua

### 3.2. Computer Identification creation

Run your audio/video host and create a new session (avoid templates). Your Acqua Effect plugin should be scanned, detected, and added into the available list of plug-ins. Load your Acqua Effect plug-in and you will see a message asking for authorization. A computer Identification file (SAND.SER) will be created into your Acustica/Acustica64 or Components folder depending on which format you are using in your audio/video host application.

If your audio/video host refuses to create an Acqua Effect plug-in Computer Identification file, try it again running it as a true administrator with administrator privilege. If you don't understand what we are talking about, please contact your system administrator for more information.

### 3.3 Computer Identification file path in Windows

VST plug-in folder 32 bits: C:\VSTPlug-ins\Acustica\ (not fixed path)

VST plug-in folder 64 bits: C:\VSTPlug-ins\Acustica64\ (not fixed path)

AAX plug-in folder 32 bits: C:\Program Files (x86)\Common Files\Avid\Audio\Plug-Ins\ (fixed path)

AAX plug-in folder 64 bits: C:\Program Files\Common Files\Avid\Audio\Plug-Ins\ (fixed path)

File name: depends on the product or bundle. Extension: .SER.

---

If your audio/video host refuse to create Acqua Effect plug-in Computer Identification file, try it again running it as true administrator with administrator privilege. If you don't understand what we are talking about, please contact your system administrator for more information.

#### 3.4 Computer Identification file path in OS X

- VST plug-in folder 32 bits: OSX HD/Library/Audio/Plug-ins/VST/Acustica (fixed path)
- VST plug-in folder 64 bits: OSX HD/Library/Audio/Plug-ins/VST/Acustica64 (fixed path)
- AU plug-in folder 32 and 64 bits: OSX HD/Library/Audio/Plug-ins/Components (fixed path)
- AAX plug-in folder 64 bits: OSX HD/Library/ApplicationSupport/Avid/Audio/Plug-ins/(fixed path)
- AAX plug-in folder 32 bits: OSX HD/Library/ApplicationSupport/Avid/Audio/Plug-ins/ (fixed path)

#### 3.5 Computer Identification on-line request

Go to Acustica Audio website, Customer Area, Dashboard, Authorize Products. Browse to your Computer Identification file (SAND.SER) and click Upload. Our Global Key Generator will create your authorization and within few minutes you will receive an email with your authorization attached. The Global Key Generator will also deposit a copy of your authorization into "My Licenses" section in your Dashboard as an on-line backup.

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## 4. ONLINE AUTHORIZATION REQUEST

Browse to your computer ID file (SAND.SER) created in Acustica/Acustica64 folder(s), Components folder, AAX Plug-ins folder, depending which format are you using, and upload it in Acustica Audio website, Customer Area, Dashboard, Authorize Products.

Our Global Key Generator will create your personal key in three minutes and you will receive an email with your personal key and also GKG (Global Key Generator) will add a copy of your license into My Licenses section in your Dashboard as an on-line backup.

**IMPORTANT:** Try with different browsers if you have any trouble with computer ID file upload.

**NOTE:** Do not try multiple uploads of your computer ID file (SAND.SER) after each request, wait at least 3 minutes.

### Authorize Products

If you have purchased a new Acustica product or you did a new installation, you will need to authorize it.

Please upload your authorization file (.ser) so that we can process it and register it as your license. Once we have authorized your license, it will appear in the My Licenses section of this page

If you do not have any license showing, it means your authorization is currently pending with us, or that you have not authorized any Acustica products.

Note

- Free products doesn't need authorizations;
- The authorization process could take from 3 to 60 minutes please be patient and don't make multiple-upload.
- You can do a limited numbers of requests;
- You will receive a copy of the license via e-mail;
- For further information, please contact: [licensing@acusticaudio.net](mailto:licensing@acusticaudio.net)

Choose a file to upload

Examinar...

---

#### 4.1 License installation

After creating your license file, our Global Key Generator will send you a message to your registered email address with your license file compressed in zip format as an attachment. Decompress your license file and move it to the corresponding path, depending on the format you use. The product will be unlocked after you move the license file to the correct folder.

#### 4.2 License file path in OS X

VST plug-in folder 32 bits: OSX HD/Library/Audio/Plug-ins/VST/Acustica (fixed path)

VST plug-in folder 64 bits: OSX HD/Library/Audio/Plug-ins/VST/Acustica64 (fixed path)

AU plug-in folder 32 and 64 bits: OSX HD/Library/Audio/Plug-ins/Components (fixed path)

AAX plug-in folder 64 bits: OSX HD/Library/Application Support/Avid/Audio/Plug-ins/ (fixed path)

AAX plug-in folder 32 bits: OSX HD/Library/Application Support/Avid/Audio/Plug-ins/(fixed path)

#### 4.3 License file path in Windows

VST plug-in folder 32 bits: C:\VSTPlug-ins\Acustica\ (not fixed path)

VST plug-in folder 64 bits: C:\VSTPlug-ins\Acustica64\ (not fixed path)

AAX plug-in folder 32 bits: C:\Program Files (x86)\CommonFiles\Avid\Audio\Plug-Ins\ (fixed path)

AAX plug-in folder 64 bits: C:\Program Files\CommonFiles\Avid\Audio\Plug-Ins\ (fixed path).

---

File name: depends on the product or bundle.

Extension: .AUT.

Note: our Global Key Generator will also deposit a copy of both your Computer Identification and your license into “My Licenses” section in your Dashboard as an on-line backup.

#### 4.4 Installations paths

##### 4.4.1 OS X paths:

VST plug-in folder 32 bits: OSX HD/Library/Audio/Plug-ins/VST/Acustica (fixed path)

VST plug-in folder 64 bits: OSX HD/Library/Audio/Plug-ins/VST/Acustica64 (fixed path)

AU plug-in folder 32 bits: OSX HD/Library/Audio/Plug-ins/Components (fixed path)

AU plug-in folder 64 bits: OSX HD/Library/Audio/Plug-ins/Components (fixed path)

AAX plug-in folder 32 bits: OSX HD/Library/Application Support/Avid/Audio/Plug-ins (fixed path)

AAX plug-in folder 64 bits: OSX HD/Library/Application Support/Avid/Audio/Plug-ins (fixed path)

##### 4.4.2 Windows paths:

VST plug-in folder 32 bits: C:\VSTPlug-ins\Acustica\ (recommended path)

VST plug-in folder 64 bits: C:\VSTPlug-ins\Acustica64\ (recommended path)

AAX plug-in folder 32 bits: C:\Program Files (x86)\Common Files\Avid\Audio\Plug-Ins\ (fixed path)

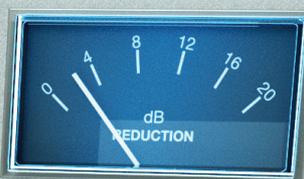
AAX plug-in folder 64 bits: C:\Program Files\Common Files\Avid\Audio\Plug-Ins\ (fixed path)

Also recommended:

- Do not resume downloads.
- Disable any anti-virus and/or any anti-malware.
- Disable OSX Gatekeeper.
- Disable Windows Smart Screen.







Acustica

COMP ATTACK

1. .3  
0.3 .10  
0.1 ms .30

RELEASE

0.3 .1.2  
0.1 s .30

SHMOD

1.5 2 2.5  
0.5 .3 .3.5  
0 4

THRSH

-40 -32 -24  
-48 -56 -64  
-8 -16 -24

RATIO

2. .10

CONTROL

MIX<sub>A</sub> MIX<sub>B</sub> BUS<sub>A</sub> BUS<sub>B</sub> BUS<sub>C</sub>

SAND

INPUT COMP OUTPUT

-12. -6. 0 +6 +12 +18 +24  
30. 40 50 60  
20. 30. 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. 170. 180. 190. 200. 210. 220. 230. 240. 250. 260. 270. 280. 290. 300. 310. 320. 330. 340. 350. 360. 370. 380. 390. 400. 410. 420. 430. 440. 450. 460. 470. 480. 490. 500. 510. 520. 530. 540. 550. 560. 570. 580. 590. 600. 610. 620. 630. 640. 650. 660. 670. 680. 690. 700. 710. 720. 730. 740. 750. 760. 770. 780. 790. 800. 810. 820. 830. 840. 850. 860. 870. 880. 890. 900. 910. 920. 930. 940. 950. 960. 970. 980. 990. 1000. 1010. 1020. 1030. 1040. 1050. 1060. 1070. 1080. 1090. 1100. 1110. 1120. 1130. 1140. 1150. 1160. 1170. 1180. 1190. 1200. 1210. 1220. 1230. 1240. 1250. 1260. 1270. 1280. 1290. 1300. 1310. 1320. 1330. 1340. 1350. 1360. 1370. 1380. 1390. 1400. 1410. 1420. 1430. 1440. 1450. 1460. 1470. 1480. 1490. 1500. 1510. 1520. 1530. 1540. 1550. 1560. 1570. 1580. 1590. 1600. 1610. 1620. 1630. 1640. 1650. 1660. 1670. 1680. 1690. 1700. 1710. 1720. 1730. 1740. 1750. 1760. 1770. 1780. 1790. 1800. 1810. 1820. 1830. 1840. 1850. 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