

WHITE3 User's manual



1. Introduction

Thank you for purchasing White3. To get the most out of your new plugin suite, please take the time to read this user manual carefully.

1.1. Overview

White3 is an exciting plugin suite that embodies esoteric units from the renowned Italian studio **White Sound Mastering**.

Their solid-state design give them an excellent transient response making them ideal for mastering and also mixing applications.

In the words of Sound on Sound reviewer Sam Inglis: *“White has that elusive quality of making everything sound better, at a wide range of settings.”*

1.2. What you get

White 3 includes

- White3 PEQ-2.0 (solid state P-style EQ) - is a faithful emulation of the WSM PEQ-2.0, a solid state P-style EQ, with dual-mono channel topology designed specifically for Mastering.

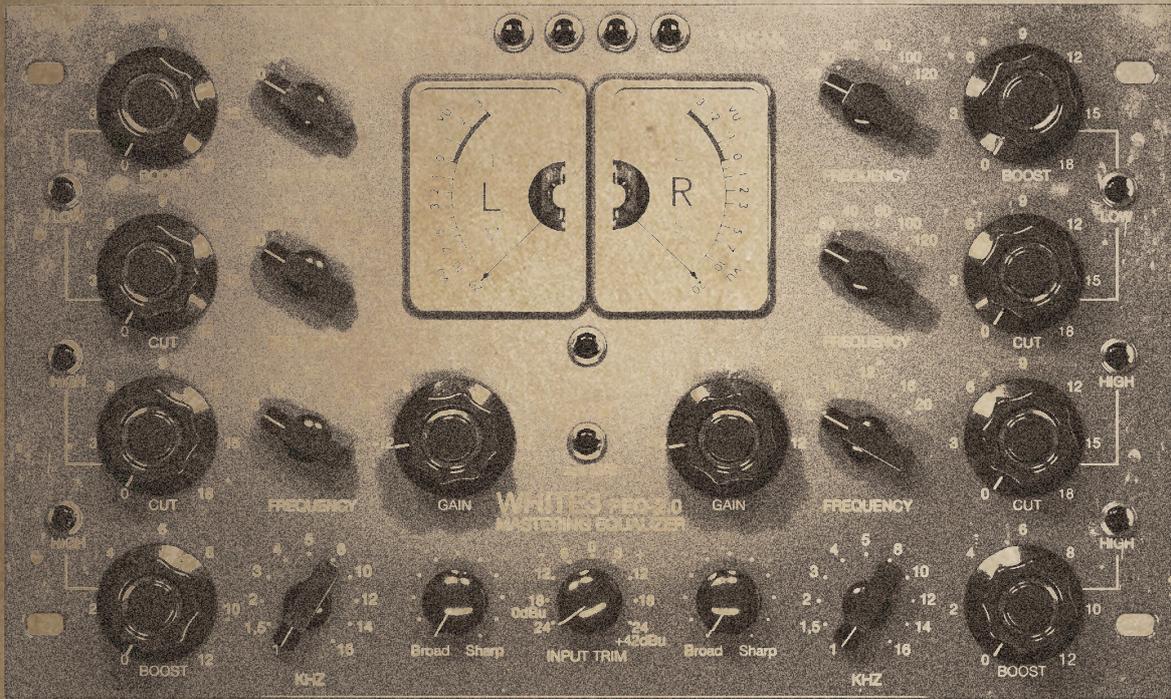
Its solid state design gives it excellent transient response, and its knobs with stepped controls guarantee perfect reproduction of the stereo spectrum with amazing and complete recall capabilities.

This hardware was created to be an evolution of a classic P-equalizer using passive filters, inductors and transformers , while the design choice of solid state makes it suitable for any musical genre.

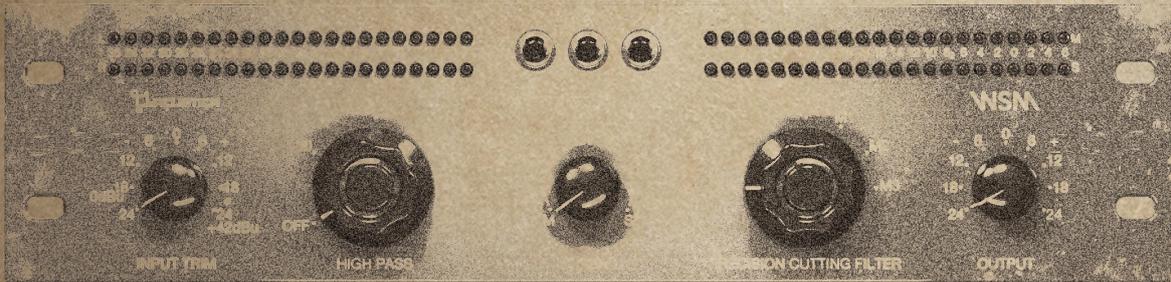
The low frequency band has been enhanced by being split, so, unlike most P-style units, you can use the controls of the CUT and BOOST simultaneously on multiple frequencies. This provides greater flexibility and many more possibilities for sound-shaping the audio.

The WSM PEQ-2.0 began as a custom project of the White Sound Mastering studio in Florence.

- White3 FLT-2.0 (solid state mastering pre+filter) - is an emulation of the WSM DLP Dual Line Preamplifier, an esoteric passive preamp+filters, ideal for mastering purposes, White3 FLT-2.0 compared to the original version features an 'Extra' section dedicated to mastering cutting filters designed to Tommy Bianchi's specifications.

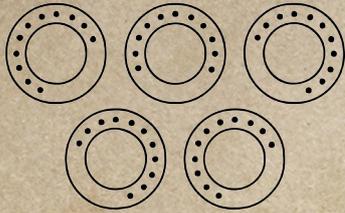


White3 PEQ-2.0 (solid state P-style EQ).

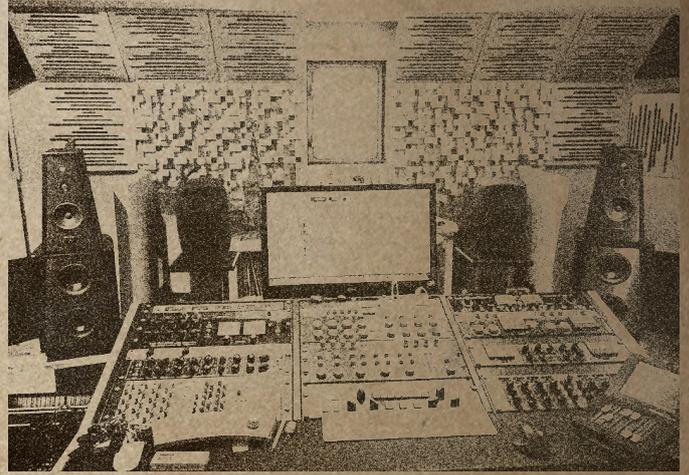


White3 FLT-2.0 (solid state mastering filter).

WSM



LABS



Tommy Bianchi "the Warlock"



Powerful analog custom and hand-built mastering tools

www.whitesoundmastering.com

WSM Labs is a trademark of White Sound Mastering Studio. WSM Labs produces analog esoteric custom instruments for audio mastering purposes. Founded by Tommy Bianchi and Niccolo' Caldini, they are based in Florence (Italy).

2.1. Download And Authorization

White3, and all Acustica Audio products, can be downloaded, installed, and authorized using the Aquarius desktop application, our dedicated free app for macOS and Windows. When you purchase a product on the Acustica store, the registration is automatic. For more information, please visit our website. Please note: make sure Aquarius is constantly updated to the latest version. If you experience any issues during the authorization of your products, uninstall the plugin(s) and then re-install them using the latest version of Aquarius.

2.2. System Requirements

Modern computers are powerful enough to run many plugins at once. However, our technology requires more resources than algorithm-based software. Please, consider optimizing your system to work with high CPU loads and low audio latency.

All technical specifications of Acustica Audio products provided are intended to be estimates or approximations. Due to numerous variables, no guarantees of compatibility or performance can be made. The end-user is solely responsible for, prior to purchase, ensuring that the end-user's devices are compatible and meet the system requirements for Acustica Audio products.

	PC Windows		Apple macOS	
	MINIMUM	RECOMMENDED	MINIMUM	RECOMMENDED
OPERATING SYSTEM	Windows 10 64 bits ^{(1) (9)}	Windows 10 64 bits ^{(1) (9)}	macOS 10.13 ^{(1) (9)}	macOS 10.15 ^{(1) (9)}
CPU	Intel i5 Broadwell 3.1 GHz ^{(2) (8)}	Intel i9 Coffee Lake 3.5 GHz ^{(2) (8)}	Intel i5 Broadwell 3.1 GHz ^{(2) (8)}	Intel i9 Coffee Lake 3.5 GHz ^{(2) (8)}
RAM	4 GB of RAM ⁽³⁾	64 GB of RAM ⁽³⁾	4 GB of RAM ⁽³⁾	64 GB of RAM ⁽³⁾
SSD	It depends on the product ⁽⁴⁾	It depends on the product ⁽⁴⁾	It depends on the product ⁽⁴⁾	It depends on the product ⁽⁴⁾
SCREEN RESOLUTION	FHD (1920x1080)	UHD (3840x2160)	FHD (1920x1080)	UHD (3840x2160)
PLUG-IN FORMAT	VST & AAX	VST & AAX	VST, AAX & AU	VST, AAX & AU
PLUG-IN ARCHITECTURE	64-bits		64-bits	
TRIAL / DEMO	30 Days ⁽⁵⁾		30 Days ⁽⁵⁾	
SUPPORTED DAW / NLE	Cubase 64-bits & Pro Tools 64-bits ⁽⁶⁾		Cubase 64-bits & Pro Tools 64-bits & Logic Pro X 64-bits ⁽⁶⁾	
AQUARIUS APPLICATION	YES & Mandatory		YES & Mandatory	
INTERNET CONNECTION	YES & Mandatory ⁽⁷⁾		YES & Mandatory ⁽⁷⁾	

- (1) Case sensitive file systems are not supported.
- (2) Intel i7/i9 X and Xeon processors need CORE 16 or superior. The CPU speed is more important than the number of CPU cores.
- (3) In order to run more plug-ins instances it is always necessary to increase the amount of RAM.
- (4) Each format needs three times more space than what the product is in order to download and decompress the installation files.
- (5) Trial settings cannot be transferred from the trial to the commercial version.
- (6) For others DAWs or NLEs, try trial before buy
- (7) TCP/UDP ports 8080 and 443 should be open. Reliable and fast internet connection is recommended
- (8) For Apple Silicon (ARM) computers, check compatibility before purchasing. AMD processors are not officially supported.
- (9) For other operating systems, check compatibility before purchasing using the trial version.

IMPORTANT: Genuine Apple device with a valid serial number or valid volume ID on Windows operating systems is mandatory.
IMPORTANT: It is highly recommended to make a complete backup before making changes to your computer systems.
IMPORTANT: Acustica Audio cannot be held responsible for any loss or damage arising directly or indirectly from any error or omission in this manual.

3. Controls

This suite offers the possibility to combine two very important steps of the mastering process, filtering (Filter) and sound shaping (Eq).

The mastering filters have been carefully recreated in the digital domain according to Tommy Bianchi's technical specifications, with the aim of obtaining very linear and functional "cutting filters". The White 3's filter section offers two different elliptical filter modes and 3 fixed positions, the V containing cuts suitable for Vinyl Cutting and the M for classic mastering cuts. More details in chapter 3.2

In this third version the PRE2 and PRE3 buttons are two different sound modes of the same preamplifier, the WSM DLP Dual Line Preamplifier, which compared to the preamplifier stage of the WSM PEQ-2.0 (linear and clear), introduces an interesting amount of colour and harmonic saturation in the sound.

These NEW preamplifiers have been added to this third version of the White3 EQ, to improve it in several respects, whilst still preserving its sound characteristics and identity.

This EQ has become famous over time for its low-and high-shelving boosts and cuts, but it expands upon these in a couple of interesting ways. In particular, it allows you to choose between several frequency options, more than a classic P-style EQ, and most significantly, it's possible to select different frequencies for the boost and the cut!

3.1. White3 PEQ-2.0



1- OFF: Bypasses (Led on) the Preamp.

2- PRE 1: Activates the first preamp emulation of the White 3 EQ. It's the preamp emulation derived from the WSM PEQ-2.0

3- PRE 2: Activates the second preamp emulation. It's the first preamp emulation derived from the WSM DLP Dual Line Preamplifier.

4- PRE 3: Activates the third preamp emulation. It's the second preamp emulation derived from the WSM DLP Dual Line Preamplifier.

5- Low Boost (Left Channel): The Low boost goes from 0 to +18 dB.

6-14 Low Frequency (Left Channel): This sets the cut-off frequency for the Low frequency BOOST and CUT controls for the Left Channel. The frequency settings for each controls are 20 Hz, 30Hz, 40Hz, 60Hz, 100Hz, 120Hz.

7-15 Low Frequency (Right Channel): This set the cut-off frequency for the Low frequency BOOST and CUT controls for the Right Channel. The frequency settings for each controls are 20 Hz, 30Hz, 40Hz, 60Hz, 100Hz, 120Hz.

8- Low Boost (Right Channel): The Low boost goes from 0 to +18 dB.

9- Output meter (Left-Mid): This VU meter displays the output level (Left/Mid) of the plug-in.

10- Output meter (Right-Side): This VU meter displays the output level (Right/Side) of the plug-in.

11- Low band activation button (Left Channel): Activates (Led On) the Low Frequency band of the Left Channel.

12- Low band activation button (Right Channel): Activates (Led On) the Low Frequency band of the Right Channel.

13- Low Cut (Left Channel): The Low Cut goes from 0 to -18 dB.

16- Low Cut (Right Channel): The Low Cut goes from 0 to -18 dB.

17- High Cut activation button (Left Channel): Activates (Led On) the High Cut section of the Left Channel. Note: The HIGH FREQUENCY band is made up of two INDEPENDENT subsections, the BOOST and the CUT sections.

18- C Link: By pressing this button you can link the controls of left and right channels.

19- High Cut activation button (Right Channel): Activates (Led On) the High Cut section of the Right Channel. Note: The HIGH FREQUENCY band is made up of two INDEPENDENT subsections, the BOOST and the CUT sections.

20- High Cut (Left Channel): The High Cut goes from 0 to -18 dB.

21- High-Cut Frequency (Left Channel): Sets the cut-off frequency for the high frequency CUT control of the Left Channel. The frequency settings are 5kHz, 10kHz, 12Hz, 16Hz, 20kHz.

22- Gain (Left Channel): This knob is an output gain control of the Left Channel ranging from -12dB to +12dB.

23- M/S: This button allows you to enable the MID-SIDE configuration of the plug-in; when bypassed, the plug-in operates in LEFT-RIGHT mode (default).

24- Gain (Right Channel): This knob is an output gain control of the Right-Channel ranging from -12dB to +12dB.

25- High-Cut Frequency (Right Channel): Sets the cut-off frequency for the high frequency CUT control of the Right Channel. The frequency settings are 5kHz, 10kHz, 12Hz, 16Hz, 20kHz.

26- High Cut (Right Channel): The High Cut goes from 0 to -18 dB.

27- High Boost activation button (Left Channel): Activates (Led On) the High Boost section of the Left Channel. Note: The HIGH FREQUENCY band is made up of two INDEPENDENT subsections, the BOOST and the CUT sections.

28- High Boost activation button (Right Channel): Activates (Led On) the High Boost section of the Right Channel. Note: The HIGH FREQUENCY band is made up of two INDEPENDENT subsections, the BOOST and the CUT sections.

29- High Boost (Left Channel): The High boost goes from 0 to +18 dB.

30- High Boost Frequency (Left Channel): Sets the cut-off frequency for the high frequency BOOST control of the Left Channel it goes from 1kHz to 16kHz;

31- BROAD/ SHARP control (Left Channel): Sets the Q of the BOOST peak filter of the Left Channel.

32- Input Trim: A one-knob internal gain structure control linking the input and output gain stages with an inverse law. The control sets the input level from -24dB to +24dB of the plugin, and it is used to adjust the plugin's internal level.

Note: When the preamp stage (PRE1 / PRE2 / PRE3) is bypassed (OFF button activated), the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim knob.

33- BROAD/ SHARP control (Right Channel): Sets the Q of the BOOST peak filter of the Right Channel.

34- High Boost Frequency (Right Channel): Sets the cut-off frequency for the high frequency BOOST control of the Right Channel it goes from 1kHz to 16kHz;

35- High Boost (Right Channel): High boost knob goes from 0 to +18 dB.

3.2. White3 FLT-2.0



1-Output Meters (L-R): These meters display the output level of the plug-in. Range OUT: -36dB to +6dB.

2- OFF: Bypasses (Led on) the Preamp.

3- PRE 1: Activates the first preamp emulation.

4- PRE 2: Activates the second preamp emulation.

5- M-S Output meters: Displays the Mid-Side output levels of the plugin.

6- Input Trim: A one-knob internal gain structure control linking the input and output gain stages with an inverse law. The control sets the input level from -24dB to +24dB of the plugin, and it is used to adjust the plugin's internal level.

Note: When the preamp stage (PRE1 / PRE2) is bypassed (OFF button activated), the 'Input Trim' mode has no effect. It is possible to increase the harmonic saturation with this Input trim knob.

7- Highpass filter: From 30 to 200 Hz; first knob step (OFF) bypasses the filter.
NOTE: it only works in L-R mode

8-Spread: This knob controls the balance between the full MONO (M) and SIDE (S) signal.

9-Precision cutting filter: this filter section offers two different elliptical filter modes and 3 fixed positions, the V contains cuts suitable for Vinyl Cutting and M for classic mastering cuts. Each one operates ONLY in M/S mode; Also you can use the Spread control (8) to define the amount of Mid and Side information.

V Mode

V1 Mid: Shape Filter 72 dB HPF at 30 Hz / Shape Filter: Brickwall LPF at 14 Khz
Side: Shape Filter 36 dB HPF at 120 Hz/ Shape Filter: Brickwall LPF at 14 Khz
V2 Mid: Shape Filter 72 dB HPF at 30 Hz / Shape Filter: Brickwall LPF at 14 Khz
Side: Shape Filter 36 dB HPF at 150 Hz/ Shape Filter: Brickwall LPF at 14 Khz
V3 Mid: Shape Filter 72 dB HPF at 30 Hz / Shape Filter: Brickwall LPF at 14 Khz
Side: Shape Filter 36 dB HPF at 180 Hz/ Shape Filter: Brickwall LPF at 14 Khz

M Mode

M1 Mid: Shape Filter 72 dB HPF at 22 Hz / Shape Filter: Brickwall LPF at 17 Khz
Side: Shape Filter 24 dB HPF at 90 Hz/ Shape Filter: Brickwall LPF at 17 Khz
M2 Mid: Shape Filter 72 dB HPF at 22 Hz / Shape Filter: Brickwall LPF at 17 Khz
Side: Shape Filter 24 dB HPF at 120 Hz/ Shape Filter: Brickwall LPF at 17 Khz
M3 Mid: Shape Filter 72 dB HPF at 22 Hz / Shape Filter: Brickwall LPF at 17 Khz
Side: Shape Filter 24 dB HPF at 150 Hz/ Shape Filter: Brickwall LPF at 17 Khz

10- Output: This knob is an output gain control of the plugin ranging from -24dB to +24dB.

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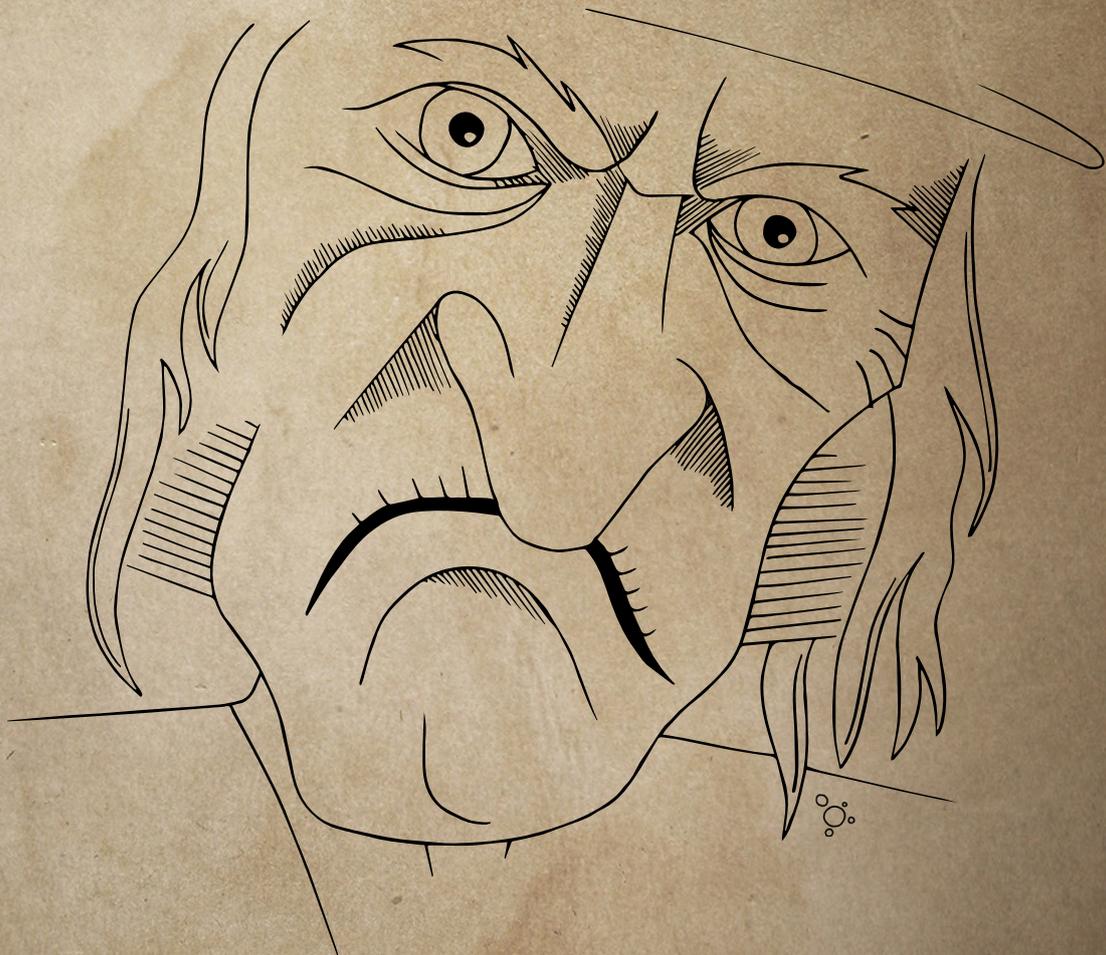
MIXING
CAROL



nce upon a time, in a land far, far away, there was a man who was very full of himself. He was passionate and a great connoisseur in the world of audio.

He was very proud of his little world, which according to him, he had built with so much effort.....so much effort the he was almost obsessed...

His passion was fueled only by his pursuit of perfection and the utmost quality in his audio work; it was his only reason for living. Achieving this perfection was becoming more and more difficult as the cost of living increased and economic resources were beginning to run low, much to prevent him from buying the hardware that both wanted and that he would step closer to the realization of his dream, realize the perfect mix....



Sgroove was his name, a strict and straight-laced man, outspoken enough to alienate his peers in the industry; colleagues, sound engineers, producers.... Everyone one knew his name not because of his skills, but for his temper.

Sgroove was locked to the past in Audio history, insisted that audio must be “hardware or nowhere”....He harbored a deep hatred towards those who had chosen the inferior path of plug-ins ... this was unacceptable!

After all, he knew that even if he had access to the machines that he desired, he still would hardly have been able to finish the mix that has long tormented himEach forum was therefore fertile ground for Sgroove, who took great pleasure in discrediting and berating anyone’s suggestion (especially if they suggested software!) ... instead of finding a practical solution to his problem ...



Sgroove did have one friend in a man named Charlie. Charlie shared the same passion for perfection, and agreed with Sgrooves rejection of all things not hardware....

Unfortunately for Sgroove, Charlie’s time on Earth came to an end; his one friend died.

One day, a day much like other days, Sgroove was sitting alone eating his melancholy dinner in the usual melancholy tavern, and after reading the last post of his much followed Forum (where he was much dreaded, which he enjoyed and considered to be “cred”), went home to sleep.

Sgroove’s apartment was a dark and dreary place where he lived in the past and was always reminded of his old friend. . It was a dismal series of rooms in a building at the bottom of a dark courtyard where no one else ever went. One could imagine that the house that his apartment was in was once a young house, playing hide and seek with other houses, and had forgotten the way to get out ...

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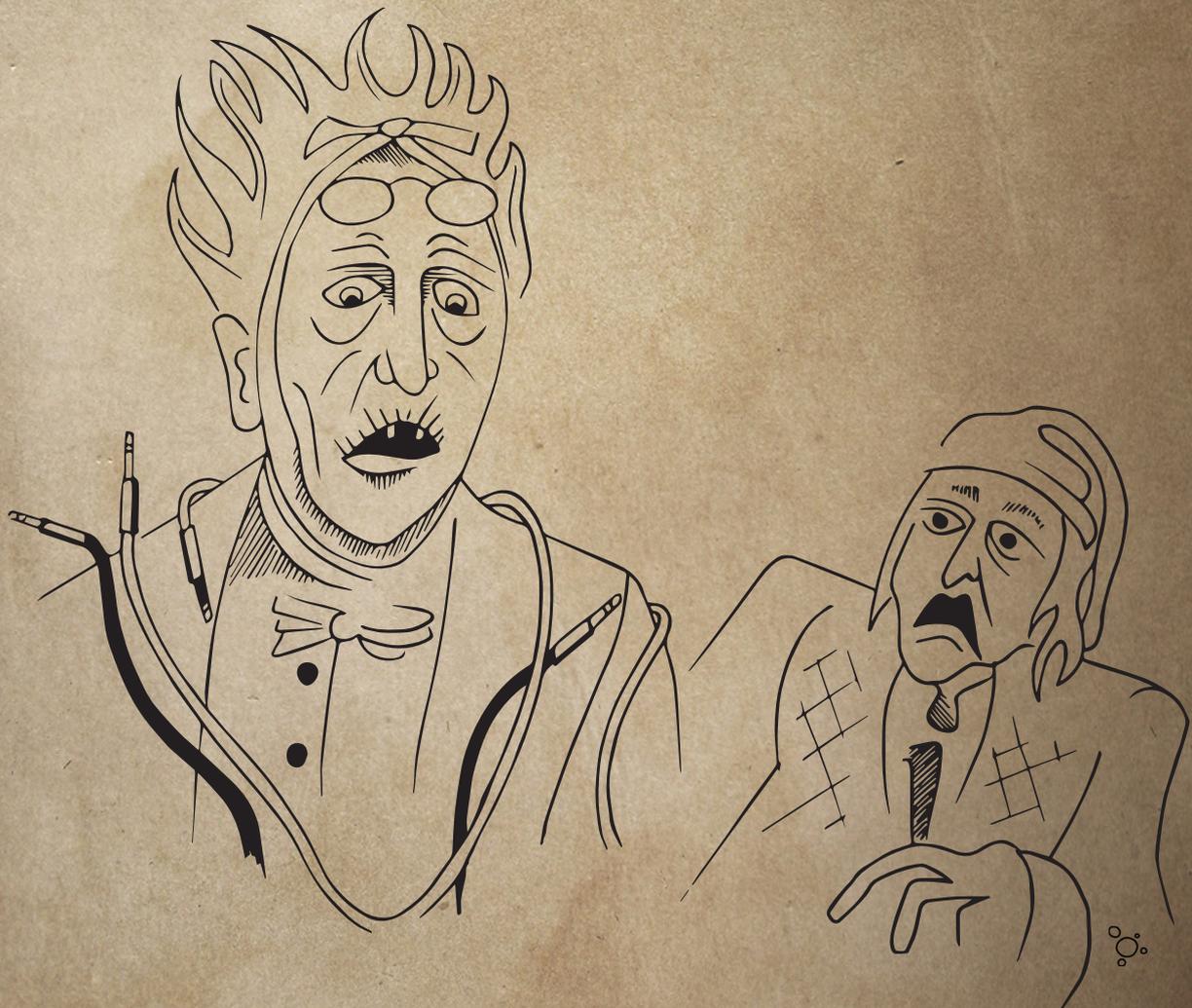


hat same evening, after unlocking the door, he looked at the knocker, and no longer that old and dilapidated clapper, but the face... The face of... Charlie!

Charlie was neither angered or ferocious, but looked at Sgroove as Charlie used to look at him, with his spectacles pulled on his forehead ... And in a flash, this moment passed, the knocker returned to being a simple knocker again ...

Not at all intimidated Sgroove went in, it was enough just to know that that night would not be like all the others....

He then heard the sound of a door swinging open with a tremendous shot from a distance and began to perceive the sound of footsteps accompanied by the sound of scrap metal....



At this point, Sgroove, being a grumpy and traditional man, said to himself; “Bah, this is hogwash”. At this point the image (or apparition!) of his friend Charlie appeared to him, illuminated in a hazy glow, heavily burdened with cables and electronics, the things that had always meant freedom and clarity to their audio work. He told Sgroove that while he may be “dead”, he cannot have peace until he passes on some vital lessons to Sgroove. He told Sgroove that he must free his mind and liberate his audio....the time has come to start trying software and begin to let go of the destructive and debilitating anchors that an “out of the box” studio brings. These are the things that ultimately led Charlie to his own death, mired in the frustrations of zero recall and endless maintenance....

Charlie then declared that three spirits would visit, saying: “You’ll get a visit from three spirits: wait for the first tomorrow at the stroke of the first hour wait for the second night after the same time and on the third night after that when the last stroke of the 12th hour Shortly after, Charlie disappeared and a chill came upon the room ... Sgroove was suddenly impossibly tired, still haunted by his gaze into the invisible world and the sad conversation with the ghost of a friend. He felt a great need to rest and fell into a deep sleep.



Some time the next day, Sgroove heard the chime of the clock ...

and at that moment a strange light flooded the room...there appeared a strange figure like a child and yet not so much like a child, but more like a small old man bathed in light as if seen by some supernatural means, but with the innocence of a child.



The hair that hung around his neck and fell on the shoulders were white like old age, yet his skin had not a wrinkle and he moved as if never touching the ground. Sgroove asked: “Are you the first spirit I was told about?” The apparition replied; “Yes, I am. I am the spirit of mixes past.....Follow me now”.

From there the spirit led Sgroove magically to the place Sgroove first learned the audio tech field, the very first studio that he had ever worked as a very young person. “Ah, the studio that I started my love of audio....” Sgroove started to wistfully remember..... In this room there were 4-track tape machines, old mixing consoles, and other miscellaneous hardware that, by today’s standards, were primitive and perhaps even “inferior” to what Sgroove had learned to appreciate and expect. This was the gear he now scoffed at and made fun of people for on forums...But he also remembered completing projects with whatever he had to work with, and feeling like an innovator, or even like an explorer making daring and new discoveries with the simple tools (like a young archeologist armed with only one shovel...) . Yes, he remembered the feeling of hope that his young self had felt, a feeling of pride that he had long lost now.....

The spirit, seeing the revelations happening in Sgroove, exclaimed; "These are the shadows of your past that have been cataloged and are what they are, do not blame me. I am only providing the mirror to your own soul...." Sgroove suddenly replied in anguish; "Please take me away from this! I can not take the torment and pain". It pained him to see the joy and hope in the heart of his young self, knowing that those feelings had been gone from him for so long that it was now so very foreign to him....

Shortly after Scroove found himself in his room as if nothing had happened ...

looming over him was an unusual feeling, a disturbance ... He barely had time to throw himself on the bed before sinking into a deep sleep.



Sgroove awake in the mist of some very heavy snoring, and bolted up in his bed.



He saw the clock and new that it was almost the time that his ghost-friend Charlie had said that the second spirit would be visiting..... And then he saw a reddish glow coming from another room of his apartment. He started towards the light when a voice called his name....”Sgroove, come to me....come closer and come to know me, I am the spirit of Mix Present. Look carefully, you have never seen another like me before”.. Sgroove went to this glowing spirit, and was asked to touch the spirit’s garment. Scroove did and saw appear before him an infinite number of possible software, the software he has always scoffed at and ridiculed others for....He saw the smile on the faces of colleagues, warmth and satisfaction ... all that is now within the reach of a modern sound engineer. Tools that facilitate the work but without compromise, and not giving up the quality of the past. Sgroove was then shown all of his insulting comments in the all of the forum he had ever participated in, accompanied by sadness and frost ... His one-time desire for a perfect mix had been shelved..Replaced by frustration and bitterness while forever chasing the impossible perfect mix..... It was at that moment that the Spirit said: “If these shadows will not change the Mixing will forever die”.



Suddenly Sgroove again awoke in his sad and familiar room, looking for the past spirit but finding himself more alone than he had ever felt before.

The clock began to strike, and Sgroove began to count.....when he got to twelve he listened as the last strike faded (seemingly slower than he thought possible...), he knew that it was time for the third spirit....By now he had become accustomed to this, but was increasingly uneasy given what the first two spirits had shown him.....

As the ghost approached, Sgroove could only kneel, and was in terror. Sgroove asked him; "Are you the Spirit of Mix Past again?". The spirit did not answer, but motioned Sgroove to follow him. With a gasp, Sgroove saw his current studio...full of the gloriously expensive and boutique hardware that filled the rooms, but then noticed that there was an enormous difference; everything was covered in dust and cobwebs..... Then in an instant he saw his future self, ... and something disturbed him deeply...he saw a man who was adrift, the reason for living that had accompanied him over the years had become a distant memory ... well ... the final mix ... even a shadow. His future self had become lost in the feelings of superiority and had unknowingly abandoned his own dreams....."You are the Spirit of Mix Future!" yelled Sgroove.....

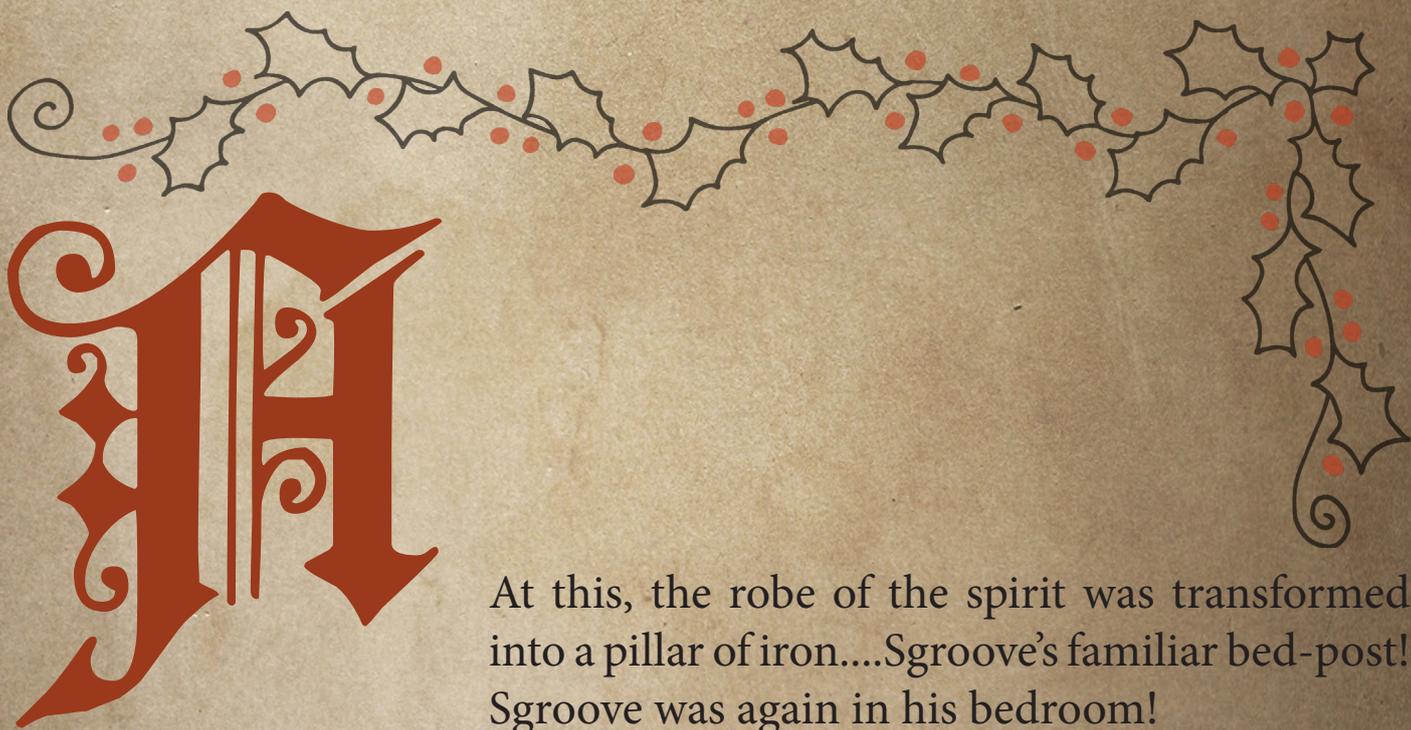


As Sgroove's eyes scanned the room, he took in the dust, the smell of old and unused hardware, but what he noticed most was the unrealized dreams that were so heavy in the room that he could almost taste the sad feelings that they left behind in the tangled mess of cables and scratchy knobs....The spirit pointed a crooked and shaky finger across the room, forcing Sgroove to bestow his eyes on a small and almost hidden and unnoticed urn in the corner. The spirit said; "Sgroove....read the inscription on the urn....."

Sgroove, feeling afraid because he had a dreadful premonition that he knew what it might say, but he knew that he had no choice but to look..... As he bent over to read the words, covered in years of dust that not a single person had ever bothered to blow off to read before now, he was cold and shaking in fear.....As he slowly focused on the engraving, his blood ran cold...It read:

“Here lies EBENEZER SGROOVE, old and sad sound engineer whose desire to achieve the perfect mix was never achieved.”

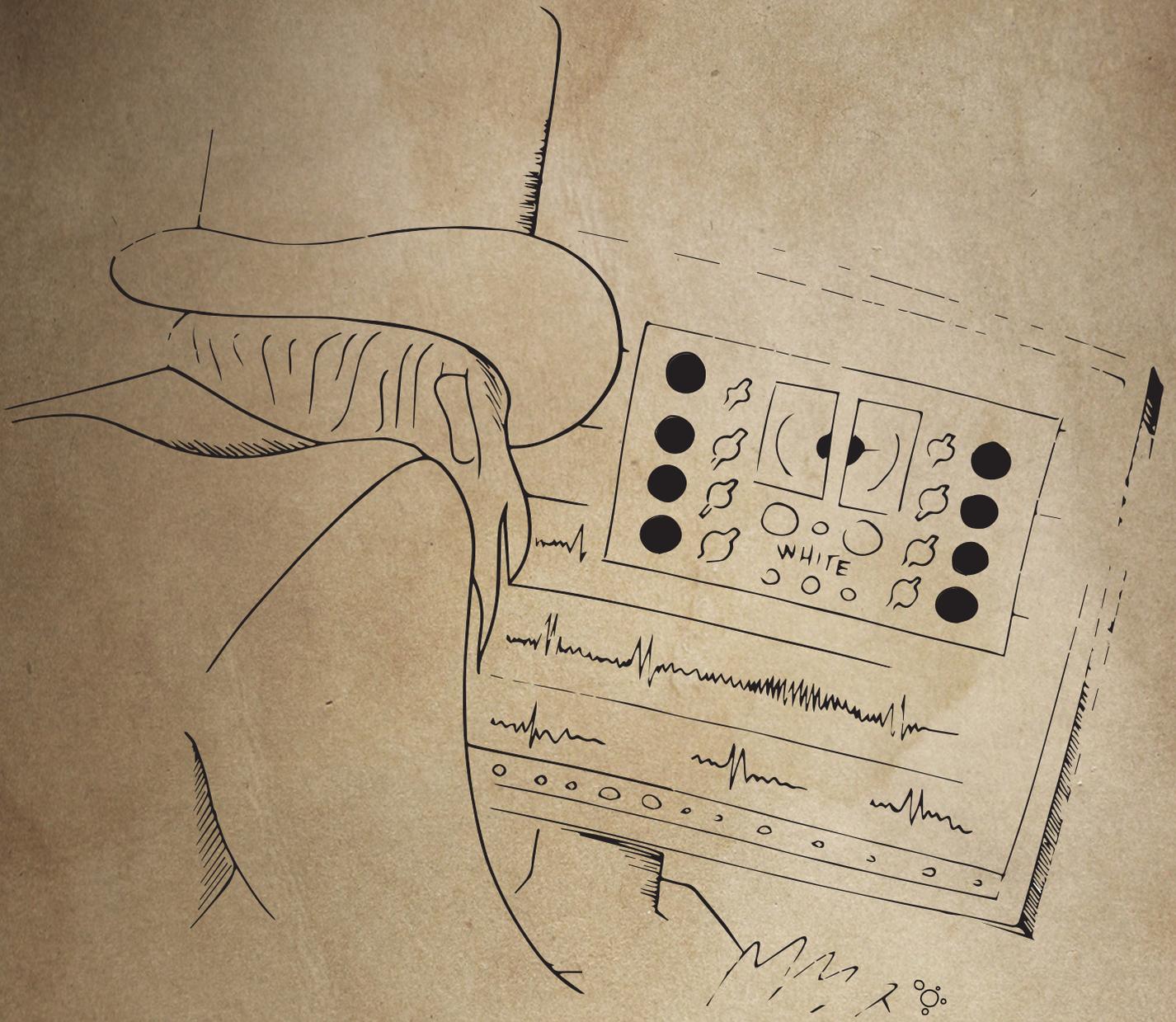
“No spirit! No! I am not that man! I want to live in the past, present, AND future. Why show me all of this if all hope is lost for me? Please erase the shadows and burdens I have seen tonight and have mercy on me! I want to have my knowledge of the past but use the tools of the present. I want to explore and develop the tools of the future! The spirits of all three will live within me. I will not be deaf to their lessons. Oh tell me that I can still erase the writing on the plate.....”



At this, the robe of the spirit was transformed into a pillar of iron....Sgroove’s familiar bed-post! Sgroove was again in his bedroom!

But instead of a sad and dreary room, this room was filled with bright sunshine, and with it was a feeling of hope, joy, and an excitement to mix that Sgroove had not felt in years! “ I want to live in the past, present and future.....” Sgroove repeated over and over, leaping out of bed....

In a very short time, with his new vigor and open-mindedness for audio, Sgroove had his studio re-equipped with the newest and best software emulations from Acustica Audio.



He had the same familiar quality that he demanded from his hardware, but also gained the flexibility of the diverse selection, unlimited instances and recall, and the exploratory excitement that he had when he was a younger engineer! His passion and integrity had returned! And for the first time that Sgroove could remember, he was soon finishing a Perfect Mix!

The End

Acustica 2021