

MAINTENANCE AND OPERATION  
INSTRUCTION MANUAL

**SOUND4**  
**BIG VOICE<sup>2</sup>**  
**Base**

3-Band Voice Processor

**SOUND** 

# Contents

<b>Introduction</b> .....	<b>7</b>
<b>Typographic conventions</b> .....	<b>8</b>
<b>General Information</b> .....	<b>9</b>
<i>Overview</i> .....	9
<i>Much more than a simple Noise Gate + a Compressor</i> .....	9
<i>Dominate-it... Let the lead Talent LEAD!</i> .....	9
<i>Dedicated to “Live Studios”</i> .....	9
<i>Bus-Mix... Auto-Mix all mics to one output and save fader space in consoles!</i>	9
<i>Preset Sharing</i> .....	9
<i>A hyper user-friendly control interface</i> .....	10
<i>Processing</i> .....	10
<i>Preset Settings</i> .....	10
<i>De-Esser</i> .....	10
<i>The 3-Band Noise Gate</i> .....	10
<i>Pre-EQ (4-Band Parametric EQ)</i> .....	11
<i>The 3-Band Process</i> .....	11
<i>Post EQ (4-Band Parametric EQ)</i> .....	11
<i>The Brick Wall Limiter</i> .....	11
<i>Technical Specifications</i> .....	12
<b>Before you start</b> .....	<b>14</b>
<i>Safety warning</i> .....	14
<i>Operating recommendations</i> .....	14
<i>Source Material Quality</i> .....	14
<i>Unpacking and inspection</i> .....	15
<i>Radio Frequency Interference</i> .....	15
<b>Mounting</b> .....	<b>16</b>
<i>Rack requirements</i> .....	16
<i>Heat Dissipation</i> .....	16
<i>Fuse holder</i> .....	16
<b>Panel Indicators and Connectors</b> .....	<b>17</b>
<i>Front Panel</i> .....	17
<i>Rear Panel</i> .....	18
<b>Operation</b> .....	<b>19</b>
<i>User Accounts Overview</i> .....	19
<i>In-Box Admin Ethernet</i> .....	20
<i>WEB Interface</i> .....	22
<i>Admin account</i> .....	24
<i>Setup</i> .....	25
<i>Studio account</i> .....	29
<i>Live account</i> .....	33
<i>Software Installation</i> .....	37
<i>Windows users</i> .....	37
<i>Linux Ubuntu OS</i> .....	37
<i>Connection</i> .....	38

<i>Software</i> .....	39
<i>Network scan for new device</i> .....	39
<i>Add Device manually</i> .....	41
<i>Basic set-up</i> .....	42
<i>Inputs Setup</i> .....	42
<i>Outputs Setup</i> .....	42
<i>Preset Selection</i> .....	43
<b>Software Accounts Overview and Settings</b> .....	<b>44</b>
<i>Live Account</i> .....	44
<i>Window controls</i> .....	44
<i>Main menu and controls</i> .....	45
<i>Sessions</i> .....	46
<i>Preset change</i> .....	47
<i>Setup</i> .....	48
<i>Setup options</i> .....	48
<i>Admin Account</i> .....	50
<i>Main menu and controls</i> .....	51
<i>Settings – General</i> .....	52
<i>Processor name</i> .....	52
<i>Display</i> .....	52
<i>Application Auto Exit</i> .....	52
<i>Settings – Studio/Mic</i> .....	53
<i>How to change or assign a new password</i> .....	54
<i>How to add a new account</i> .....	55
<i>Settings – Control IP configuration</i> .....	56
<i>Settings – EtherNet: Livewire+/AES67</i> .....	57
<i>Settings – GPIO</i> .....	58
<i>Settings – Synchro</i> .....	59
<i>Settings – Preset Sharing</i> .....	60
<i>Advanced</i> .....	61
<i>Advanced – Livewire+/AES67 Advertisement</i> .....	61
<i>Advanced – Livewire+/AES67 Audio Profiles</i> .....	62
<i>Advanced – Livewire+/AES67 Audio QOS</i> .....	63
<i>Advanced – Upgrade/Licenses</i> .....	65
<i>Expired license</i> .....	65
<i>New license</i> .....	65
<i>Advanced – Backup/Restore</i> .....	66
<i>Advanced – Hardware/Supervision</i> .....	67
<i>Maintenance</i> .....	68

<i>Studio Account</i> .....	69
<i>Main menu and controls</i> .....	69
<i>How a new session can be created</i> .....	71
<i>How a new preset can be created</i> .....	72
<i>Preset Security</i> .....	74
<i>Preset Export</i> .....	76
<i>Presets Import</i> .....	76
<i>Presets Delete</i> .....	76
<i>List of factory presets</i> .....	77
<i>M&amp;F Open</i> .....	77
<i>M&amp;F Open Plus</i> .....	77
<i>RE20 Mic Punchy</i> .....	77
<i>SM-7 Mic Punchy</i> .....	77
<i>M&amp;F - Soft tone</i> .....	77
<i>M&amp;F - News Presenter - Soft tone</i> .....	77
<i>M&amp;F - News Presenter – Natural</i> .....	77
<i>M&amp;F - Natural Loud</i> .....	77
<i>M&amp;F – Natural</i> .....	77
<i>M – Punchy</i> .....	77
<i>M - Hot tone</i> .....	77
<i>M - Hit tone</i> .....	78
<i>M - Big Voice</i> .....	78
<i>F - Structured tone</i> .....	78
<i>F - Hit tone</i> .....	78
<i>F - High Mid</i> .....	78
<i>BY-PASS</i> .....	78
<i>Processing</i> .....	79
<i>Preset Settings</i> .....	80
<i>Input</i> .....	80
<i>De-Esser</i> .....	80
<i>3-Band Noise Gate (Basic Controls)</i> .....	81
<i>3-Band Noise Gate (Advanced Controls)</i> .....	81
<i>Pre-EQ (Basic)</i> .....	82
<i>Pre-EQ (Advanced)</i> .....	82
<i>3-Band Processing (Basic Controls)</i> .....	83
<i>3-Band Processing (Advanced Controls)</i> .....	83
<i>Post-EQ (Basic)</i> .....	84
<i>Post-EQ (Advanced)</i> .....	84
<i>Brick Wall Limiter</i> .....	84
<i>Output</i> .....	85
<i>Settings – General</i> .....	86
<i>Processor Name</i> .....	86
<i>Display</i> .....	86
<i>Application Auto Exit</i> .....	86
<i>Preset security</i> .....	86
<i>Process Autolock</i> .....	86

<i>Settings – Studio/Mic</i> .....	87
<i>How to change or assign a new password</i> .....	87
<i>Settings – Ethernet: Livewire+/AES67</i> .....	88
<i>Settings – Inputs</i> .....	89
<i>Settings – Outputs</i> .....	90
<i>Settings – GPIO</i> .....	92
<i>Advanced – Upgrade/Licenses</i> .....	93
<i>Expired license</i> .....	93
<i>New license</i> .....	93
<i>Advanced – Hardware/Supervision</i> .....	94
<i>Advanced – Maintenance</i> .....	95
<b>WARRANTY TERMS AND CONDITIONS</b> .....	<b>96</b>
<b>Product Registration Card</b> .....	<b>97</b>

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## Introduction

### **More than 30 Years of Experience**

Delivering the best at all times is not an easy task but the team of SOUND4 makes it seem effortless thanks to over 30 solid years of experience in the field. What we excel at, above everything else, is audio signal processing. Launched back in 2007, SOUND4 began with analog technologies and went on to achieve groundbreaking results in the digital world as well, having an instant impact on the market with a string of innovative products. The launch of a set of FM/HD processing tools was quickly followed by the release of networking audio-over-IP solutions.

2010 was significant in the company's illustrious history as SOUND4's very first multichannel voice processor was introduced on the market and the company integrated the Livewire Audio IP standard, which most of our equipment today is compatible with. This revolutionary product immediately received the acknowledgement of the industry in the form of two prestigious prizes – The 2010 Innovation Trophy in Paris and the Pick Hit Award at the 2012 NAB Show in Las Vegas. Further recognition came in 2012 with the release of our Web Radio product range which received a Cool Stuff Award upon its presentation at NAB 2012.

Today, SOUND4 is a household name in the competitive, fast-developing world of broadcasting technology and enjoys a deserved reputation for proven quality and reliable service.

### **The SOUND4 – DEVA Partnership**

2016 was a landmark year as two of the most respected companies in the industry – SOUND4 and DEVA Broadcast, joined forces, forming a powerhouse team dedicated to delivering broadcasting excellence. Adding to the equation its own expertise and years of experience at the top level, DEVA brings to the table its considerable resources and knowledge of hardware development to ensure unparalleled quality of the finished product.

### **A Wealth of Engineering Talent**

What our merchandise owes its massive appeal to is the creativity of a highly-skilled team of engineers responsible for bringing bright, fresh ideas to life through vast know-how in their respective fields. We pride ourselves on not allowing any compromises with quality and laying great emphasis on fine-tuning each detail, which we believe is the key to the overwhelming success of our products.

### **What SOUND4 Guarantees**

Besides a combination of creativity and technical expertise, SOUND4 also relies heavily on versatility. Products are developed to serve multiple purposes and offer a number of functions for even better performance. The company provides solutions that are cost-effective, reliable, fully upgradable and very compact in terms of design. Another important advantage is heat reduction, as well as the intelligent interconnection with the rest of the chain, especially where music programming is concerned.

### **Perfect Sound Quality**

Perfect clarity of sound is the signature asset of our products and the reason why SOUND4 today stands for unrivalled audio quality. This is a brand that is recognizable all over the world for affordable excellence, dependability and constant innovation.

### **Reliable Technical Support**

As we appreciate the importance of each product's flawless operation, we guarantee dependable technical support by a team of engineers whose job it is to answer all your questions, provide you with detailed information on device features and capabilities, and guide you through using our products to your best advantage. Expert advice is there for you whenever you need it.

## Typographic conventions

This manual uses the following typographic conventions:

Style	Used for
<b>NOTE</b>	Important notes and recommendations
Example	Used when example text is cited
<a href="#">“Menu” on page XX.</a>	References
[OK]	Interface Interactive buttons.
<i>Settings</i>	Menu paths are represented as follows: <i>Settings</i> > <i>General</i> > <i>Backup</i>



## General Information

### OVERVIEW

---

#### **Much more than a simple Noise Gate + a Compressor**

SOUND4 BIG VOICE<sup>2</sup> - Base is powered with the revolutionary HQ-Sound 192kHz Audio Processing engine, a SOUND4 patented technology which has been used for years in other products. Its processing structure includes an advanced DeEsser, 3-band noise gate, Pre-EQ 4-band parametric, 3-band dynamic processor, Post-EQ 4-band parametric, brick wall limiter... Yes much more than a simple noise gate and compressor and we don't stop there, SOUND4 BIG VOICE<sup>2</sup> - Base products offers further enhancements with our own plugin extensions like Reverb and more.

SOUND4 BIG VOICE<sup>2</sup> - Base processors are flexible, and adapt perfectly to all voices. From Natural tone to Big, everything is possible in a few clicks. The SOUND4 BIG VOICE<sup>2</sup> - Base is the perfect tool for production studios for that smooth Voice Over.

#### **Dominate-it... Let the lead Talent LEAD!**

SOUND4 BIG VOICE<sup>2</sup> - Base includes the revolutionary "Dominate-It" function so the Lead talent is always the leader. This unique feature invented by SOUND4 gives priority to the main talent and will automatically back off guest mics when the main talent speaks.

SOUND4 BIG VOICE<sup>2</sup> - Base can even share the "Dominate-It" function with other BIG VOICE<sup>2</sup> processors to control other mics if needed!

#### **Dedicated to "Live Studios"...**

SOUND4 BIG VOICE<sup>2</sup> - Base has been designed for Live studio requirements. The dedicated graphical user interface shows 2 Mics, status, affectations and Users Names. Recalling a Mic to a user is done in two clicks... More and more... SOUND4 introduces now the "Session Recall": it is possible to save all Mic's affectations + loaded users presets, and then recall all in one click! SOUND4 BIG VOICE<sup>2</sup> - Base is also externally automatable for dayparts automatic sessions recall...

#### **Bus-Mix... Auto-Mix all mics to one output and save fader space in consoles!**

The Bus-Mix function groups selected channel outputs to one physical output. This acts as an Auto-Mix function and is always protected from bus overloads. SOUND4 BIG VOICE<sup>2</sup> - Base is limited to 1 Bus-Mix and is not sharable with other devices. SOUND4 BIG VOICE<sup>2</sup> - Loaded offers 4 Bus-Mix sharable with several BIG VOICE<sup>2</sup> processors, you can then for example have 12 BIG VOICE<sup>2</sup> mic outputs grouped to one physical output, saving 11 faders on the console.

#### **Preset Sharing...**

SOUND4 BIG VOICE<sup>2</sup> - Base Preset Sharing function, another SOUND4 invention, offers the ability to automatically share presets with other BIG VOICE<sup>2</sup> processors across the network. Presets modified in one studio are instantly updated in all other studios. This saves a considerable amount of time and ensures your carefully tuned sound stays consistent no matter which studio is in use.

### **A hyper user-friendly control interface...**

- Two GUI types: STUDIO is dedicated for sound setup and LIVE is a very simplified one for On-Air Studio.
- Setting of sound from one single screen! No more opening and closing of windows for going from one function to another.
- In STUDIO GUI, two level modes: BASIC where everything is simple and rapid, ADVANCED for exploring all the processor functionalities.
- In LIVE GUI, if needed Presets are editable or not in a very simplified GUI for fast On-Air modifications.
- Ultra-fast vu meter for true control.
- Unlimited “Undo/Redo” versioning function for presets with possibility of recall.
- Innovative “compare” function with reference notion.
- Log function for presets.
- A remote connection manager to control several processors.
- Works on Windows 7, 8, 10, Windows Server 2016, Linux (Debian).

## **PROCESSING**

### **Preset Settings**

SOUND4 BIG VOICE<sup>2</sup> - Base offers the possibility to setup a preset for each user, everybody knows that talents never get the same sound level. Usually sound processors are running with the same level adjustment for all users... Here in the Preset Setting, SOUND4 BIG VOICE<sup>2</sup> - Base users can adapt the basics for each talent:

- Phase Invert and Phase Rotator
- Low Pass & High Pass Filters
- 3-band frequency adjustment
- Dominate-It

### **De-Esser...**

In SOUND4 BIG VOICE<sup>2</sup> - Base, the De-Esser is tracking automatically the sibilance frequencies, the user just needs to setup the gain attenuation and the Q Factor which defines the correction width.

### **The 3-Band Noise Gate...**

In Broadcast Voice Processing, Noise gate is a crucial functionality for general voice sound optimizations. Thanks to HQSound algorithms, the SOUND4 BIG VOICE<sup>2</sup> - Base Noise Gate is extremely reactive in opening and closing Gates. This is a real advantage comparing to majors solutions on the market which usually “eats” the first syllables...

SOUND4 BIG VOICE<sup>2</sup> - Base Noise Gate provides an advanced detection mode: Bands are settable to run as “Master”, “Slave” or “Alone”. For example, it is possible to isolate Low Frequency detection and then avoids a gate opening when user bumps the table. In this case user will set Low Frequency in Slave Mode....

In Advanced mode, users get access to Thresholds, Target (gain attenuation when gate is closed), Hold Time (to maintain Gate opened before the Release Time), and finally the Release Time.

**Pre-EQ (4-Band Parametric EQ)...**

The Parametric EQ before 3-band process is an excellent solution to “lock” bands in desired frequencies. The SOUND4 BIG VOICE<sup>2</sup> - Base is powered with a 4-band parametric Pre Equalizer.

Advanced mode offers access for each band to: Frequency, Q factor and Gain correction.

**The 3-Band Process...**

The 3-band Process is the heart of the dynamic processing. SOUND4 BIG VOICE<sup>2</sup> - Base algorithm guarantees the gain in each of the bands in order to complete sound stabilization. “Coloring” is controlled by the Fidelity parameter: thus, it is possible to have a purist or colored sound texture.

The 3-band Process is provided with the revolutionary algorithm S.I.S (Sound BIG VOICE System), which makes possible to maintain the authenticity of the original sound attacks.

In Advanced mode, users get access to “Smart Gate Threshold” (below which gain action is frozen), “Ratios” (efficiency ratio of dynamic processing), “Fidelity”, “SIS”, “Drives” (increasing or decreasing gain at band input), “Thresholds”, “Attack Time”, “Release Time” and “Mix output Gain” (to dose output level of each band).

**Post EQ (4-Band Parametric EQ)...**

The Parametric EQ provides the final “touch” in sound setup. The SOUND4 BIG VOICE<sup>2</sup> - Base is powered with a 4-band parametric Equalizer.

Advanced mode offers access for each band to: Frequency, Q factor and Gain correction.

**The Brick Wall Limiter...**

The Brick Wall Limiter is an advanced algorithm which provides a strong and rock solid gain limitation.

## TECHNICAL SPECIFICATIONS

<b>ANALOG/MIC INPUT</b>	
Quantity	2
Level Mic	nom. -80dBu to -4dBu (max 16dBu)
Level Line	nom. 4dBu (max 24dBu)
Equivalent Input Noise	-126dB, 22Hz to 22kHz unweighted
Gain	+12 to +67dB
Pad	0dB / -24dB (software selectable)
Phase	0° / 180° (software selectable)
Input impedance	2 kΩ
Source impedance	150 Ω
Connectors	2x combo XLR/Jack female balanced, EMI suppressed
Phantom Power	+48V (software selectable)
<b>DIGITAL INPUT</b>	
Quantity	2
Standard	AES3
Sampling Rate	32 to 192kHz, 24 bits
Connectors	2x XLR female balanced, EMI suppressed
<b>ANALOG OUTPUT</b>	
Quantity	2 (shared with Digital Out)
Level	+ 24 dBu max
Load Impedance	10 kΩ typ. (> 300 Ω)
Connectors	2x XLR male balanced, EMI suppressed (shared with Digital Out, manual switch)
<b>DIGITAL OUTPUT</b>	
Quantity	2 (shared with Analog Out)
Standard	AES3
Sampling Rate	32 to 192kHz, 24 bits
Connectors	2x XLR male balanced, EMI suppressed (shared with Analog Out, manual switch)
<b>AUDIO OVER IP</b>	
Interface	Ethernet 100Mbps
Live Protocol (AES67)	Compatible AES67, Ravenna, Livewire; 48kHz, 24 bits, 12 samples/packet (250μs)
<b>AUDIO SPECIFICATIONS</b>	
I/O Latency Processing Delay	approx. 3 to 4ms
I/O Latency Analog	0,4ms (input) / 0,6ms (output)
I/O Latency AES @ 48kHz	1,2ms (input) / 1,4ms (output)
I/O Latency Livewire	<2ms (input) / 0,5ms (output)
Distortion	0.05% THD+N

<b>POWER SUPPLY</b>	
Type	Dual Redundant
Voltage	100 – 260 Volt AC, 40W
Operating conditions	
Operational between	0 – 50°C
<b>SIZE AND WEIGHT</b>	
Dimensions (WxHxD)	485 x 44 x 260mm
Shipping Weight	540 x 115 x 300 mm / 2.700 kg
<b>POWER UP BOOT</b>	
Boot time	3s
<b>OPTIONAL INTERFACES</b>	
GPIO	8 inputs, 8 outputs (opto-isolated) with 5V supply (DB25 male)
<b>SOUND4 REMOTE CONTROL SOFTWARE OPERATING SYSTEMS</b>	
Linux Debian	32 & 64 bits
Microsoft Windows	32 & 64 bits: Windows 7, Windows 8, Windows 10, Windows Server 2008 R2, Windows Server 2012
<b>PC TO CLIENT COMMUNICATION INTERFACE</b>	
TCP/IP	Client (Remote) / Server (Big Voice) architecture via Ethernet 1000Mbps
Link & Share	All parameters are accessible via simple Telnet protocol
SNMP	Supervision with Trap Feature

## Before you start

### SAFETY WARNING

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- The servicing of electronic equipment should be performed only by qualified personnel;
- Before removing the covers the SOUND4 BIG VOICE<sup>2</sup> - Base must be switched off and the mains cable unplugged;
- When the equipment is open, the power supply capacitors should be discharged using a suitable resistor;
- Never touch the wires or the electrical circuits;
- Use insulated tools only;
- Never touch the metal semiconductor. They might carry high voltages;
- For removing and installing electronic components, follow the recommendations for handling MOS components

**ATTENTION:** SOUND4 BIG VOICE<sup>2</sup> - Base has an internal Lithium battery. Do not try to re-charge this battery! Please contact us for detailed instructions in case the battery should be changed.

### OPERATING RECOMMENDATIONS

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For the normal operation of SOUND4 BIG VOICE<sup>2</sup> - Base, we recommend following the instructions listed below.

- Install the unit in places with good air conditioning. The SOUND4 BIG VOICE<sup>2</sup> - Base is designed to operate within the ambient temperature range of 10 to 50°C. The equipment rack should be ventilated in order for the device to keep its internal temperature below the maximum ambient temperatures;
- We do not recommend installation in rooms with high humidity, dusty places or other aggressive conditions;
- Locate the device away from abnormally high RF fields;
- Use only checked power supply cables. We strongly recommend the usage of shielded cables;
- Connect SOUND4 BIG VOICE<sup>2</sup> - Base only to reliable power supply sources. In case of unstable power supply, please use Uninterruptible Power Supply (UPS);
- Use the device only with its top cover on to avoid electromagnetic anomalies. Otherwise, this may cause problems with the normal functionality of the unit;
- For the normal remote operation of the unit, connect SOUND4 BIG VOICE<sup>2</sup> - Base to a good quality Internet connection;
- For the normal operation of SOUND4 BIG VOICE<sup>2</sup> - Base, check if the network settings past through all the required data traffic.

### SOURCE MATERIAL QUALITY

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The SOUND4 BIG VOICE<sup>2</sup> - Base is designed to achieve perfect sound quality, regardless of the source material. Though, it is very important that the source audio to be as clean as possible, as upon processing the poor-quality source material will cause distortion and unpleasant audio defects.

## **UNPACKING AND INSPECTION**

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Upon receipt, the equipment should be inspected for possible shipping damages. If such are found or suspected, notify the carrier at once and contact SOUND4 Ltd. The original shipping carton box and packing materials should be kept for possible reuse, in case of return for Warranty repair, for example. Shipping damages as a result of improper packing for return may invalidate the Warranty!

**IT IS VERY IMPORTANT** that the [“Product Registration Card”](#) included in the Manual be completed accurately and returned. This will assure coverage of the terms of the Warranty and it will provide a means of trace in case of lost or stolen equipment. In addition, the user will automatically receive SERVICE OR MODIFICATION INSTRUCTIONS from SOUND4 Ltd.

The SOUND4 BIG VOICE<sup>2</sup> - Base set includes:

1. SOUND4 BIG VOICE<sup>2</sup> - Base device;
2. Power supply cables x2;
3. Pouch with documents – Declaration of Conformity and Approval Information, Warranty terms and conditions, Product registration card, Waste form.

## **RADIO FREQUENCY INTERFERENCE**

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Although we have made provision for SOUND4 BIG VOICE<sup>2</sup> - Base installation in the immediate proximity of broadcast transmitters, please do practice some care using the unit near abnormally high RF fields.

## Mounting

### **RACK REQUIREMENTS**

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The SOUND4 BIG VOICE<sup>2</sup> - Base mounts in a standard 19-inch equipment rack and requires only 1¾ inches (1U) of vertical rack space. In order the painted finish around the mounting holes to be protected, the use of plastic washers is recommended.

### **HEAT DISSIPATION**

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Having very low electricity consumption, the SOUND4 BIG VOICE<sup>2</sup> - Base itself generates negligible heat. The unit is intended for operation within an ambient temperature range, extending from freezing to 120°F/50°C. But because adjacent, less efficient equipment may radiate substantial heat, be sure that the equipment rack is adequately ventilated to keep its internal temperature below the specified maximum ambient.

### **FUSE HOLDER**

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The fuse holder is placed inside the unit, next to the voltage selector. Apply downward pressure and pull the cap outward to access the 5mm mains fuse. The reverse process will release the cap.



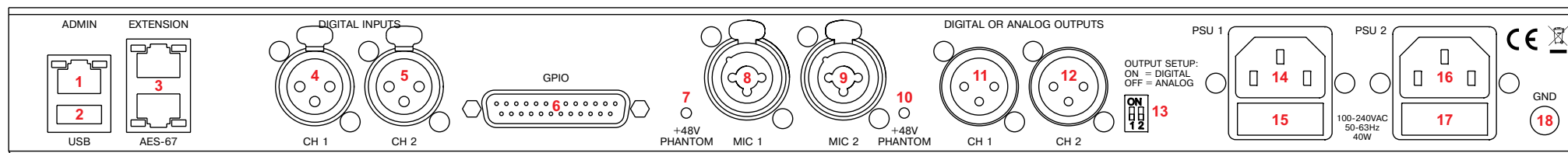
## Panel Indicators and Connectors

### FRONT PANEL



**LED Meters** – The full-time LED meters allow quick and easy monitoring of the metering, making the setup, adjustment and programming easy.

## REAR PANEL



1. Ethernet T-BASE10/100 RJ45;
2. USB communication port;
3. Ethernet T-BASE10/100 RJ45;
4. Digital Audio Input Channel 1 (XLR);
5. Digital Audio Input Channel 2 (XLR);
6. GPIO + RS232;
7. +48V Phantom;
8. MIC 1;
9. MIC 2;
10. -48V Phantom;
11. Digital or Analog Outputs Channel 1 (XLR);
12. Digital or Analog Outputs Channel 2 (XLR);
13. Output Setup - ON- Digital, OFF - Analog;
14. Mains connector 1, 110-240VAC, IEC-320 C14 type;
15. Fuse holder;
16. Mains connector 2, 110-240VAC, IEC-320 C14 type;
17. Fuse holder;
18. GND - Grounding.

## Operation

The SOUND4 BIG VOICE<sup>2</sup> - Base can be operated via the provided free of charge Software and WEB Interface. The WEB Interface of the device provides limited options but is of great use for monitoring purposes or when fast switch of the preset should be made, and the user does not have access to the Software. The WEB interface also allows you to update the firmware of your device quick and effortlessly.

### **USER ACCOUNTS OVERVIEW**

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The SOUND4 BIG VOICE<sup>2</sup> - Base provides you with three types of access levels for both - the WEB Interface and Software. Each has a different purpose and if you do not use the correct one, the controls that you are looking for might not be available.

**Admin** – Mainly used for managing user and studio rights and some global configuration settings. User name: *admin*, password: *admin*;

**Studio** – This account provides you with access to the majority of the configuration options - Inputs and Outputs configuring, processing settings and preset management. User name: *studio*, password: n/a (leave the field blank);

**Live** – This type of access is ideal for granting the operators access to basic functions such as loading sessions and presets, without providing them with full access over the unit's parameters. User name: *live*, password: n/a (leave the field blank).

For your convenience, each type of access and its options will be explained separately in the WEB and Software control Interfaces.

## IN-BOX ADMIN ETHERNET

Once the device is connected to a local network or to the Internet by the applied LAN cable, download the In-Box Admin Ethernet from:

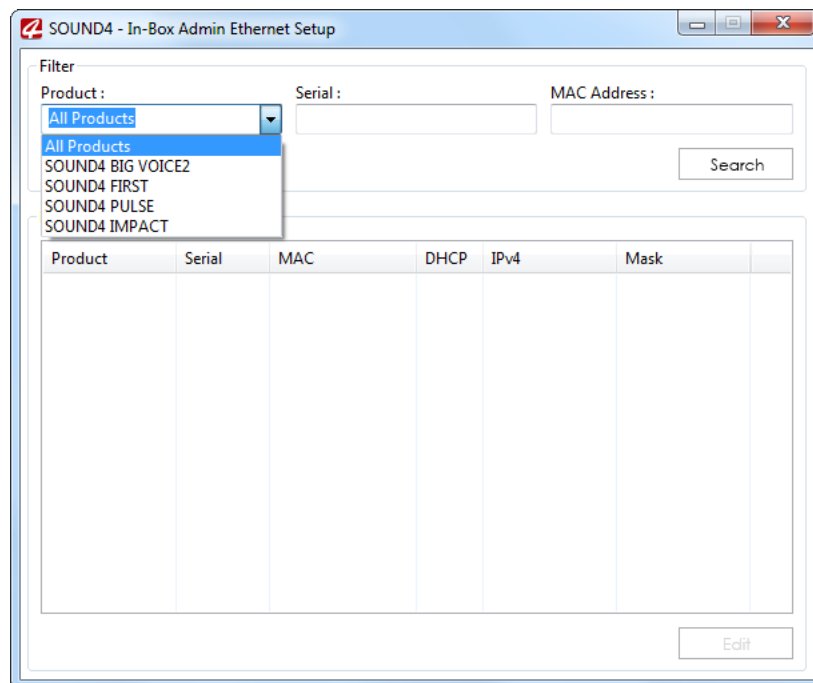
[www.sound4.com/products/big-voice-2-base#downloads](http://www.sound4.com/products/big-voice-2-base#downloads)

This tool is dedicated to In-Box Products, and especially for products that don't get the possibility to setup Admin Ethernet IP from front panel. This software will do an automatic network discovery and find SOUND4 In-Box products currently connected to be able to setup Admin Ethernet IP.

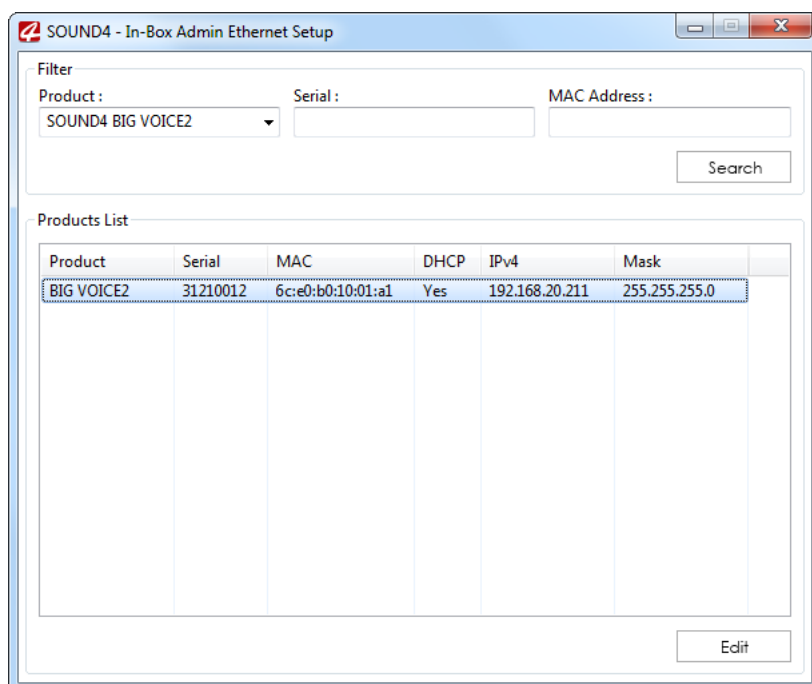
**IMPORTANT:** This software will also install a needed third party software called WinPcap.

In order for the program to be able to scan the device, please make sure that the unit is connected to the power supply chain and in the Ethernet network. Then, open the In-Box Admin Ethernet and follow the instructions listed below:

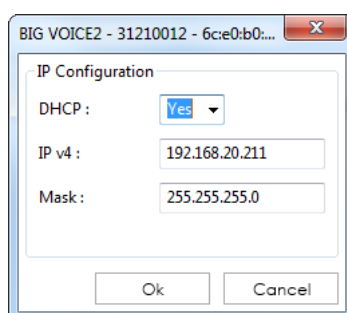
1. Once the program window opens, select the model of the device to be scanned from the **Product** sub-section as depicted below.



2. Once the scanning process is completed, the collected data will be depicted in section **Product List** as depicted below.



3. To change the parameters, double click with the mouse cursor on the line with the product of interest. A new window will appear:

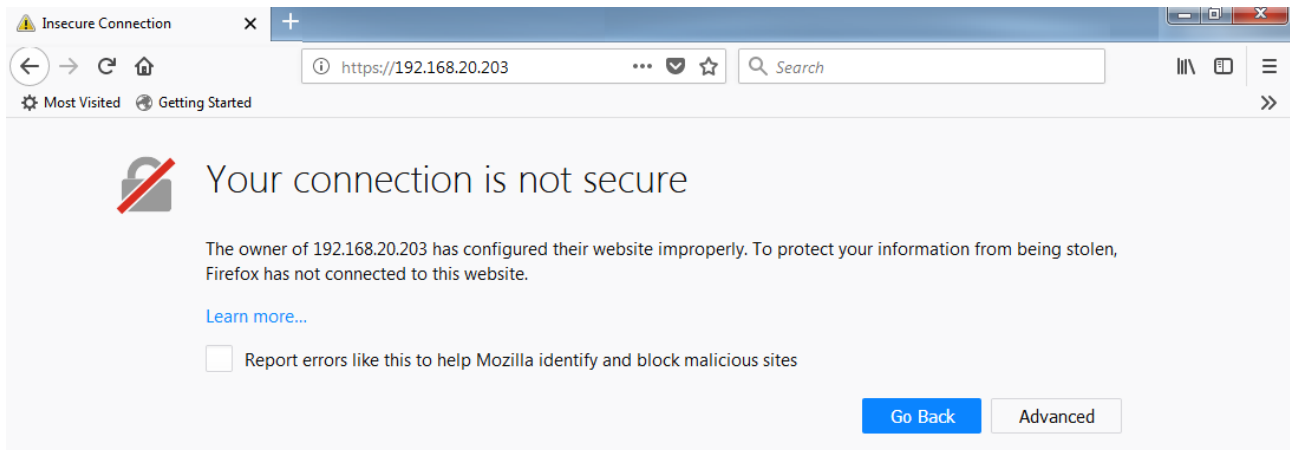


4. Apply the needed changes and press [OK].
5. Write down the IP address as it will be needed in order for the device to be accessed via WEB or Software interfaces.

## WEB INTERFACE

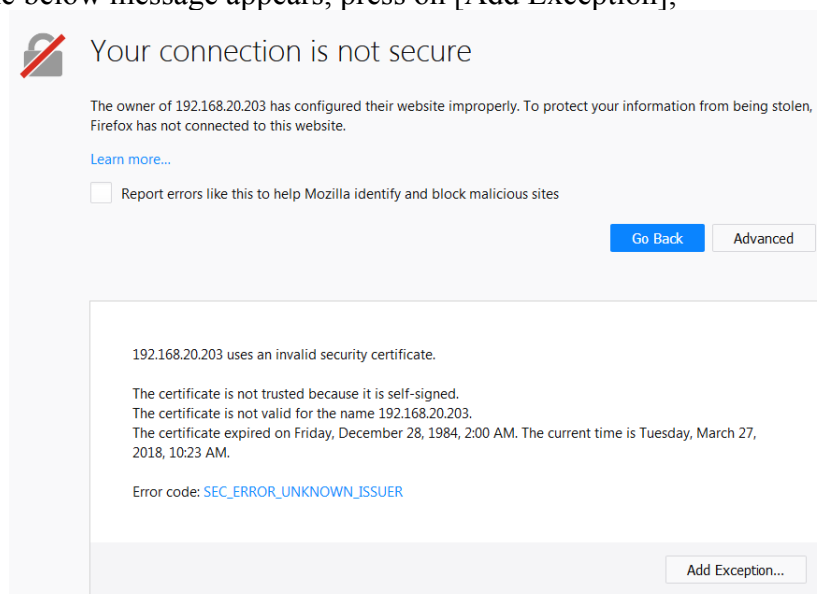
Open a WEB browser of choice and enter the IP address of the device. Please note that **https://** must be entered prior to the IP address of the device, otherwise you will not be able to establish a connection. For example (as depicted below) `https://192.168.20.203`.

Once the IP address is correctly written, press Enter on your keyboard. If the following message appears, please complete the steps listed below:

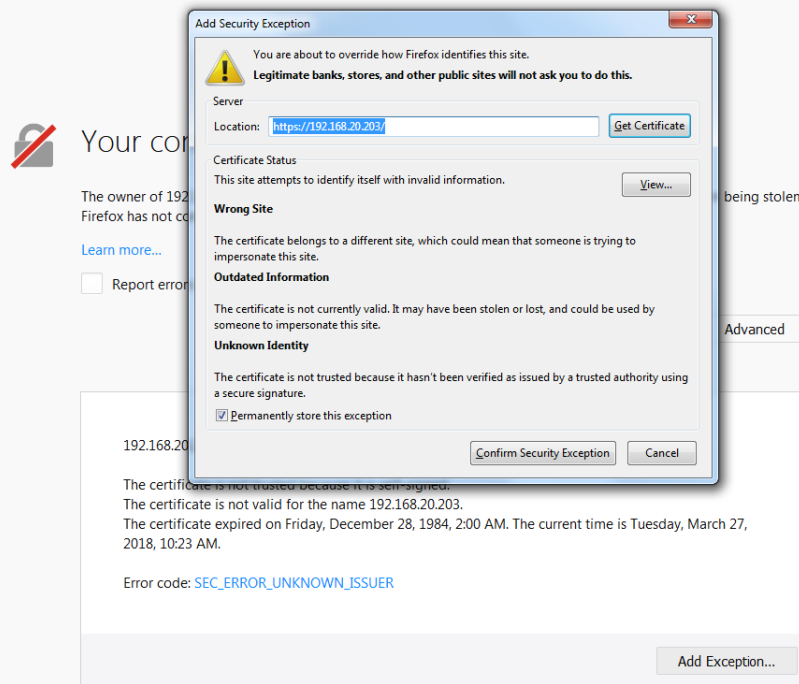


To open SOUND4 BIG VOICE<sup>2</sup> - Base WEB interface you have to add the connection as secure. To do that, follow the steps listed below:

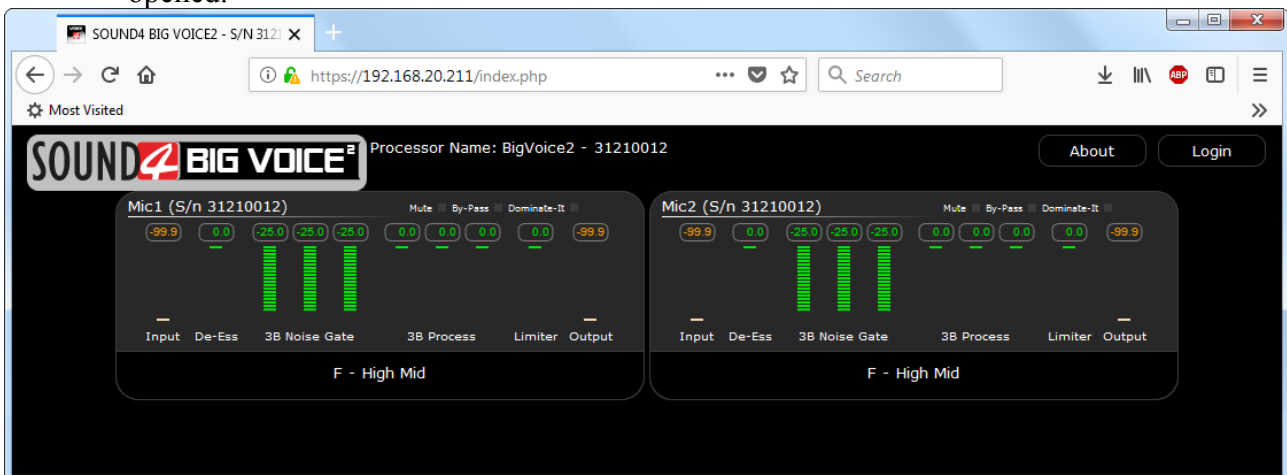
1. Press [Advanced];
2. Once the below message appears, press on [Add Exception];



3. An Add Security Exception window will appear. Press [Confirm Security Exception].



4. Once the process is completed, SOUND4 BIG VOICE<sup>2</sup> - Base WEB interface will be opened.



5. To Login, press [Login] and enter the user credentials requested. The SOUND4 BIG VOICE<sup>2</sup> - Base provides you with three types of access levels. Their default credential values are:

**Admin** – user name: *admin*, password: *admin*;

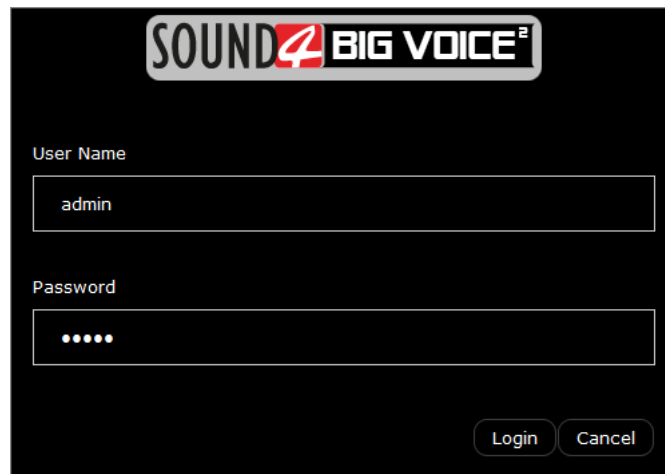
**Studio** – user name: *studio*, password: n/a

**Live** – user name: *live*, password: n/a

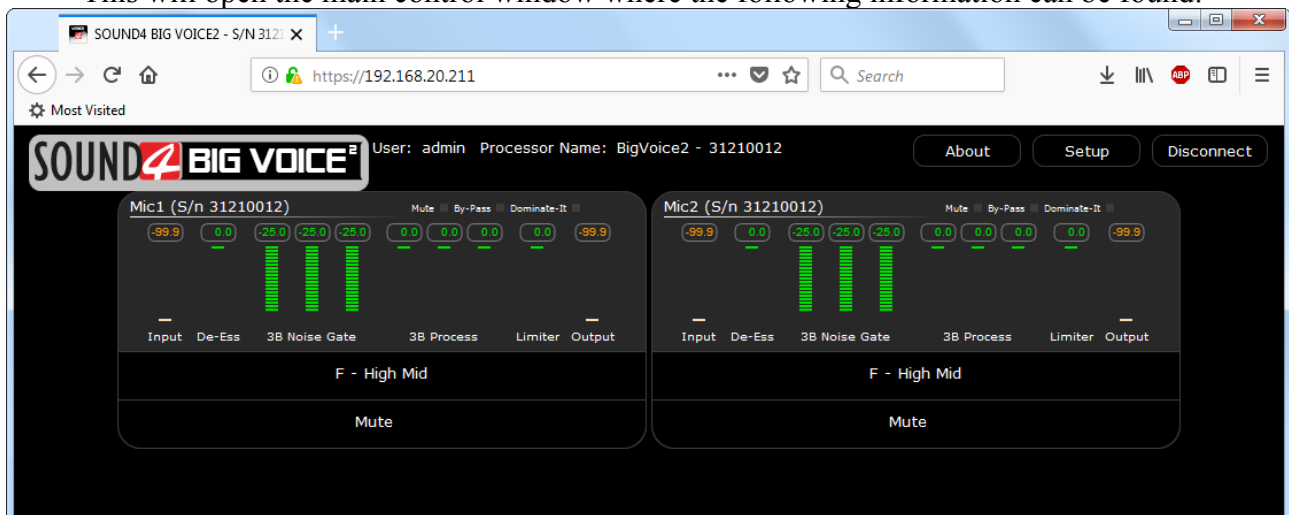
6. This will open the respective Main application window.

## Admin account

To use the Admin account, enter the following user credentials - user name: **admin**, password: **admin**.



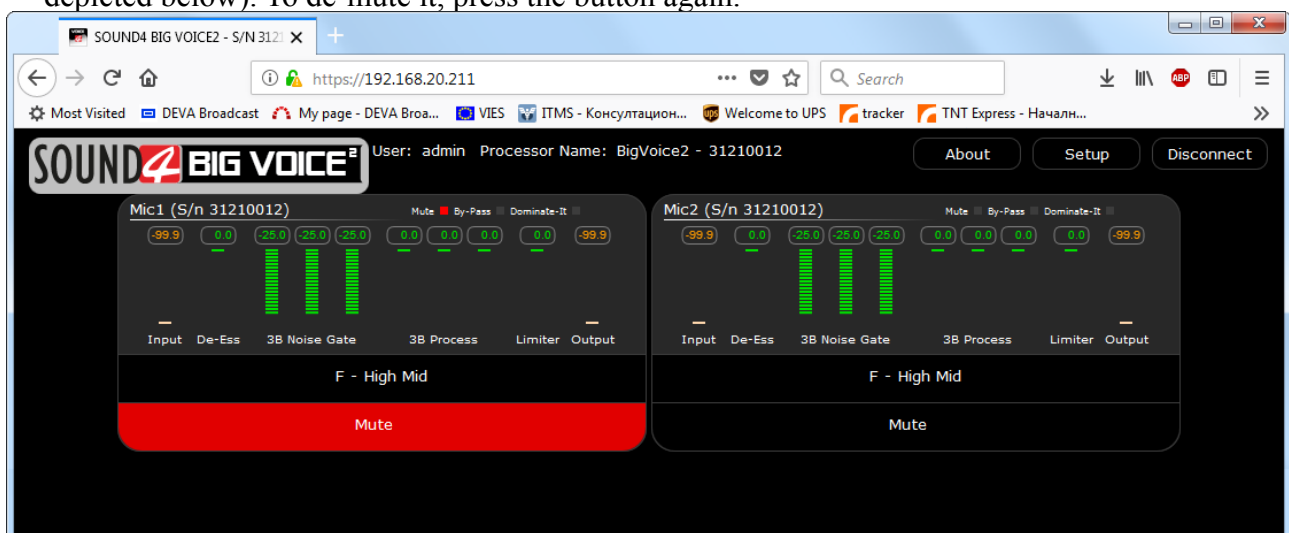
This will open the main control window where the following information can be found:



**User** – the access account currently used.

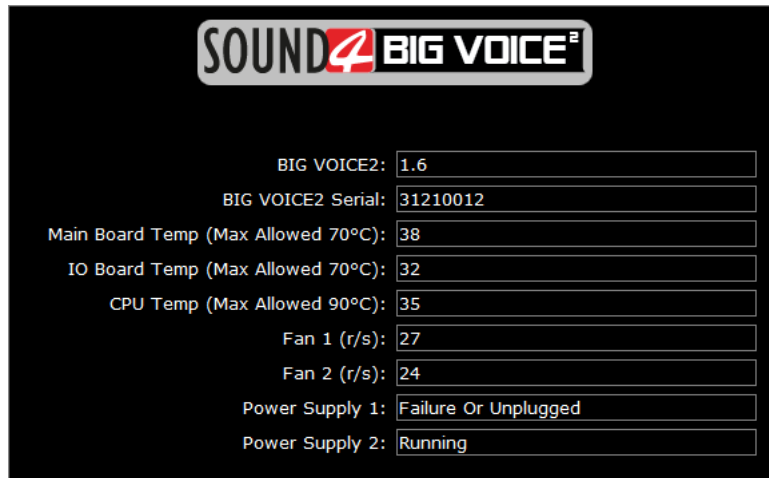
**Processor name** – Name and serial number of the device.

Overview of the two channels (**Mic 1** and **Mic 2**) including channel name, level, mute/de-esser/gate status, and currently loaded preset name. Mute the channel by clicking on the [Mute] button placed on the bottom of the section. If a **Mic** is Muted, the option will be illuminated in red (as depicted below). To de-mute it, press the button again.





[About] – Displays the current information about the device, along with the current temperatures from the connected BIG VOICE unit.



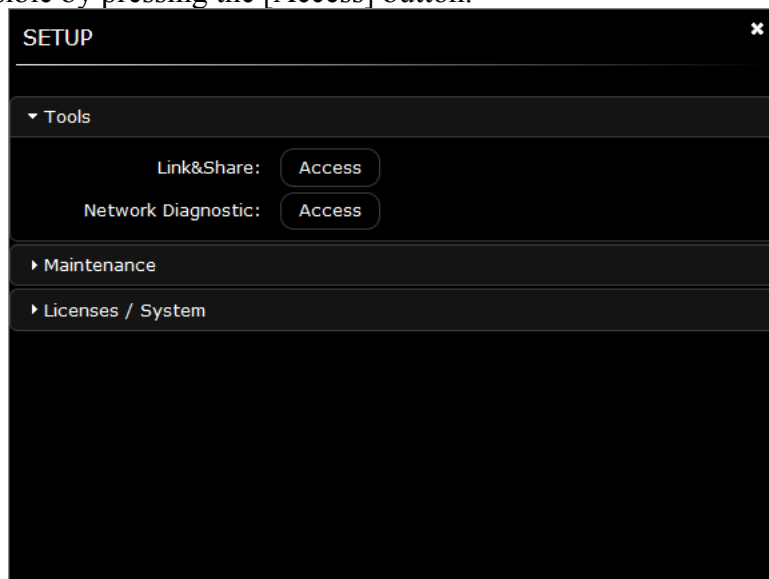
[Disconnect] – will disconnect you from the current session.

[Setup] – Opens the setup menu described below.

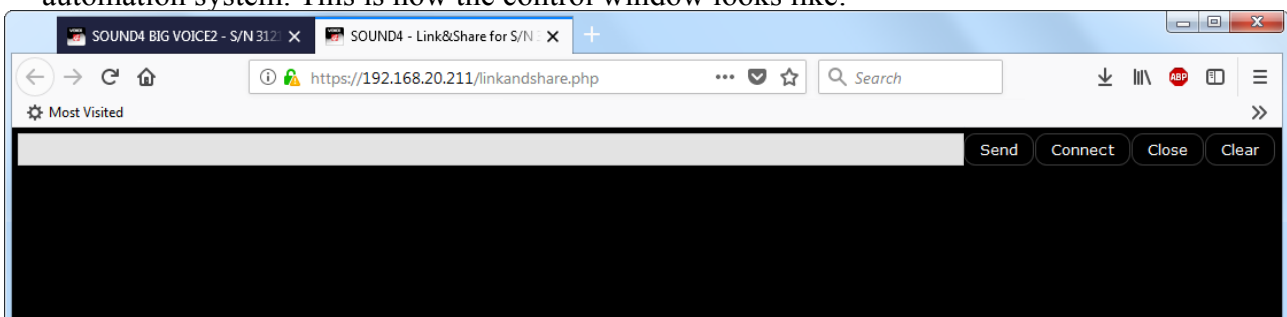
### Setup

The Setup menu is divided into three submenus. *Tools*, *Maintenance* and *Licenses/System*.

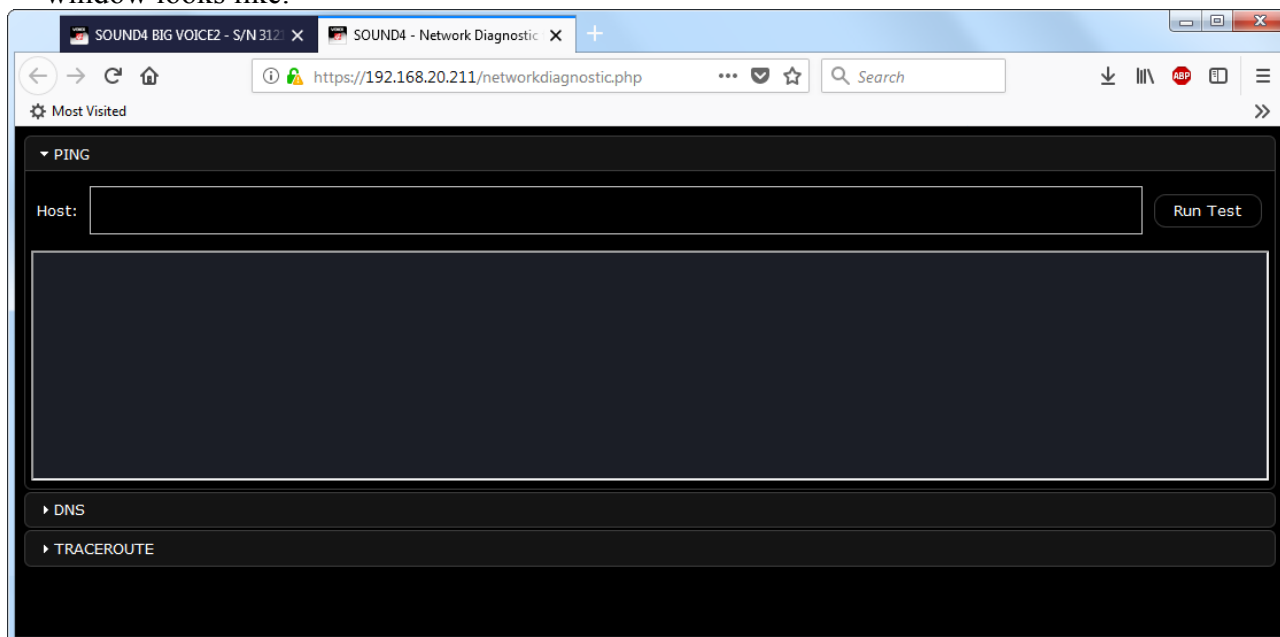
The *Tools* menu provides you with access to the **Link&Share** and **Network Diagnostic** options which are accessible by pressing the [Access] button.



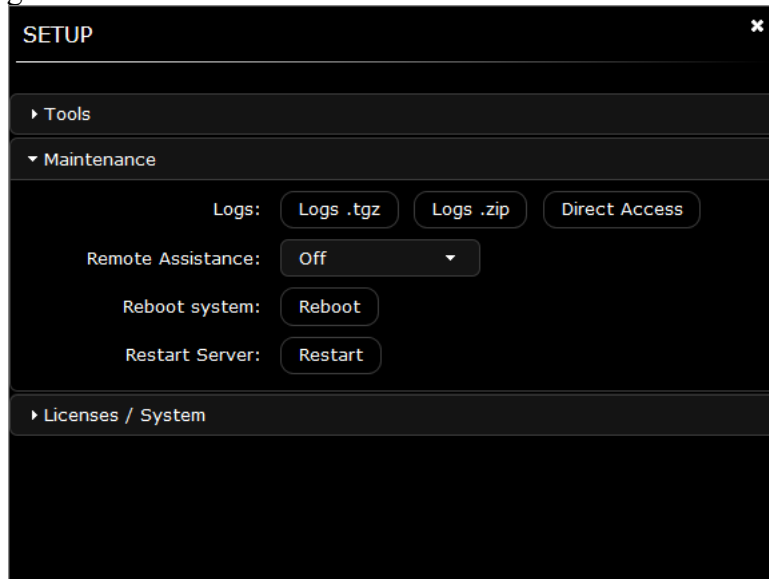
**Link&Share** allows remote control via TCP of BIG VOICE’s parameters from an external automation system. This is how the control window looks like:



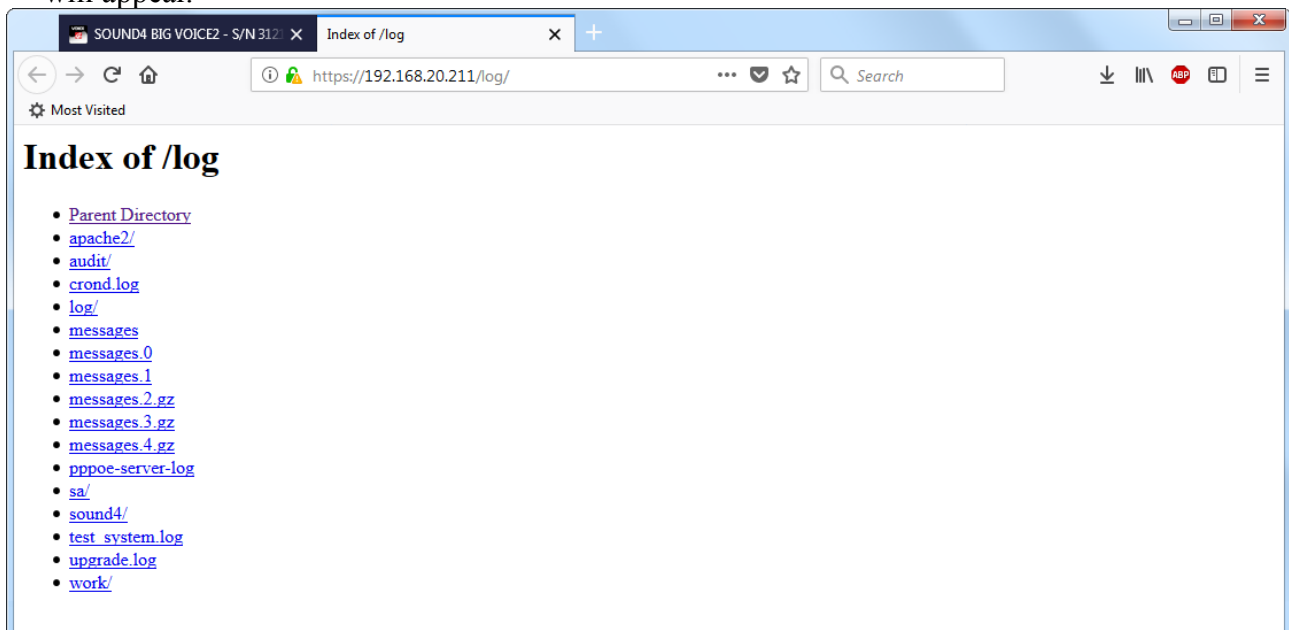
**Network Diagnostics** to be performed – PING, DNS, Traceroute. This is how the control window looks like:



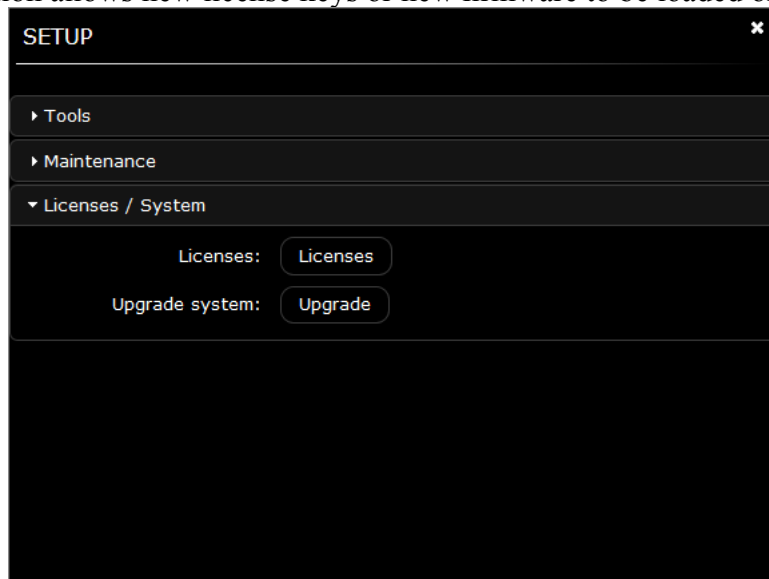
**Maintenance** – Contains various functions to reset the BIG VOICE’s hardware and view and download the Logs.



Upon pressing the [Direct Access] button, the following window with diagnostics information will appear.



**Licenses** section allows new license keys or new firmware to be loaded on the system.

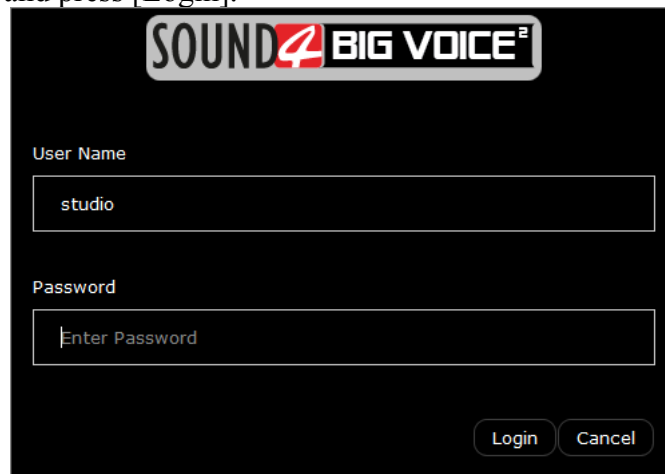


To load a new license, click [Licenses] and locate the file. The license key is delivered as a ZIP file. When license via WEB is uploaded, you need to unzip this file. Once the process is completed, a confirmation message will appear.

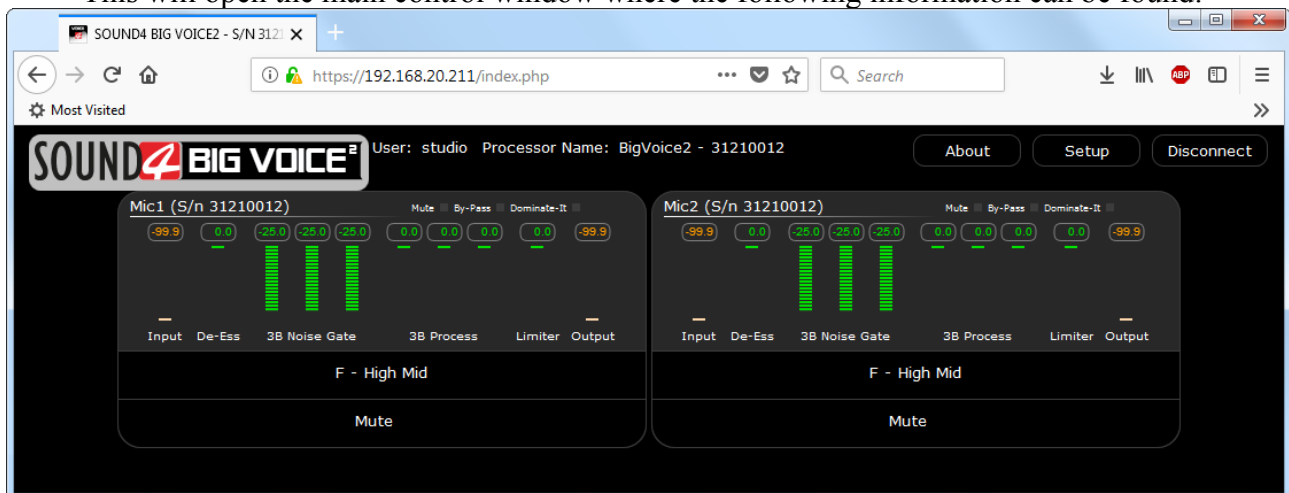
**Upgrade system** – allows upgrade of the Firmware to be made. The firmware is provided as a ZIP file. To upgrade the firmware, you need to unzip this file. Once the process is completed, a confirmation message will appear.

## Studio account

To use the Studio account, enter the following user credentials - user name: **studio**, password: *leave the field blank* and press [Login].



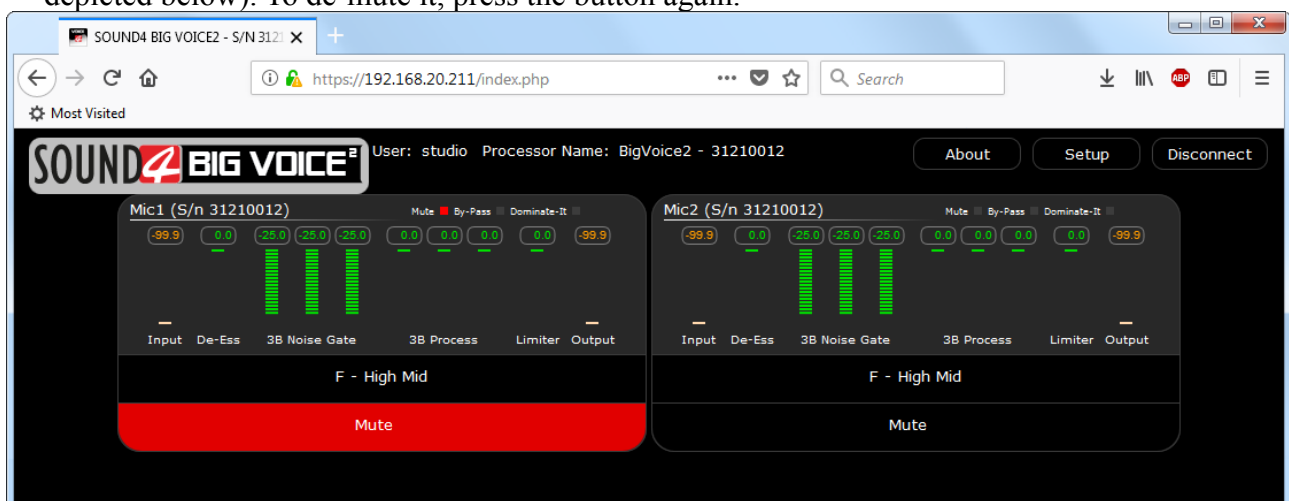
This will open the main control window where the following information can be found:



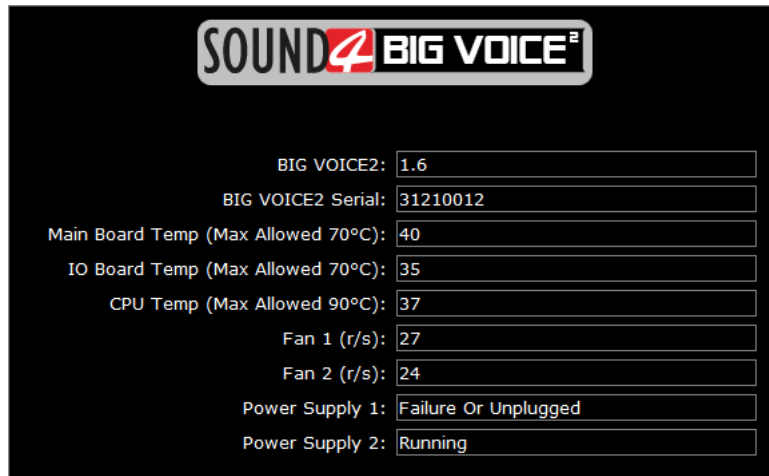
**User** – the access account currently used.

**Processor Name** – Name and serial number of the device.

Overview of the two channels (**Mic 1** and **Mic 2**) including channel name, level, mute/de-esser/gate status, and currently loaded preset name. Mute the channel by clicking on the [Mute] button placed on the bottom of the section. If a **Mic** is Muted, the option will be illuminated in red (as depicted below). To de-mute it, press the button again.



**[About]** – Displays the current information about the device, along with the current temperatures from the connected BIG VOICE unit.

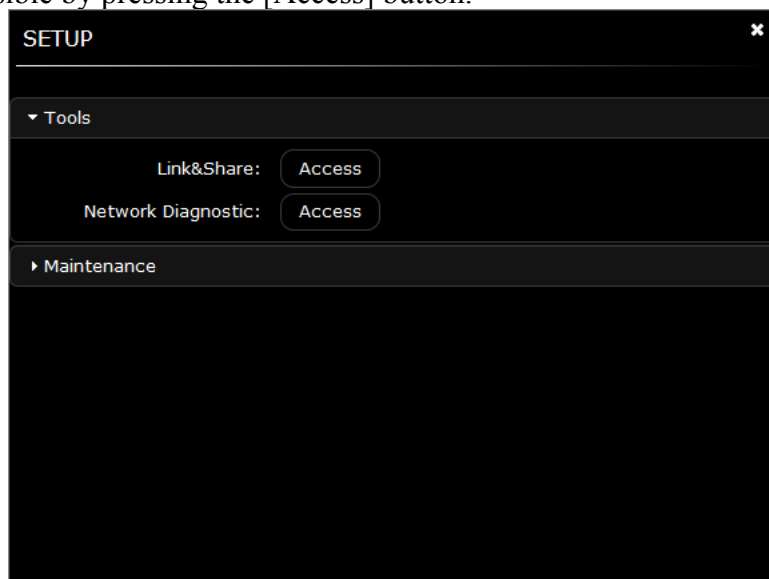


**[Disconnect]** – will disconnect you from the current session.

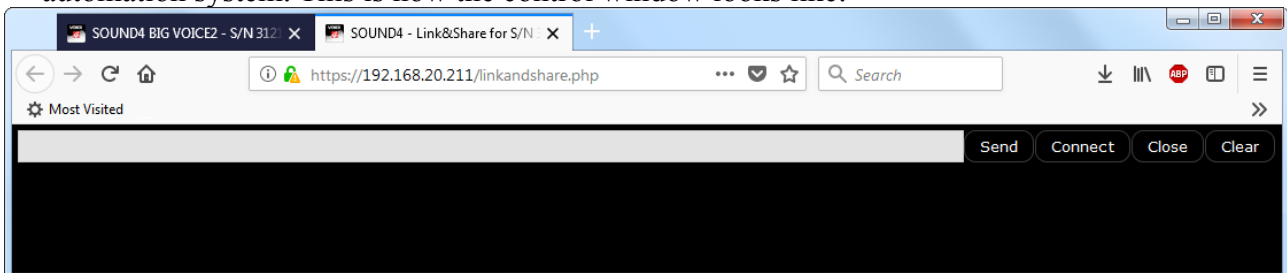
**[Setup]** – Opens the setup menu described below.

The Setup menu is divided into two submenus. **Tools** and **Maintenance**.

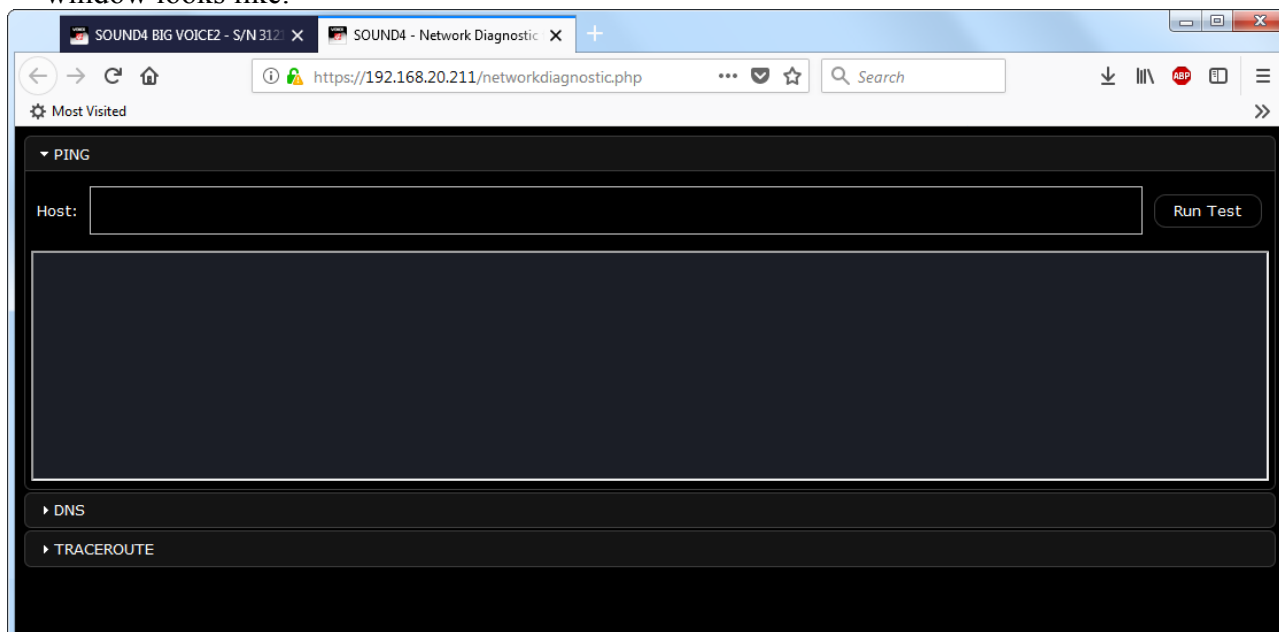
The **Tools** menu provides you with access to the **Link&Share** and **Network Diagnostic** options which are accessible by pressing the **[Access]** button.



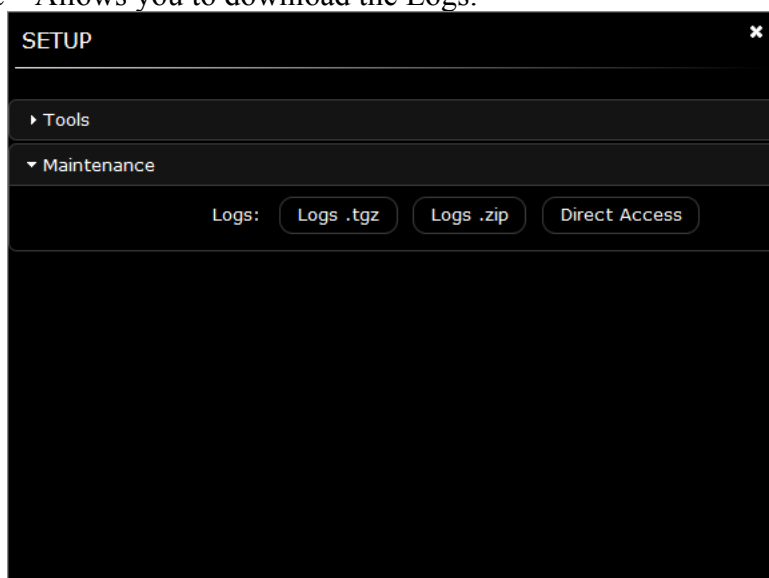
**Link&Share** allows remote control via TCP of BIG VOICE's parameters from an external automation system. This is how the control window looks like:



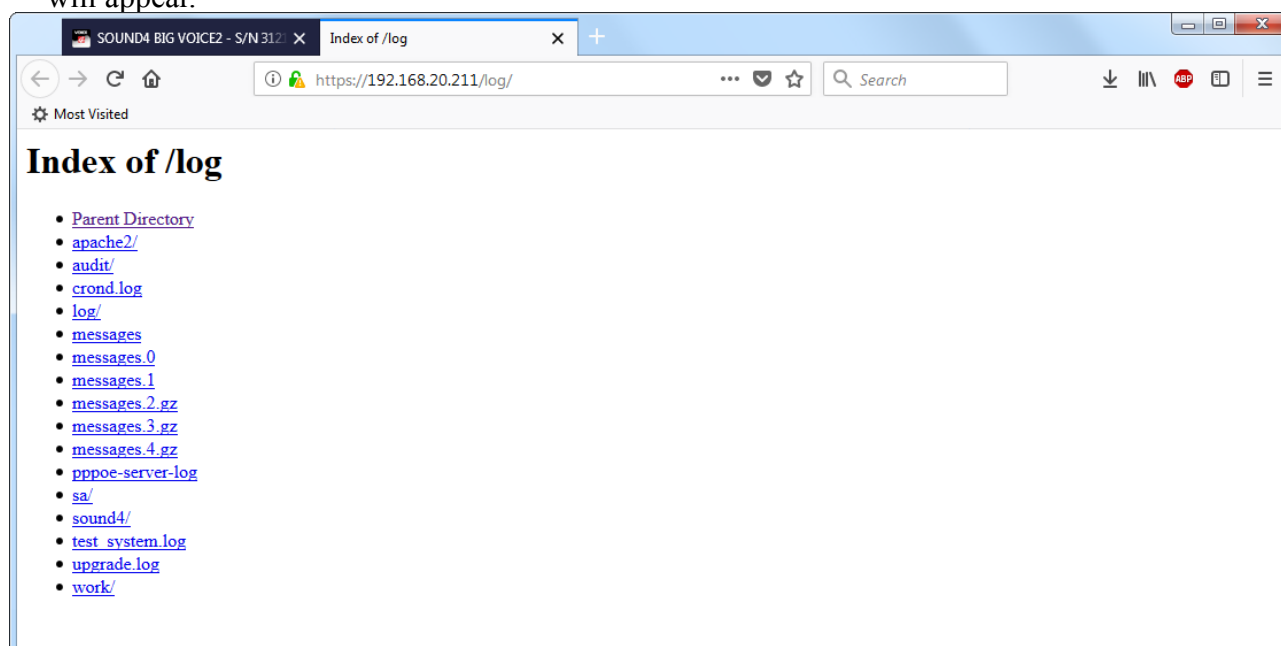
**Network Diagnostics** to be performed – PING, DNS, Traceroute. This is how the control window looks like:



**Maintenance** – Allows you to download the Logs.



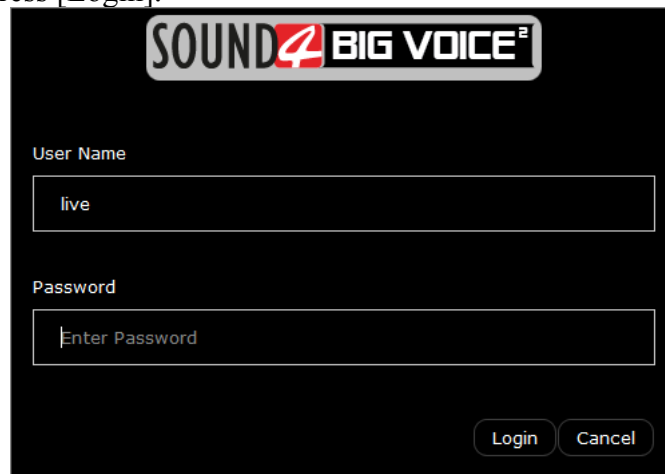
Upon pressing the [Direct Access] button, the following window with diagnostics information will appear.



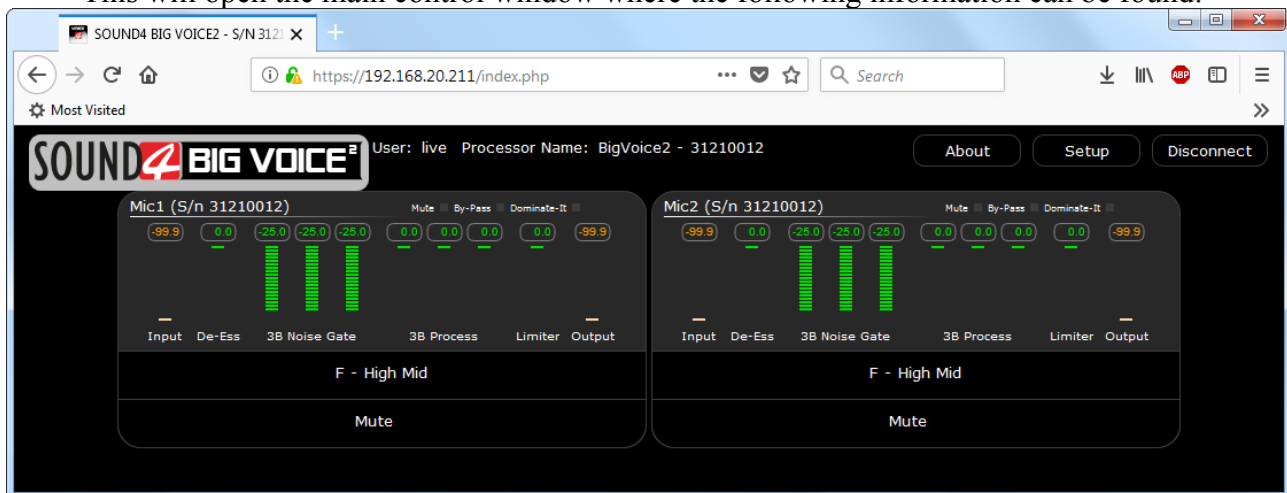


## Live account

To use the Live account, enter the following user credentials- user name: *live*, password: *leave the field blank* and press [Login].



This will open the main control window where the following information can be found:



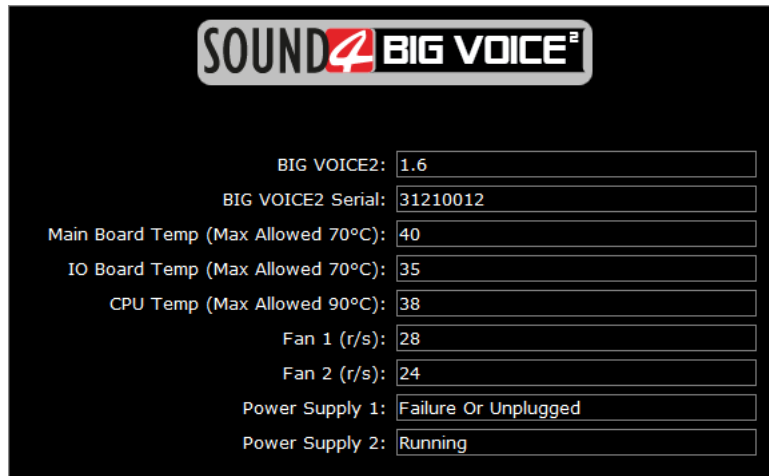
**User** – the access account currently used.

**Processor Name** – Name and serial number of the device.

Overview of the two channels (**Mic 1** and **Mic 2**) including channel name, level, mute/de-esser/gate status, and currently loaded preset name. Mute the channel by clicking on the [Mute] button placed on the bottom of the section. If a **Mic** is Muted, the option will be illuminated in red (as depicted below). To de-mute it, press the button again.



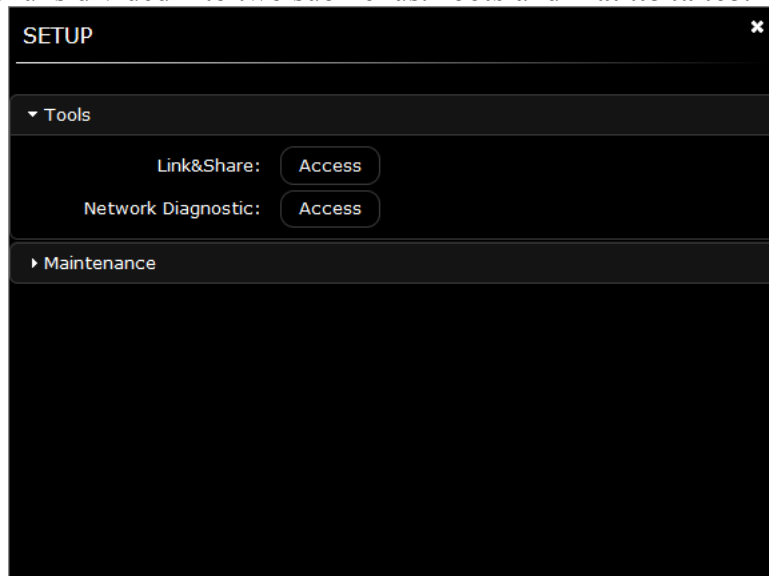
**[About]** – Displays the current information about the device, along with the current temperatures from the connected BIG VOICE unit.



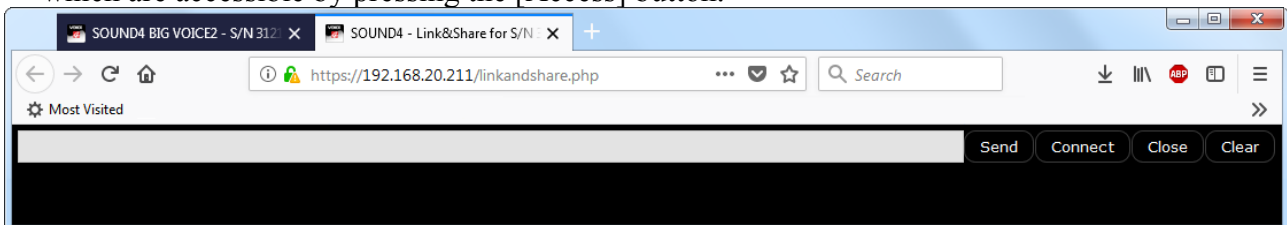
**[Disconnect]** – will disconnect you from the current session.

**[Setup]** – Opens the setup menu described below.

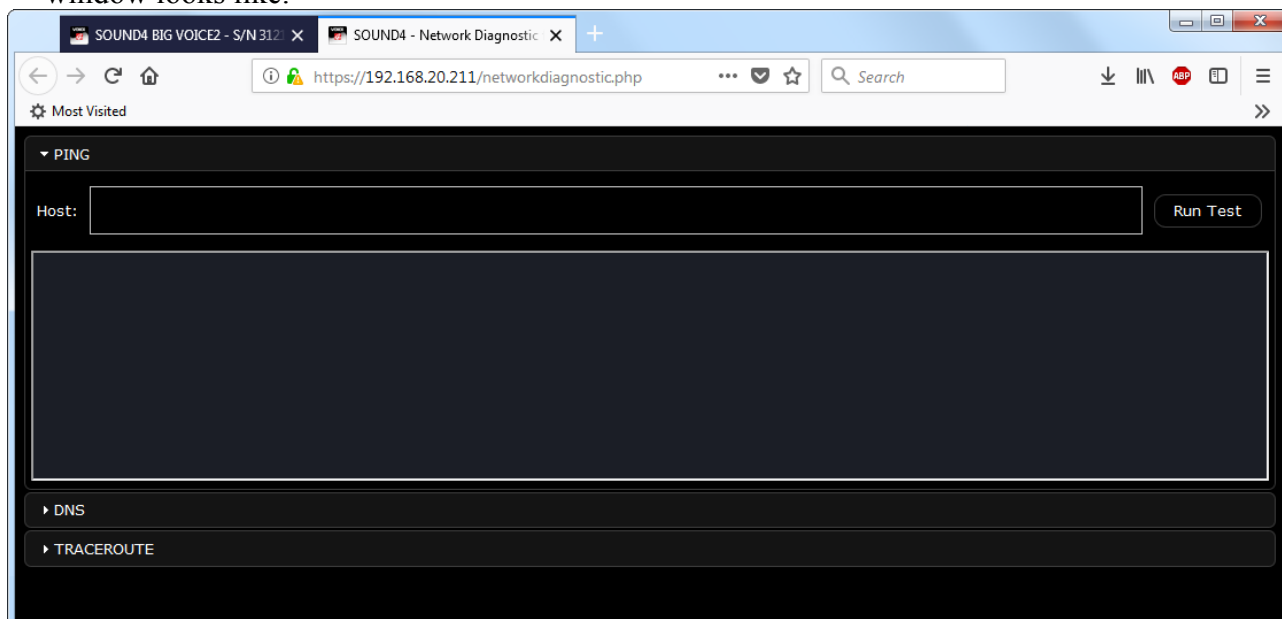
The Setup menu is divided into two submenus. **Tools** and **Maintenance**.



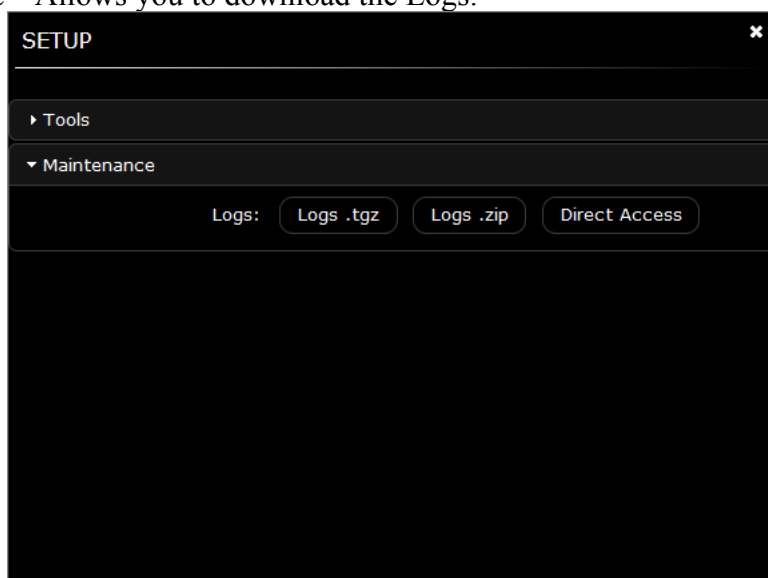
The Tools menu provides you with access to the **Link&Share** and **Network Diagnostic** options which are accessible by pressing the **[Access]** button.



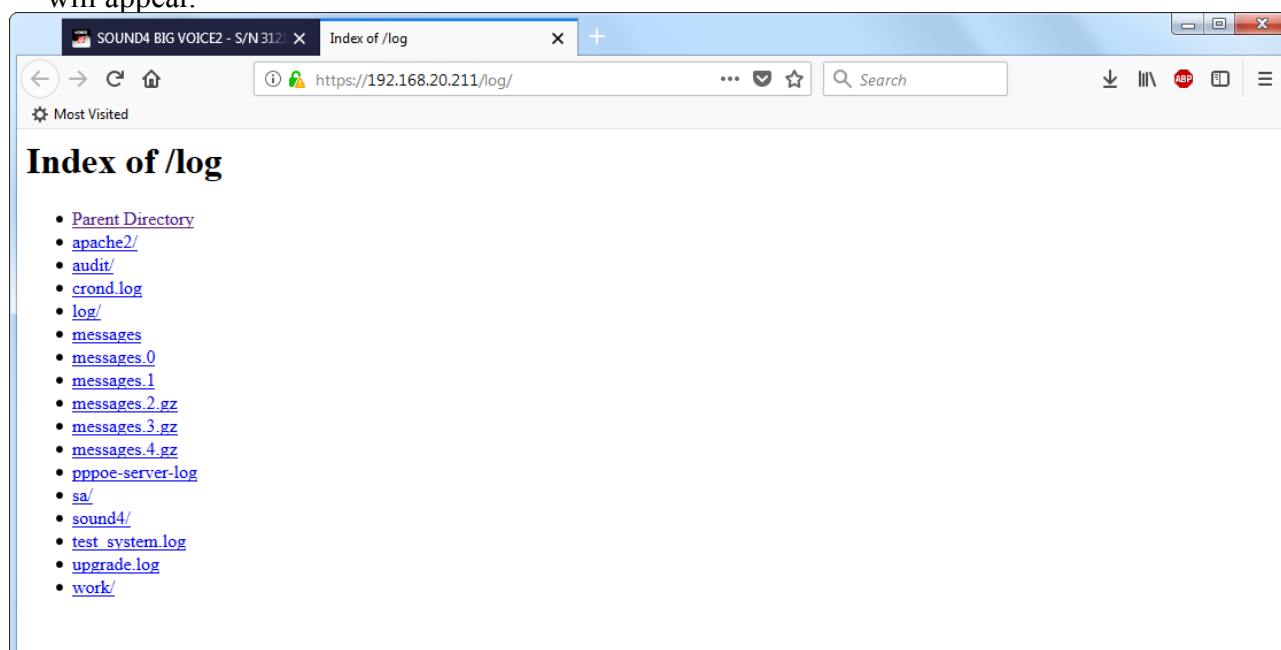
**Network Diagnostics** to be performed – PING, DNS, Traceroute. This is how the control window looks like:



**Maintenance** – Allows you to download the Logs.



Upon pressing the [Direct Access] button, the following window with diagnostics information will appear.



## SOFTWARE INSTALLATION

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Installation packages for MS Windows and Linux Ubuntu OS are available.

### Windows users

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The Universal Products Installer is the complete installation kit for all SOUND4 Products. The program is provided free of charge and can be downloaded from

<http://www.sound4.com/big-voice-2-base#downloads>

Upon entering the section, click on and download Universal All Products Installer. Once the process is completed install the .exe file. SOUND4's products are compatible with the Microsoft Windows Operating Systems listed below:

- Windows 7 - 32 & 64 bits
- Windows 8 - 32 & 64 bits
- Windows 10 - 32 & 64 bits
- Windows Server 2008 - R2
- Windows Server 2012

**IMPORTANT NOTE:** Due to Microsoft security changes, your operating system must be up-to-date, if not SOUND4 Driver will be locked by Microsoft and you will be not able to run the SOUND4 Remote Control Software.

### Linux Ubuntu OS

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SOUND4 proposes you to install the software package under your own Ubuntu. Compatibility with Ubuntu distributions:

- Lucid Lynx - 10.04 LTS
- Precise Pangolin - 12.04 LTS
- Trusty Tahr - 14.04 LTS
- Xenial Xerus - 16.04 LTS

Installation For a PC hosting SOUND4 card and running compatible Ubuntu version:

1. Click on the following link to add SOUND4 repository:  
[www.sound4.biz/repository/ubuntu/sound4-repository.deb](http://www.sound4.biz/repository/ubuntu/sound4-repository.deb)
2. Then install the driver with following link:  
[apt://sound4expl?refresh=yes](http://apt://sound4expl?refresh=yes)
3. Finally, install the SOUND4 server with following link:  
[apt://sound4server](http://apt://sound4server)

If you also want to install:

- the SOUND4 Remote Control, please use the following link: [apt://sound4remote](http://apt://sound4remote)
- the SOUND4 Stream, please follow the link: [apt://sound4stream](http://apt://sound4stream)

If you prefer to manage package installation by yourself, please follow the instructions below:

1. Add the following source to your Ubuntu repository list (example for lucid):

```
deb http://www.sound4.biz/repository/ubuntu lucid non-free
```

2. Then get the SOUND4 GPG signature key:

```
wget -q http://www.sound4.biz/repository/sound4.gpg -O- | sudo apt-key add -
```

3. Install required packages:

```
sudo apt-get update && sudo apt-get install sound4expl sound4server sound4remote sound4stream
```

4. Add the user to the audio group (needed for Alarm Stacker GUI):

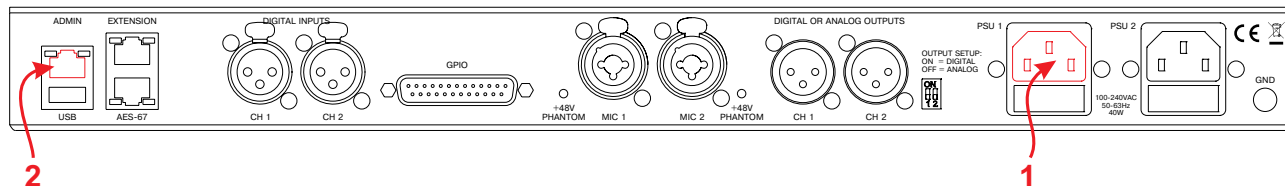
```
sudo adduser $USER audio
```

5. Log off and on to make the settings effective.

## CONNECTION

As explained, for the initial set-up of the device you will only need to connect:

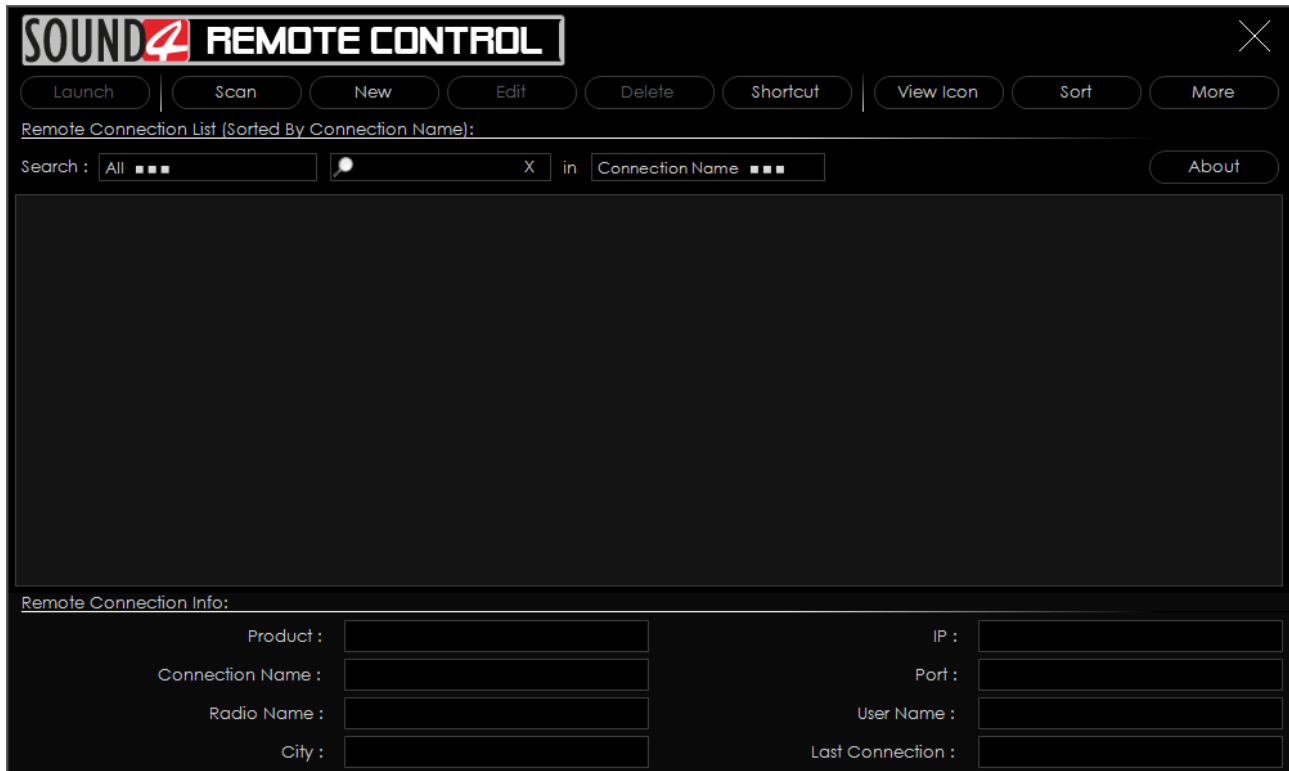
- 1 of the power cables to PSU 1 socket;
- Connect SOUND4 BIG VOICE<sup>2</sup> - Base to the TCP/IP network using a direct network cable, connected to the ADMIN port of the device.



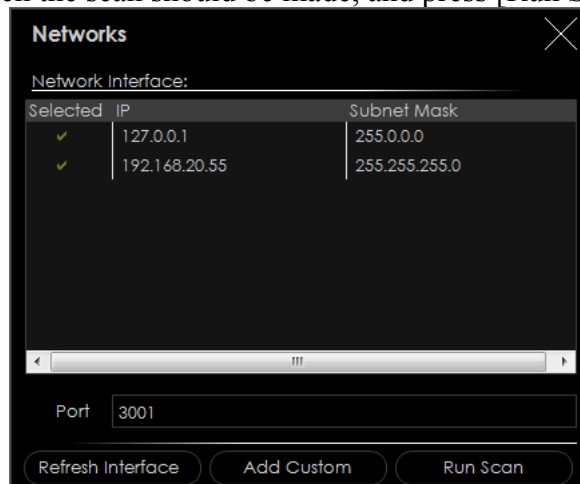
## SOFTWARE

### Network scan for new device

Double click on the software will open the main control window. The Remote control software can maintain several devices at once.



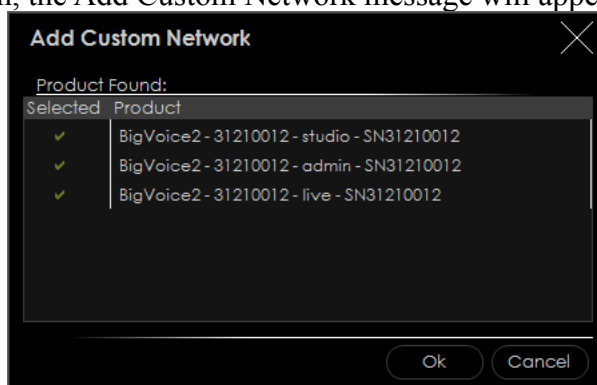
1. Press the [Scan] button;
2. A window with all network interfaces on the PC will appear. Select the IP address (the interface) on which the scan should be made, and press [Run Scan];



3. Wait until the scan is completed;



4. Upon completion, the Add Custom Network message will appear;

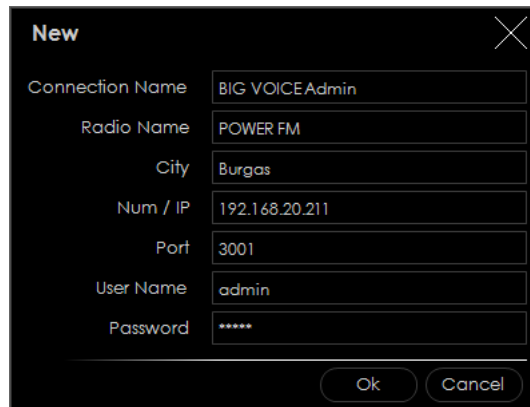


5. To add the device to the list, select the connection and press [OK];
6. The device will be added automatically. To change the device's settings, double click on the Studio version will open the control interface. The default access credentials are user name: **studio** and password: *leave the field blank* and press [OK].



## Add Device manually

1. Press the [New] button.
2. A new screen requiring the following information will appear:



The 'New' dialog box contains the following fields:

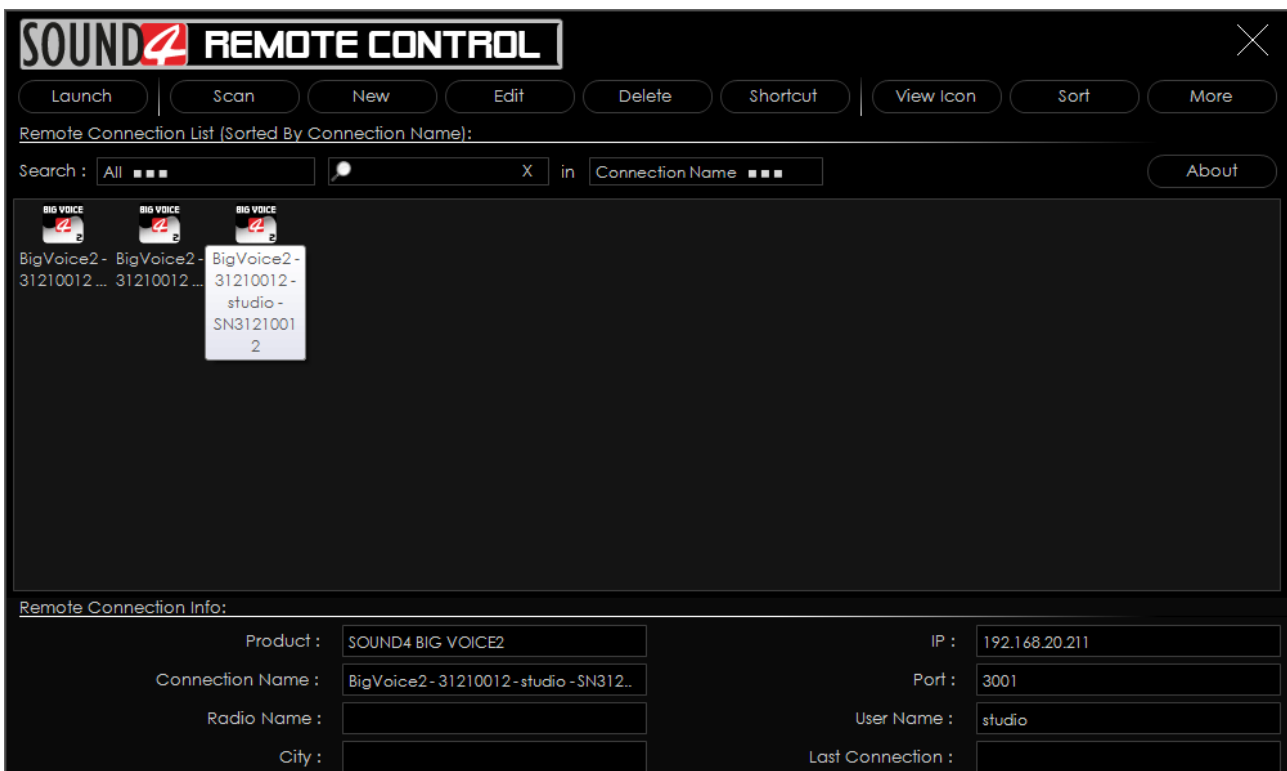
Connection Name	BIG VOICEAdmin
Radio Name	POWER FM
City	Burgas
Num / IP	192.168.20.211
Port	3001
User Name	admin
Password	*****

Buttons: Ok, Cancel

3. If you are not aware of SOUND4 BIG VOICE<sup>2</sup> - Base IP address, it can be seen via the front panel. When the Main screen is on, press the soft button labeled [INFO]. Then using the [Up] and [Down] buttons navigate to IP (2/4) where the IP address of the device will be depicted.

**NOTE:** The numbers included in the IP Address must be written without leading zeros. For example: 192.168.020.136 must be written as 192.168.20.136

4. Enter the required information. If not changed by the user, use the default value of the Port (3001). The username and password are as follows:
  - User name: **admin**;
  - Password: **admin**.
5. Press [OK]. All device operation options will be added. To change the device's settings, double click on the Studio version will open the control interface. The user credentials are as follows - username: **studio**, password: *n/a - leave the field blank* and press OK to enter the device.



**SOUND4 REMOTE CONTROL**

Buttons: Launch, Scan, New, Edit, Delete, Shortcut, View Icon, Sort, More

Remote Connection List (Sorted By Connection Name):

Search: All in Connection Name About

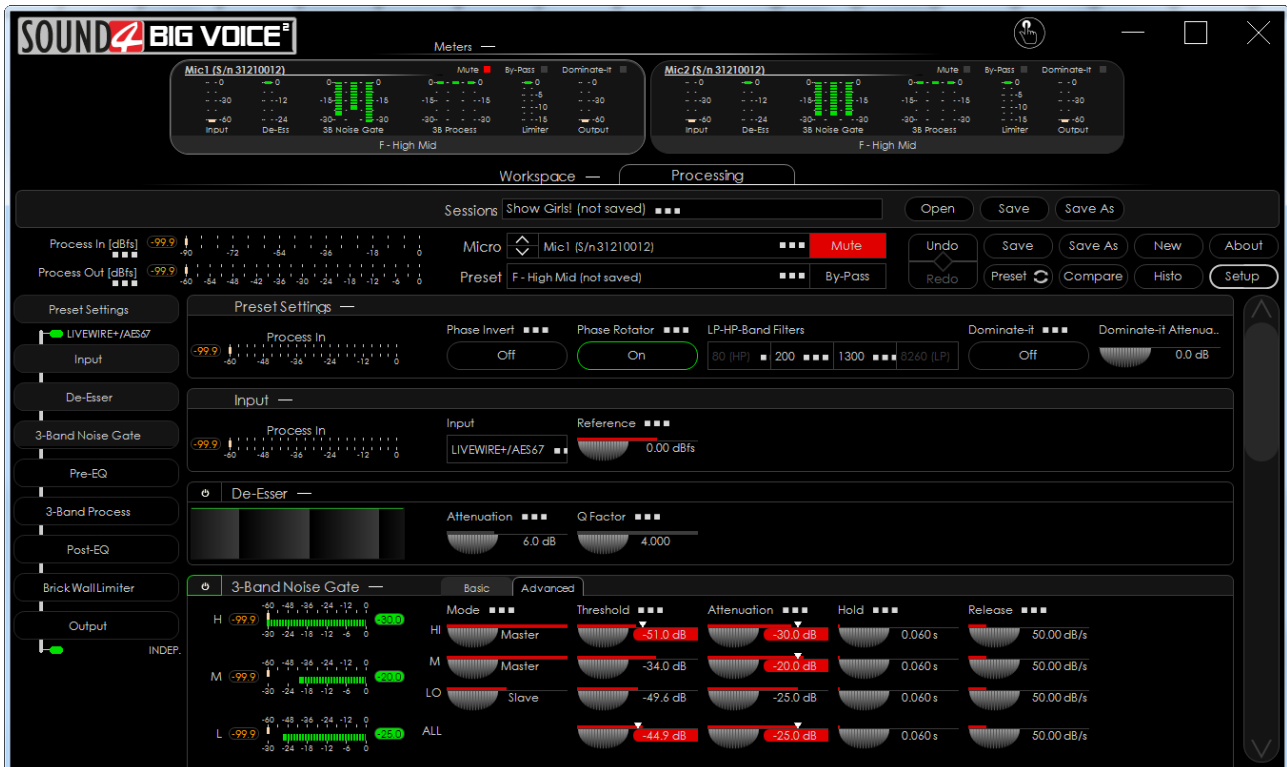
Connections:

- BigVoice2 - 31210012...
- BigVoice2 - 31210012...
- BigVoice2 - 31210012 - studio - SN31210012

Remote Connection Info:

Product :	SOUND4 BIG VOICE2	IP :	192.168.20.211
Connection Name :	BigVoice2 - 31210012 - studio - SN312..	Port :	3001
Radio Name :		User Name :	studio
City :		Last Connection :	

6. A successful log-in the system will open SOUND4 BIG VOICE<sup>2</sup> - Base main control window:



## Basic set-up

If not already done that, connect all the additional cables to the device in order for it to be properly integrated into your existing network.

The basic set-up of the inputs and outputs can be easily made via the SETUP page of the Software, section Settings.

## Inputs Setup

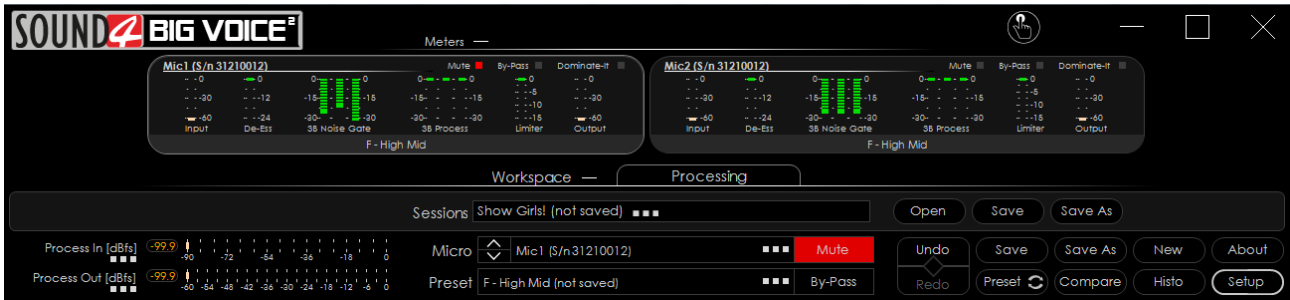
To setup the Inputs, press the [Setup] button. Once the SETUP window will appears, go to **Settings> General> Inputs**, then apply the needed settings to the Inputs. The set-up process is quite simplified.

## Outputs Setup

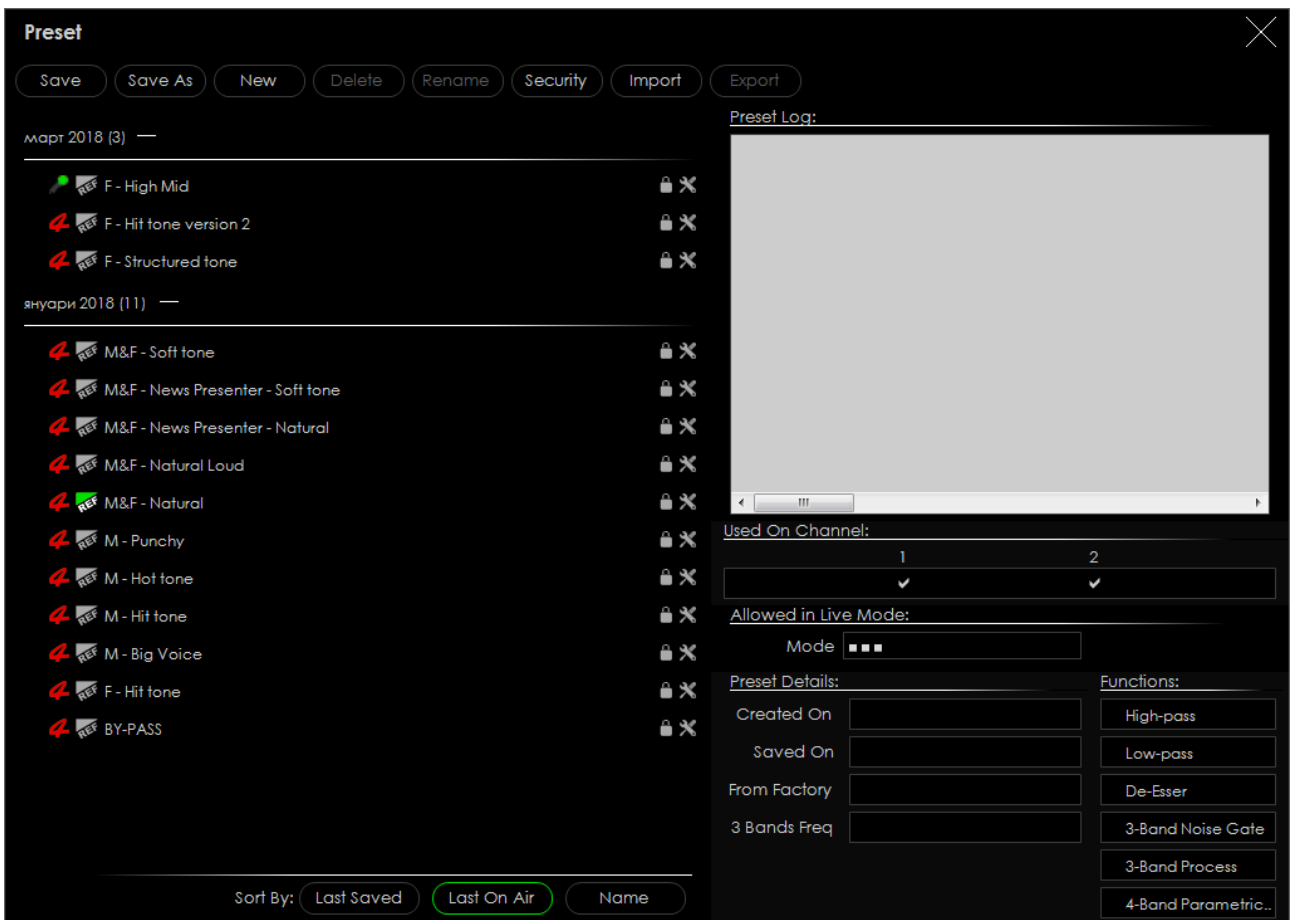
To setup the Outputs, press the [Setup] button. Once the SETUP window will appears, go to **Settings> General> Outputs**, then apply the needed settings to the Outputs. The set-up process is quite simplified.

## Preset Selection

To select a preset, press on [Preset] button, and list of all presets will appear on the screen.



Double click on the desired preset will load it automatically to the device.

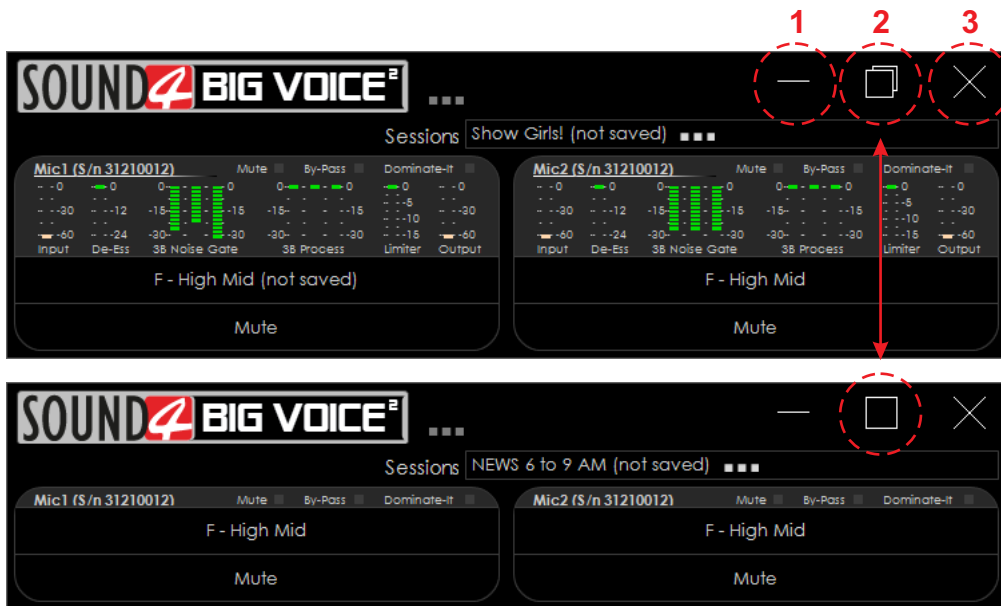


## Software Accounts Overview and Settings

### LIVE ACCOUNT

This type of access is ideal for granting the operators access to basic functions such as loading sessions and presets, without providing them with full access over the unit's parameters.

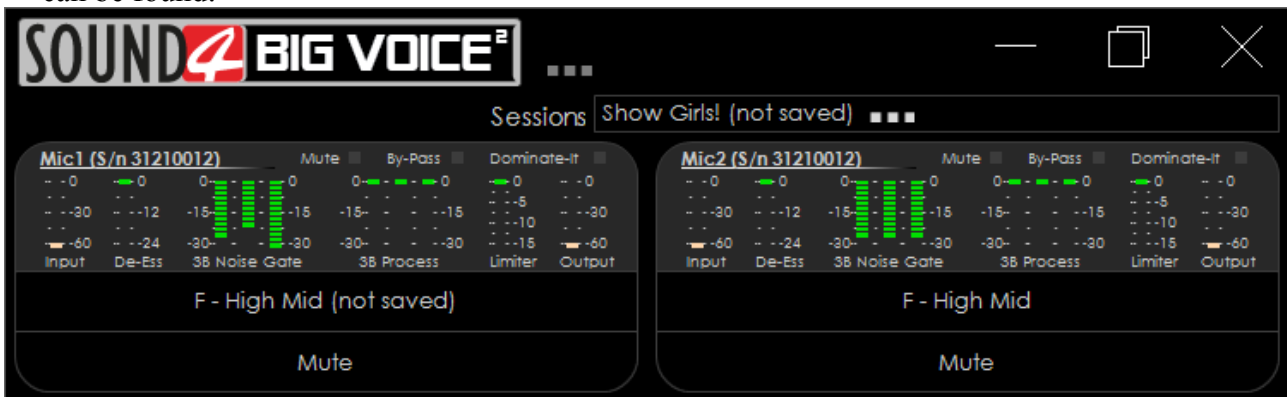
#### Window controls



1. Minimizes the program and display the Windows desktop.
2. Maximize/Restore Down the main window and its content.
3. Will close the program.

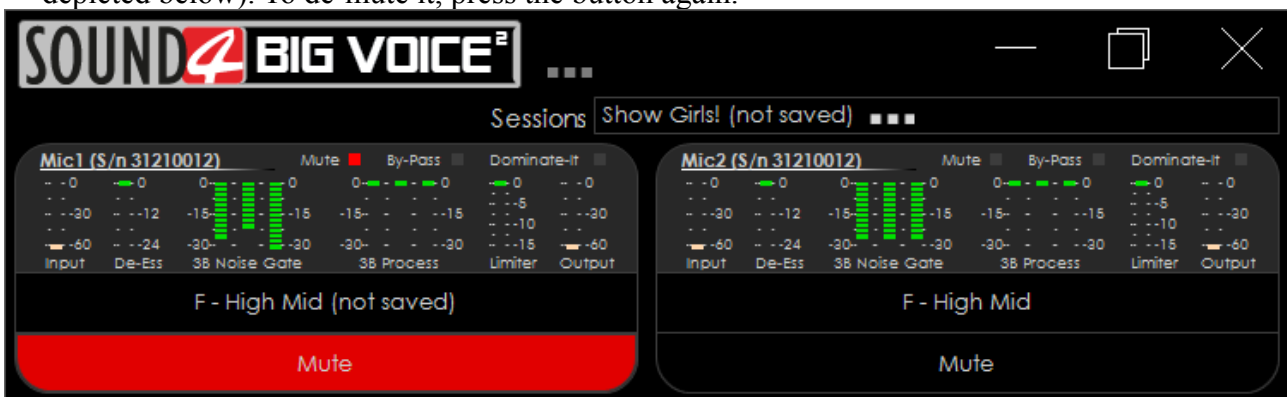
## Main menu and controls

A double click on the link will open the main control window where the following information can be found:

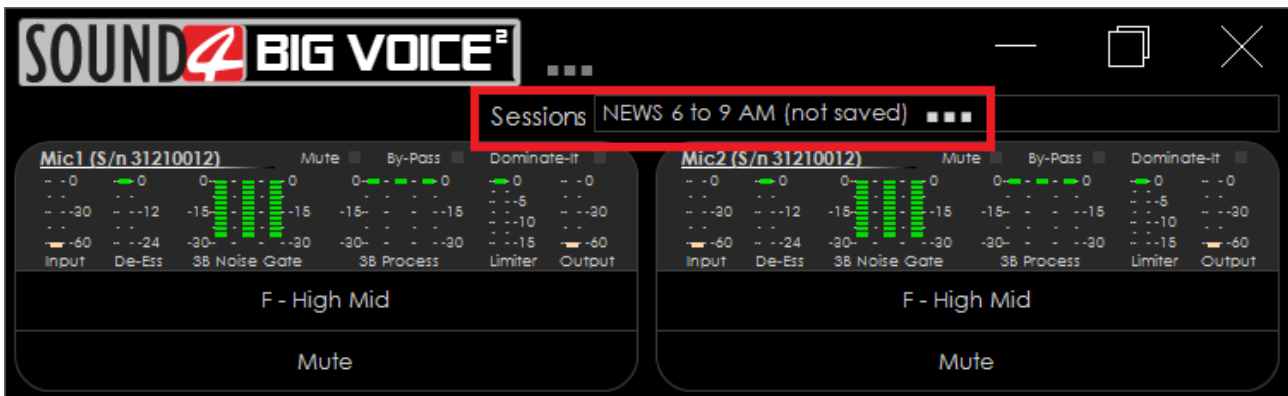


**Session** – the name of the current session will be written.

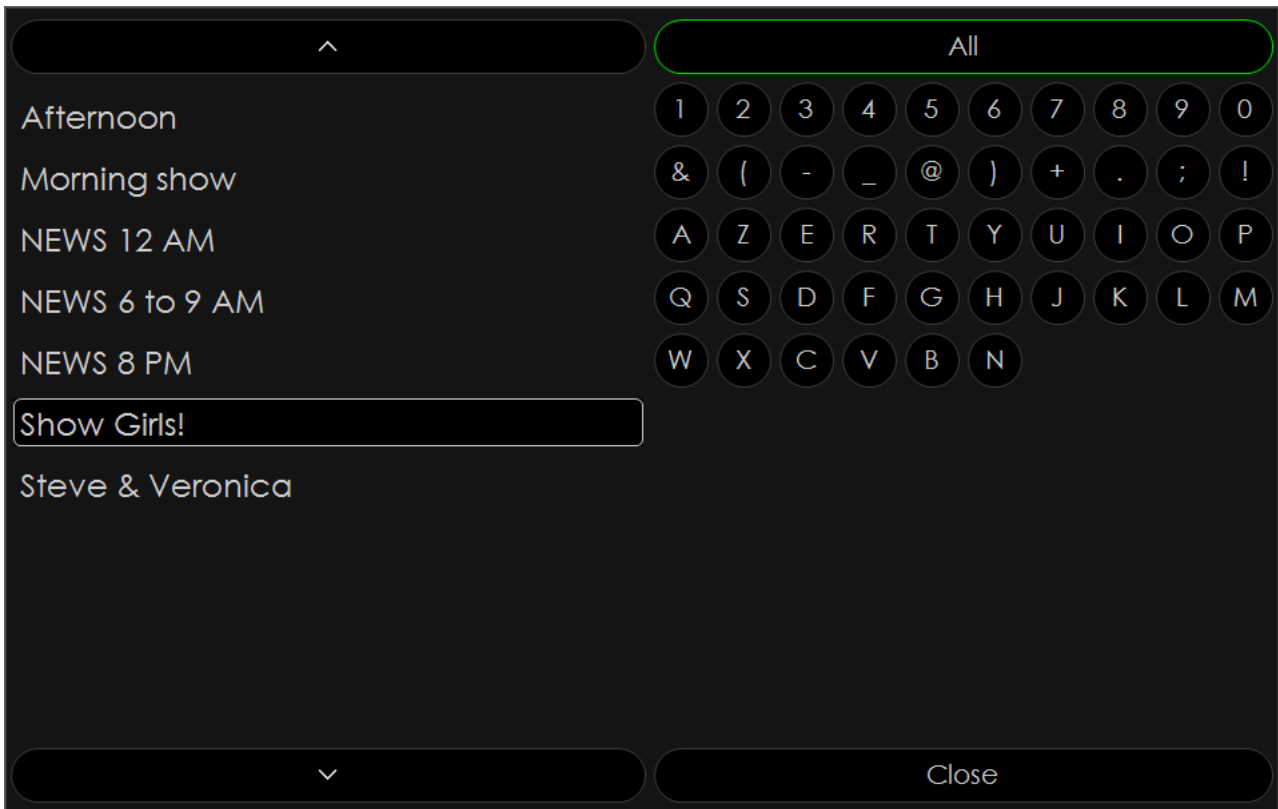
Overview of the two channels (**Mic 1** and **Mic 2**) including channel name, level, mute/de-esser/gate status, and currently loaded preset name. Mute the channel by clicking on the [Mute] button placed on the bottom of the section. If a **Mic** is Muted, the option will be illuminated in red (as depicted below). To de-mute it, press the button again.



## Sessions

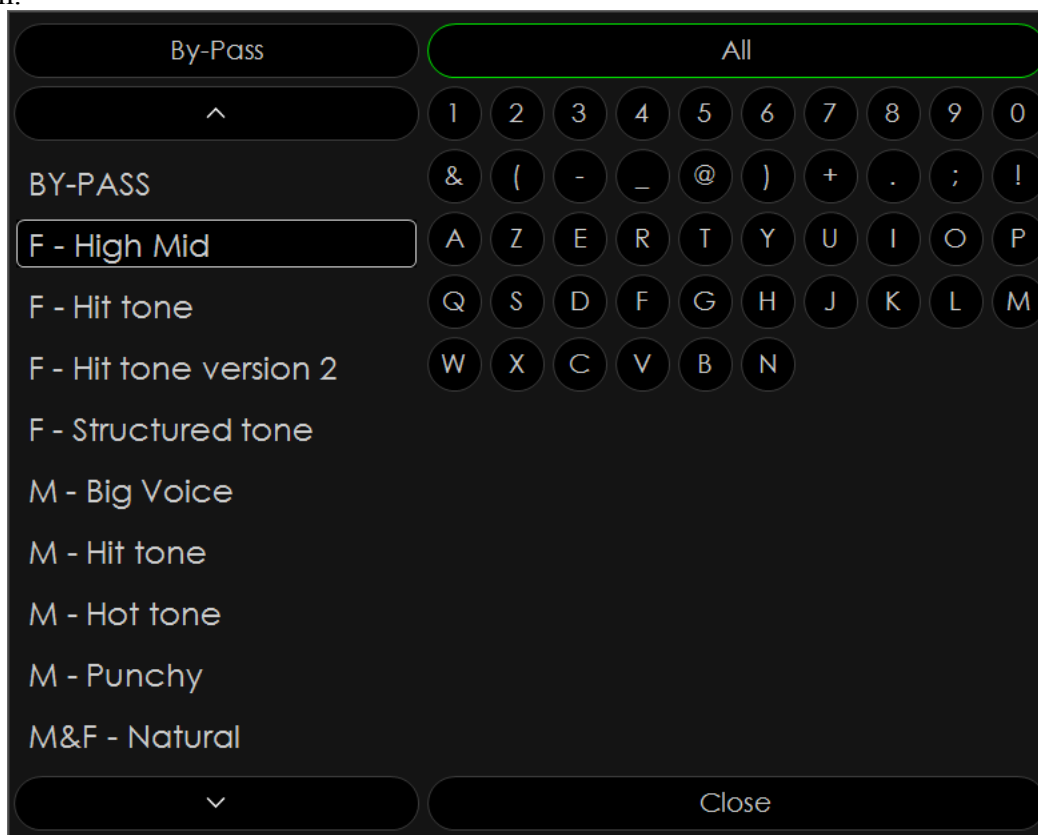


Sessions are used to load configurations for entire shows, and will select presets on the two microphone channels simultaneously. To change the session, click with the mouse cursor on the Sessions filed with the currently used one. This will open a list with all available options, and allow you to select a new one. A click on the name of the session will load it automatically to the device.



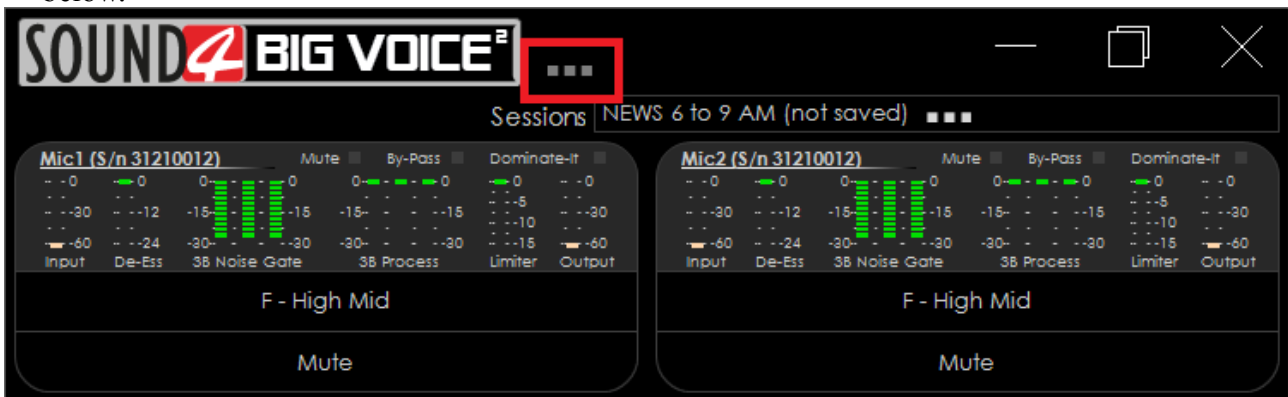
## Preset change

Double click on the name of the preset in one of the MIC sections will open the Presets list. To change the current preset click on the name and it will be automatically uploaded to the MIC chosen.



## Setup

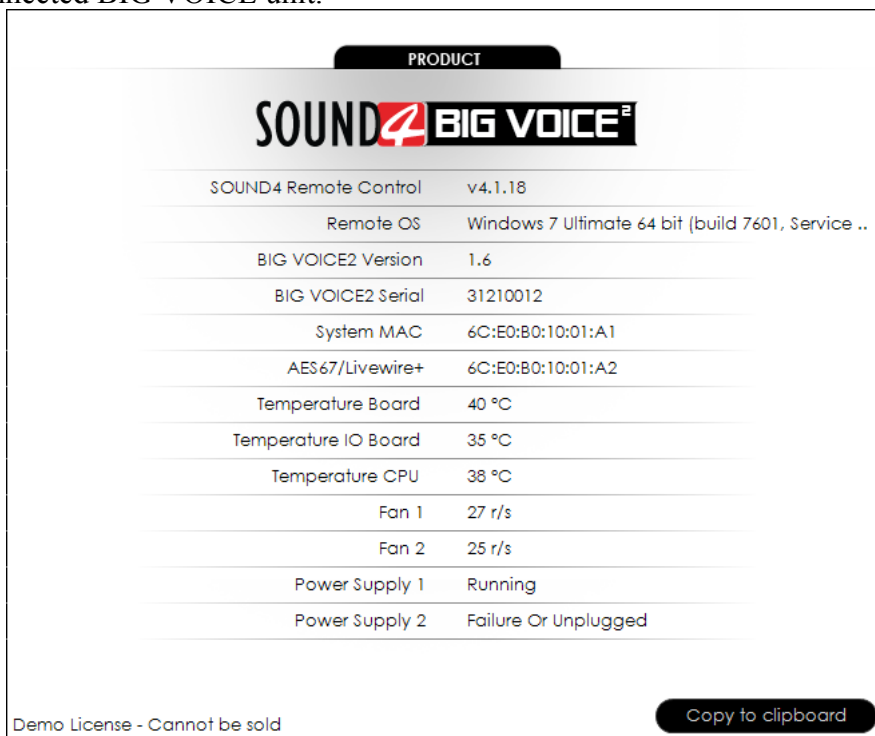
To open the Setup menu, click with the mouse cursor on the symbol marked in red on the screen below.



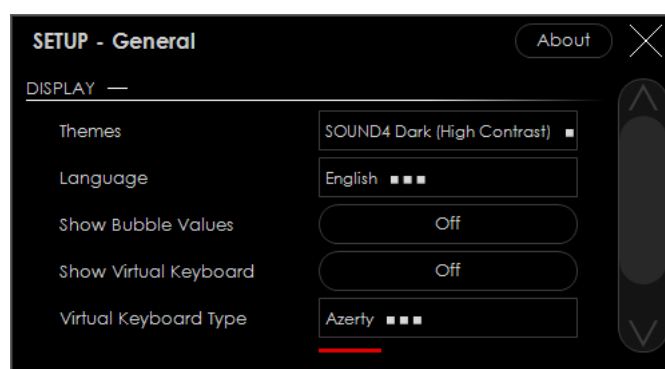
## Setup options

The setup options are limited as this is a very restricted account.

[About] – Displays the current information about the device, along with the current temperatures from the connected BIG VOICE unit.



The only section available in setup for the Live account is Display.





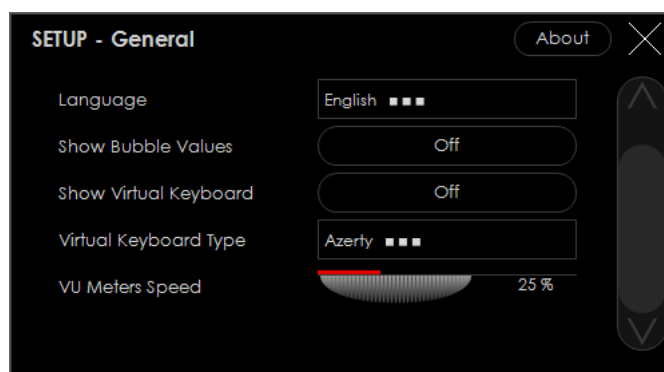
**Themes** – Select the software theme. Two options are available - Dark (high contrast) and Default.

**Language** – Selects the language within the user interface. The available options are English, Spanish, and French. Changing this setting will require restarting the software.

**Show Bubble Values** – Turns [On] and [Off] the bubble values.

**Show Virtual Keyboard** – Turns [On] and [Off] the virtual keyboard.

**Virtual Keyboard** – Selects the layout of the on-screen keyboard used when selecting sessions or presets. The available options are: Azerty and Qwerty.

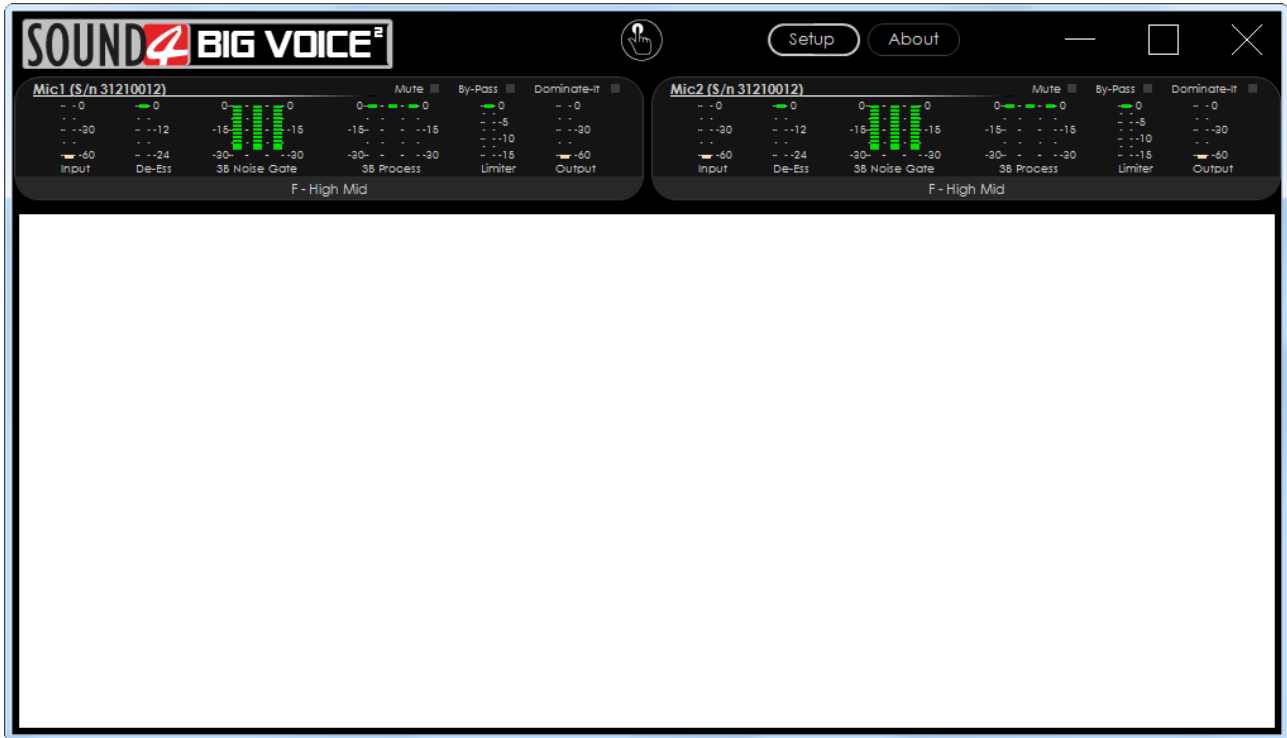


**VU Meter Speed** – This value controls the speed of the onscreen metering and is set in percent. Higher numbers will result in faster metering, though the default of 25% is sufficient.

## ADMIN ACCOUNT

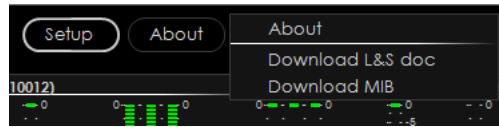
Mainly used for managing user and studio rights and some global configuration settings. Sessions and presets cannot be saved when using this account. User name: **admin**, password: **admin**.

Unlike the Live and Studio Accounts, there can only be one Admin account in the system. Similar to the Live account, the controls in the Admin account are limited.



## Main menu and controls

Overview of the two channels (**Mic 1** and **Mic 2**) including channel name, level, mute/de-esser/gate status, currently loaded preset name and etc.



[About] – Will open a window with the following options.

**About** – Displays the current information about the device, along with the current temperatures from the connected unit.

PRODUCT	
<b>SOUND4 BIG VOICE<sup>2</sup></b>	
SOUND4 Remote Control	v4.1.18
Remote OS	Windows 7 Ultimate 64 bit (build 7601, Service ..
BIG VOICE2 Version	1.6
BIG VOICE2 Serial	31210012
System MAC	6C:E0:B0:10:01:A1
AES67/Livewire+	6C:E0:B0:10:01:A2
Temperature Board	39 °C
Temperature IO Board	34 °C
Temperature CPU	35 °C
Fan 1	27 r/s
Fan 2	24 r/s
Power Supply 1	Failure Or Unplugged
Power Supply 2	Running

Demo License - Cannot be sold Copy to clipboard

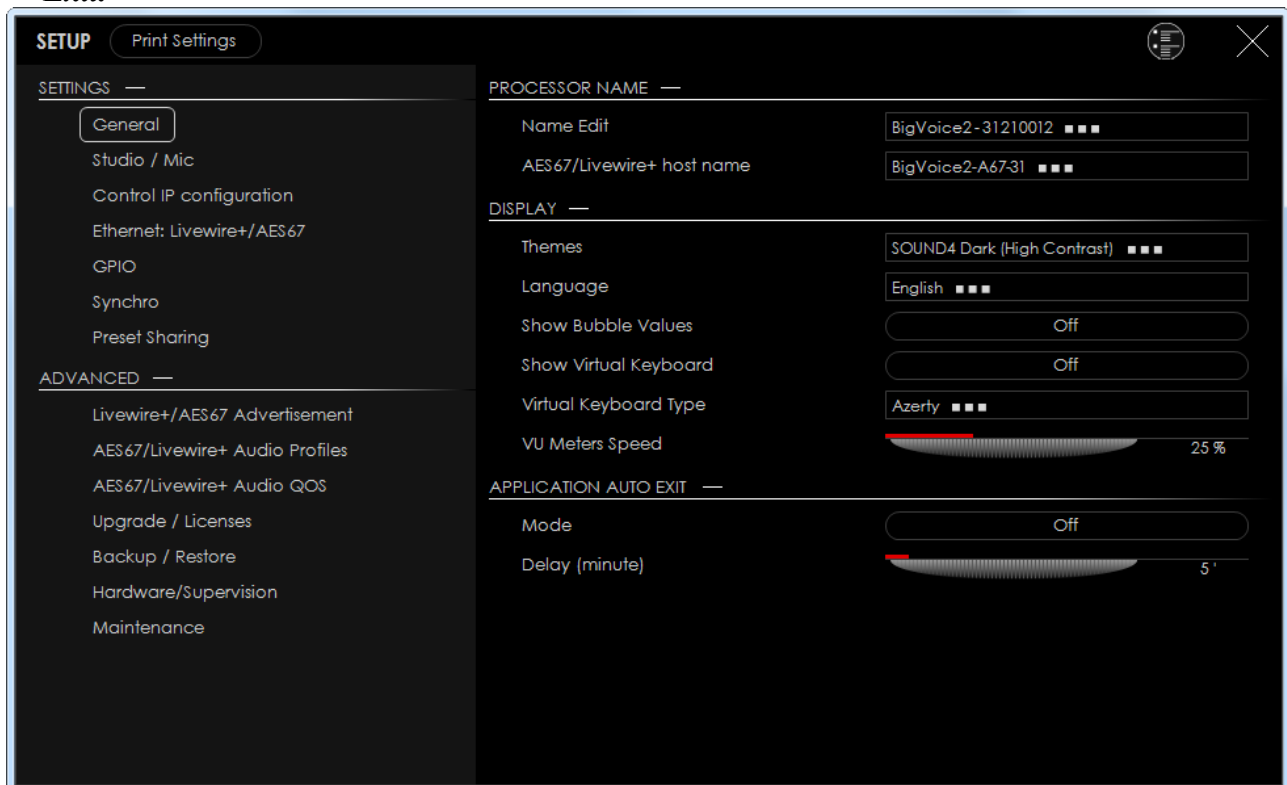
**Download L&S** - SOUND4 provides great feature throughout its product line: Link & Share. This tool is designed to allow remote control and monitoring of the devices across the network, using simple text commands via Telnet. The list of commands is available by clicking on About in the remote control window, then choosing Download L&S doc. The Resulting XML file contains all commands, necessary syntax and parameters applicable to this device and its current version. Using Telnet access by port 3002, it is possible to type commands directly and see the values or change the parameters necessary, or it is possible to use various automation or script APIs to execute these commands to fully integrate SOUND4 products into your facility control and monitoring network.

**Download SNMP MIB File** – The MIB file may vary from one firmware revision to another. Downloading this file from the device, guarantees that you have the proper MIB file.

[Setup] – will open the set-up menu. The menu is divided into two sections - **Settings** and **Advanced**. Each section includes several subsections, thus allowing complete set-up of the device.

## Settings – General

Allows set-up of the following parameters - *Processor Name*, *Display* and *Application Auto Exit*.



### Processor name

Allows the name of the processor and AES67/Livewire+ host name to be customized, hence making it more recognizable.

### Display

**Themes** – Select the software theme. Two options are available - Dark (high contrast) and Default.

**Language** – Selects the language within the user interface. The available options are English, Spanish, and French. Changing this setting will require restarting the software.

**Show Bubble Values** – Turns [On] and [Off] the bubble values.

**Show Virtual Keyboard** – Turns [On] and [Off] the virtual keyboard.

**Virtual Keyboard** – Selects the layout of the on-screen keyboard used when selecting sessions or presets. The available options are: Azerty and Qwerty.

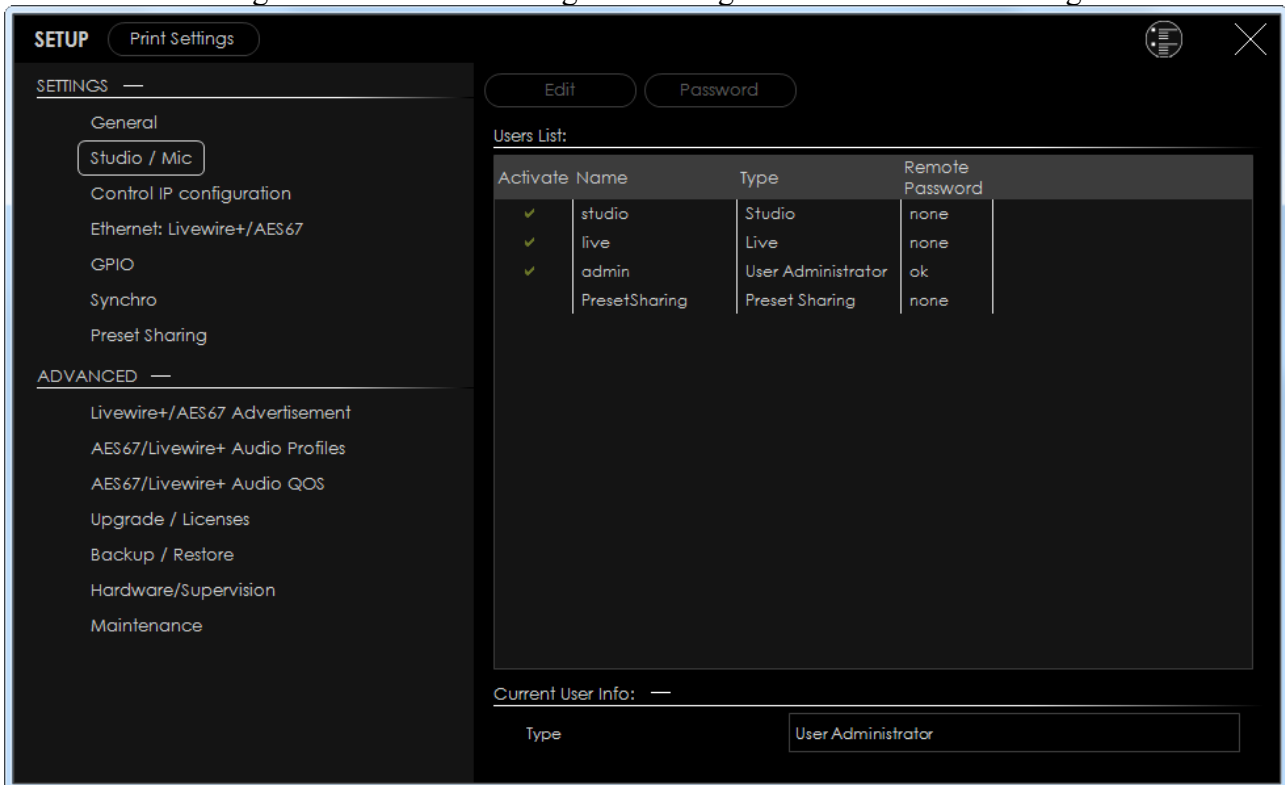
**VU Meter Speed** – This value controls the speed of the onscreen metering and is set in percent. Higher numbers will result in faster metering, though the default of 25% is sufficient.

### Application Auto Exit

Turns the application [On] and [Off] and sets delay time (the time that should elapse after the last user interaction so that the software could be closed).

## Settings – Studio/Mic

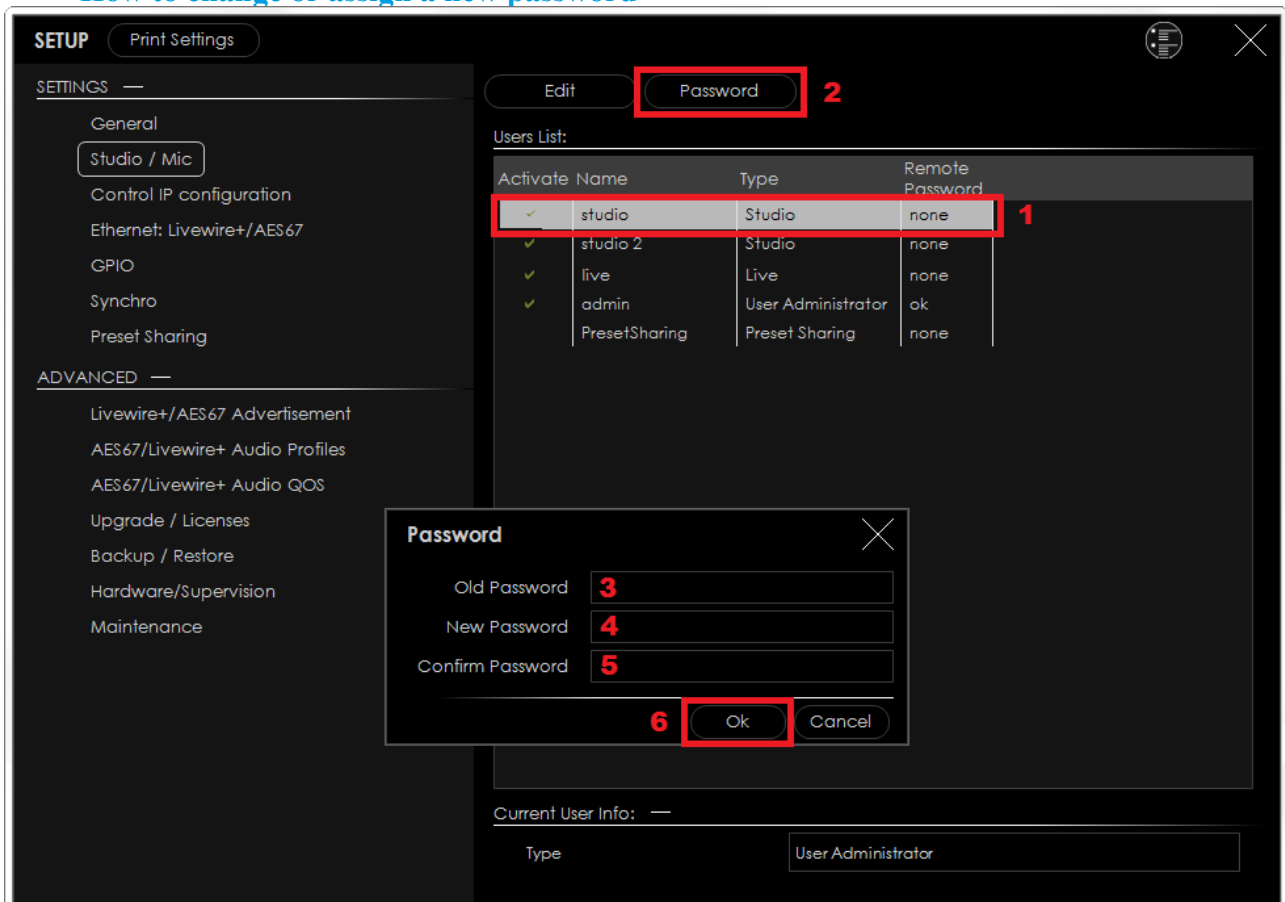
Allows the login accounts to be managed and assigned with Live or Studio rights.



By default there is one Studio account linked with all the assigned microphone inputs, and one Live account linked to the default Studio account. For preset sharing between different BIG VOICE devices with the same password set on the account, there is also one PresetSharing account. This account (just as the Admin) cannot be deleted.

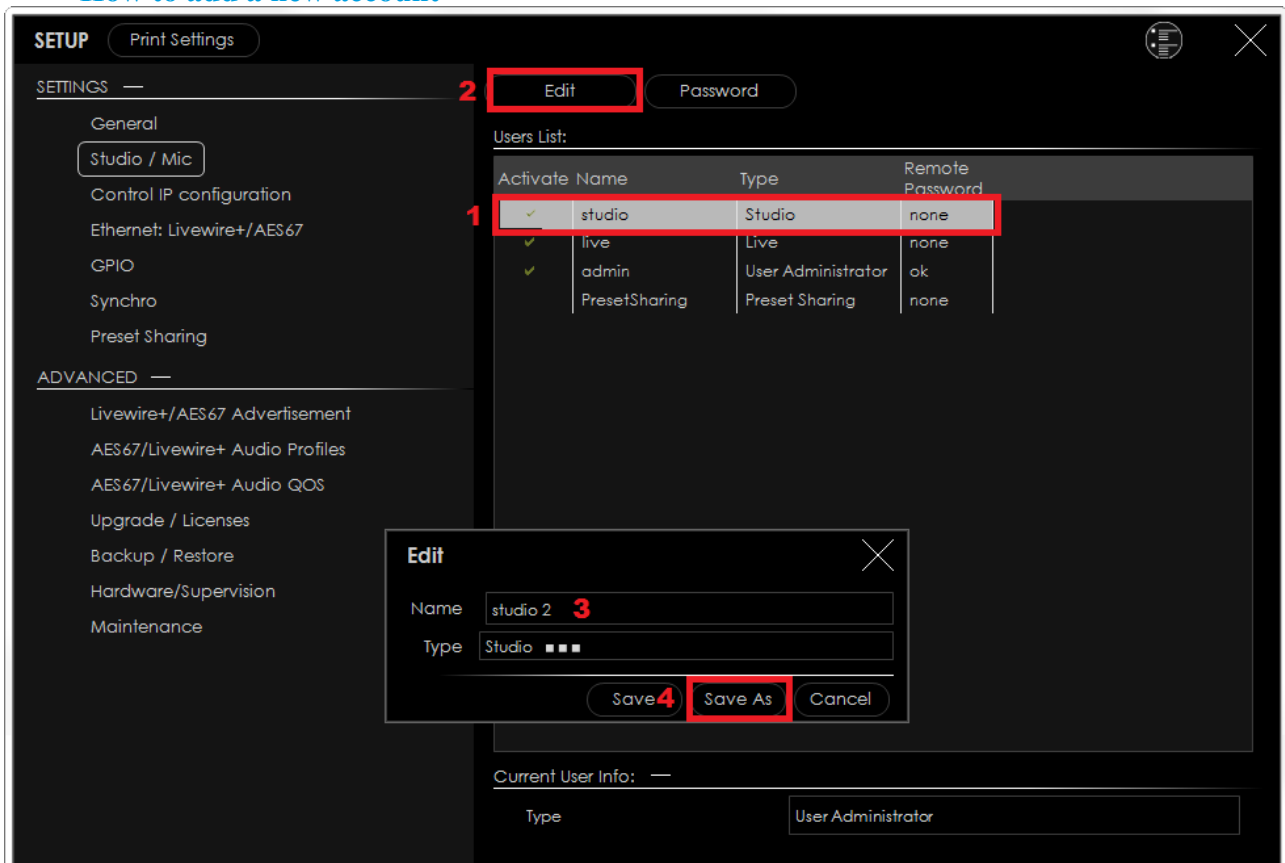
For most of the users the default accounts are sufficient. However, we recommend the default passwords to be changed and the accounts without passwords to be assigned with such.

## How to change or assign a new password



1. Click on the account/user;
2. Click on [Password];
3. For the Studio, Live and PresetSharing accounts leave the Old Password field blank. For the Admin account write the default password **admin** (if not changed);
4. Write the new password;
5. Confirm the new password;
6. Press [OK].
7. If the account did not had a password until now, an “ok” will be written in the Remote Password column. If a password is not assigned, the state will be marked as “none”.

## How to add a new account



1. Click on the default account/user type that you would like to create;
2. Click on [Edit];
3. In the Name field write name for the new connection. Note that the Type is defined by the default account you are using as a basis and cannot be changed;
4. Press [Save as].
5. The new account will be added to the list.

Activate	Name	Type	Remote Password
✓	studio	Studio	none
✓	studio 2	Studio	none
✓	live	Live	none
✓	admin	User Administrator	ok
✓	PresetSharing	Preset Sharing	none

**IMPORTANT NOTE:** To add the newly created account to the SOUND4 Remote Control software, you will need to scan the network for new devices. The procedure is described in [“Network scan for new device” on page 39](#).

## Settings – Control IP configuration

The screenshot shows the 'SETUP' page with a 'Print Settings' button. The left sidebar contains a menu with 'Control IP configuration' selected. The main content area is split into three sections:

- SETTINGS**: A list of configuration categories including General, Studio / Mic, Control IP configuration (selected), Ethernet: Livewire+/AES67, GPIO, Synchro, and Preset Sharing.
- NETWORK HOST NAME**: A form for configuring network parameters:
 

Network host name	SOUND4_31210012
DHCP	On
IP Address	...
IP Default Gateway	...
IP Mask	255.255.2550
IP Broadcast	...
DNS Server	...
DNS Server 2	...
- CURRENT (DISPLAY ONLY)**: A read-only display of the current network configuration:
 

Network host name	SOUND4_31210012
Status	DHCP
MAC address	6C:E0:B0:10:01:A1
IP Addr	192.168.20.211
IP Subnet Mask	255.255.255.0
IP Gateway	192.168.20.1
IP Broadcast	192.168.20.255

**Network Host Name** – Allows the user to apply the needed changes to the IP configuration - to specify Network host name (that will identify the device on the network), to turn [On] and [Off] the **DHCP** and specify **DNS Server**.

If **DHCP** is turned Off make sure to specify IP Address, IP Default Gateway, IP Mask and IP Broadcast.

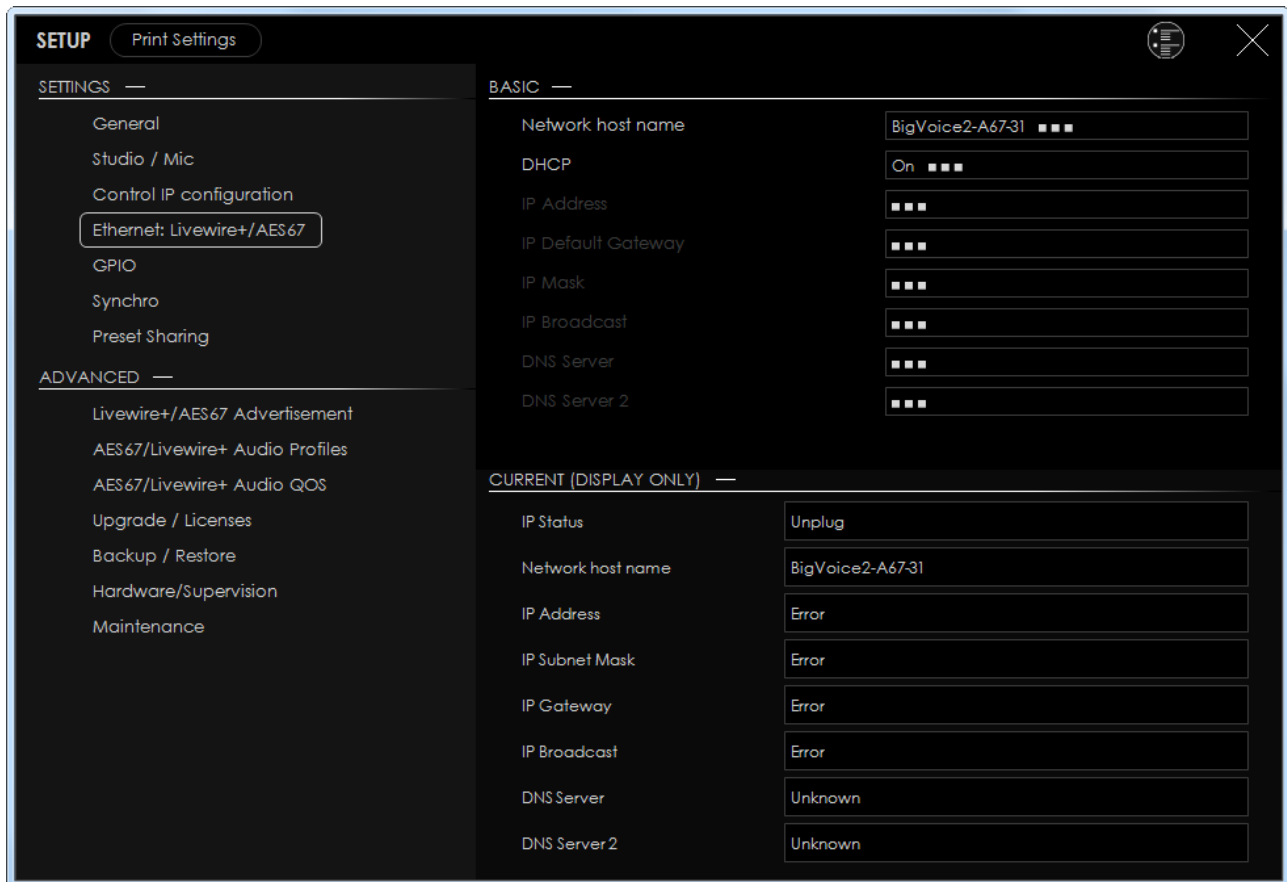
**IT IS RECOMMENDED** a static IP address to be assigned to the unit either by disabling the DHCP and entering static IP address, or by reserving an address for the interface MAC address in the DHCP server.

**Current (Display only)** – displays the current information obtained from the device, thus allowing you to verify the applied settings.



## Settings – Etherer: Livewire+/AES67

This menu allows you to set and verify IP configuration parameters for the Audio over IP interface.



**Basic** – allows the user to specify **Network host name** and to turn [On] and [Off] the **DHCP**. If DHCP is turned Off make sure to specify IP Address, IP Default Gateway, IP Mask, IP broadcast and **DNS Server**.

**Current (Display only)** – displays the current information obtained from the device, thus allowing you to verify the applied settings.

If you experience any difficulties with the set-up, please contact your network administrator.

## Settings – GPIO

The general purpose inputs and outputs settings are applied through this page. Each GPI/GPO is set individually so as to fit the user’s requirements.

**SETUP** Print Settings

**SETTINGS** —

- General
- Studio / Mic
- Control IP configuration
- Ethernet: Livewire+/AES67
- GPIO**
- Synchro
- Preset Sharing

**ADVANCED** —

- Livewire+/AES67 Advertisement
- AES67/Livewire+ Audio Profiles
- AES67/Livewire+ Audio QOS
- Upgrade / Licenses
- Backup / Restore
- Hardware/Supervision
- Maintenance

**Running** **Master GPI**

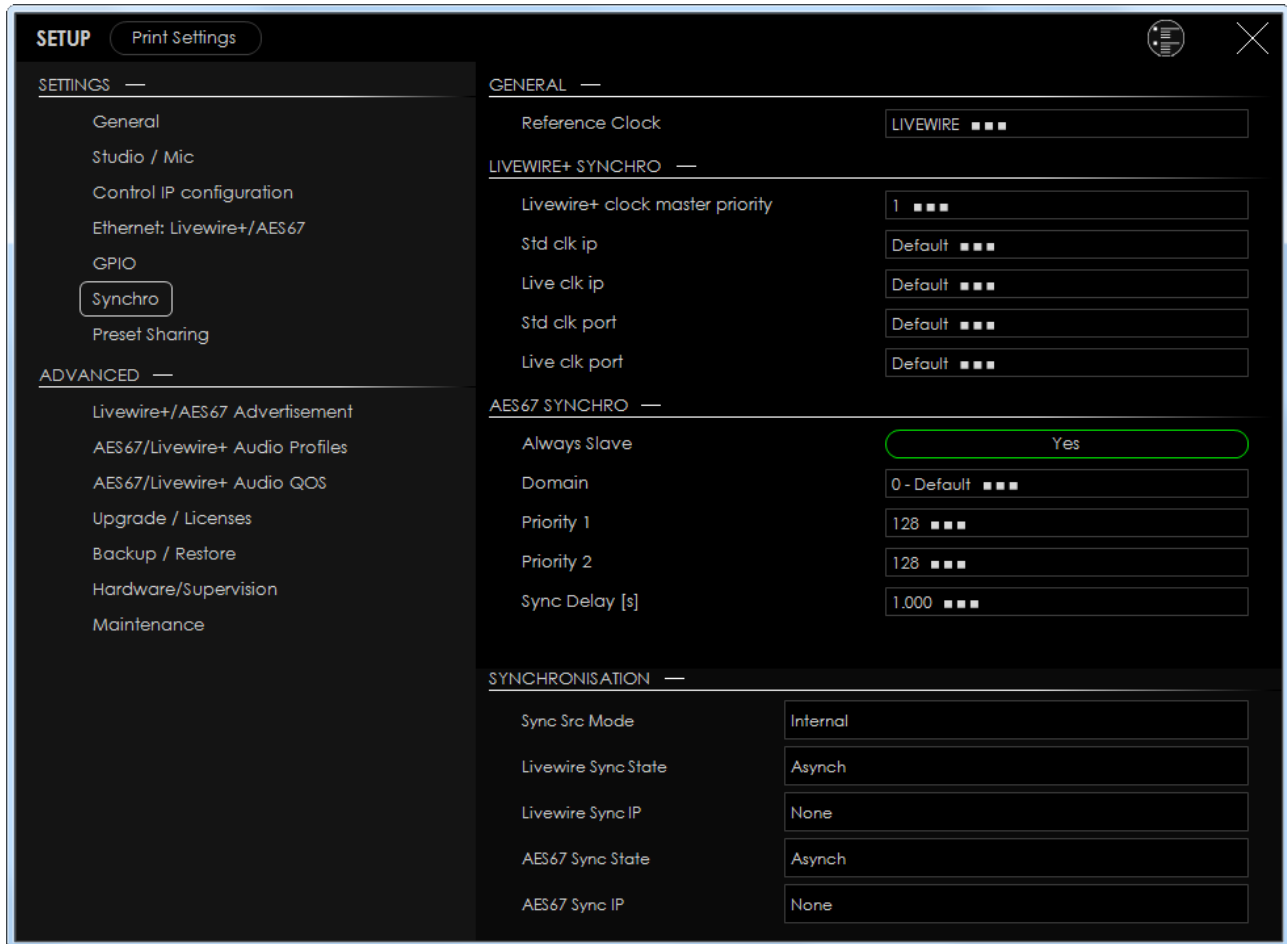
Unused	GPI 1 (Pin 13)	No Action	No Action
Unused	GPI 2 (Pin 12)	No Action	No Action
Unused	GPI 3 (Pin 11)	No Action	No Action
Unused	GPI 4 (Pin 10)	No Action	No Action
Unused	GPI 5 (Pin 9)	No Action	No Action
Unused	GPI 6 (Pin 8)	No Action	No Action
Unused	GPI 7 (Pin 22)	No Action	No Action
Unused	GPI 8 (Pin 6)	No Action	No Action

**Running** **Master GPO**

Unused	GPO 1 (Pin 15)	No Action
Unused	GPO 2 (Pin 16)	No Action
Unused	GPO 3 (Pin 17)	No Action
Unused	GPO 4 (Pin 18)	No Action
Unused	GPO 5 (Pin 19)	No Action
Unused	GPO 6 (Pin 20)	No Action
Unused	GPO 7 (Pin 21)	No Action
Unused	GPO 8 (Pin 23)	No Action

## Settings – Synchro

Configures and displays the status of the AoIP synchronization parameters. Both the Livewire+ and AES67 are supported by the device and may serve either as master or slave clock on these networks.



The Reference Clock can be synced either to the LIVEWIRE, Internal or AES67.

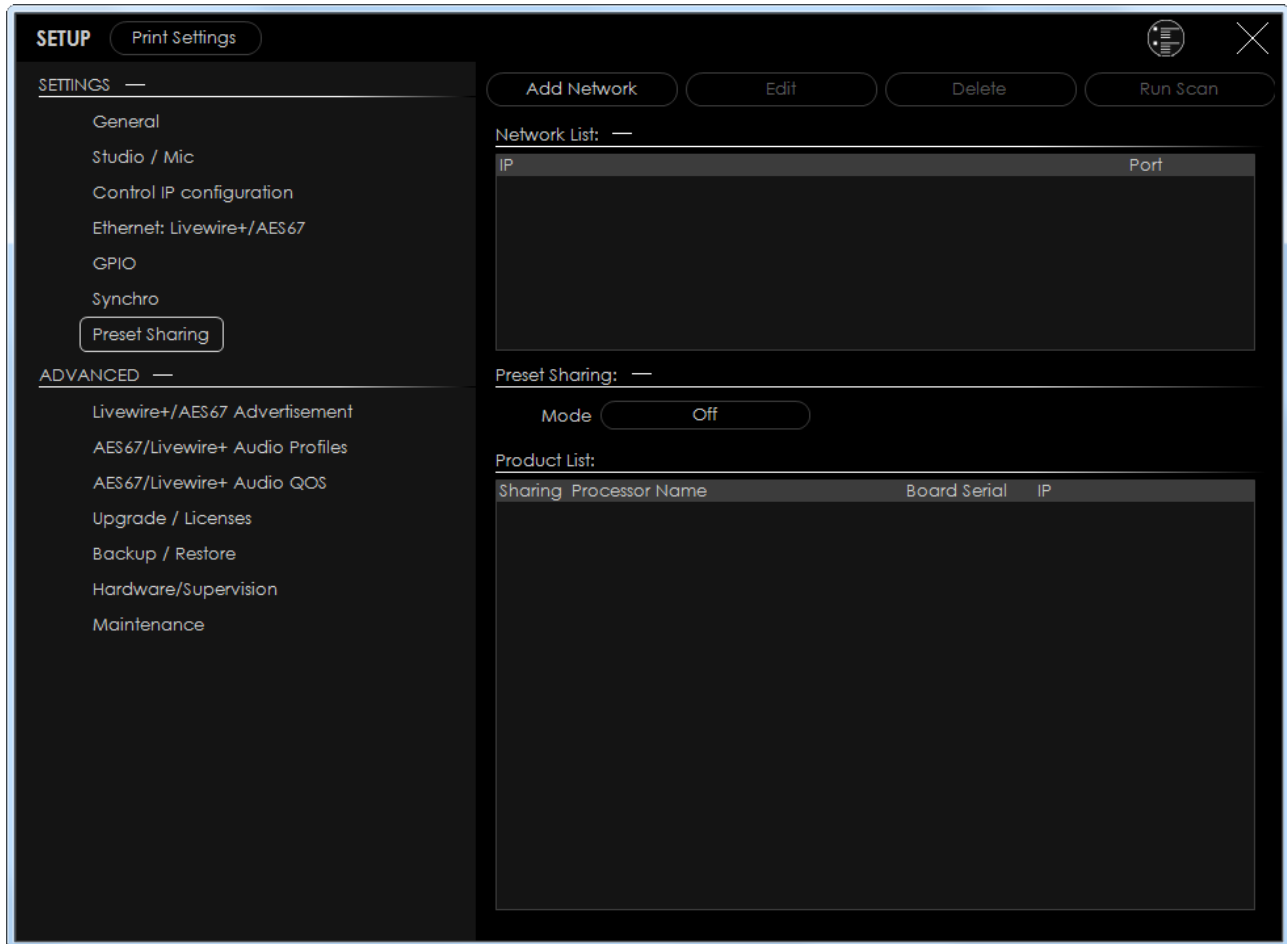
LIVEWIRE+ SYNCRO is used to set the Livewire+ clock master priority from the available options. You can also set the Studio (std) and Live clk (clock) ip and port.

AES37 SYNCRO allows you to enable or disable (Yes/No) the Always Slave option. As an addition you can also set the Domain, Priority 1 & 2 and Sync Delay.

SYNCHRONISATION contains information as regards the currently applied settings.

## Settings – Preset Sharing

Presets modified/created in one studio can be instantly shared in all other studios hence reflecting the modifications. All the needed settings for the Preset Sharing option are applied through this menu page.



You have to make sure that the password for the PresetSharing account on all BIG VOICE units that will share presets are identically set. Then, in Preset Sharing, set the Mode to [On].

To add a new network:

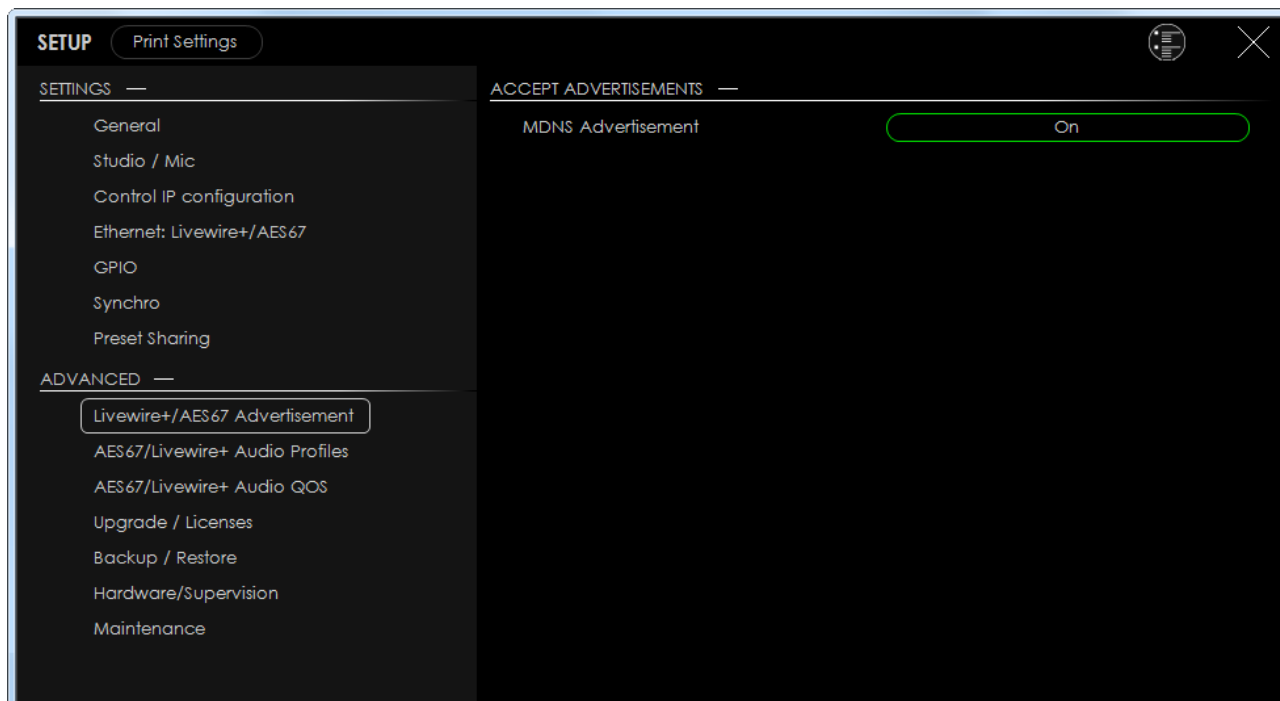
1. Press [Add Network], a list of the available interfaces and networks connected to the SOUND4 BIG VOICE<sup>2</sup> - Base will appear;
2. Click on the line to be added and press [Add selected] so that it could be displayed in the Network list,
3. Then press [Run Scan];
4. If the interface is not added/displayed, press [Add Network], then [Add Custom Network] and add the device/s manually. The preset port for sharing is 3001 and it is not recommended to be changed.

[Edit] is used to edit an entry and [Delete] to delete one if needed.

## Advanced

This section contains all the advanced configuration parameters related to AoIP formats and Qos, licenses, backup/restore functions and maintenance functions.

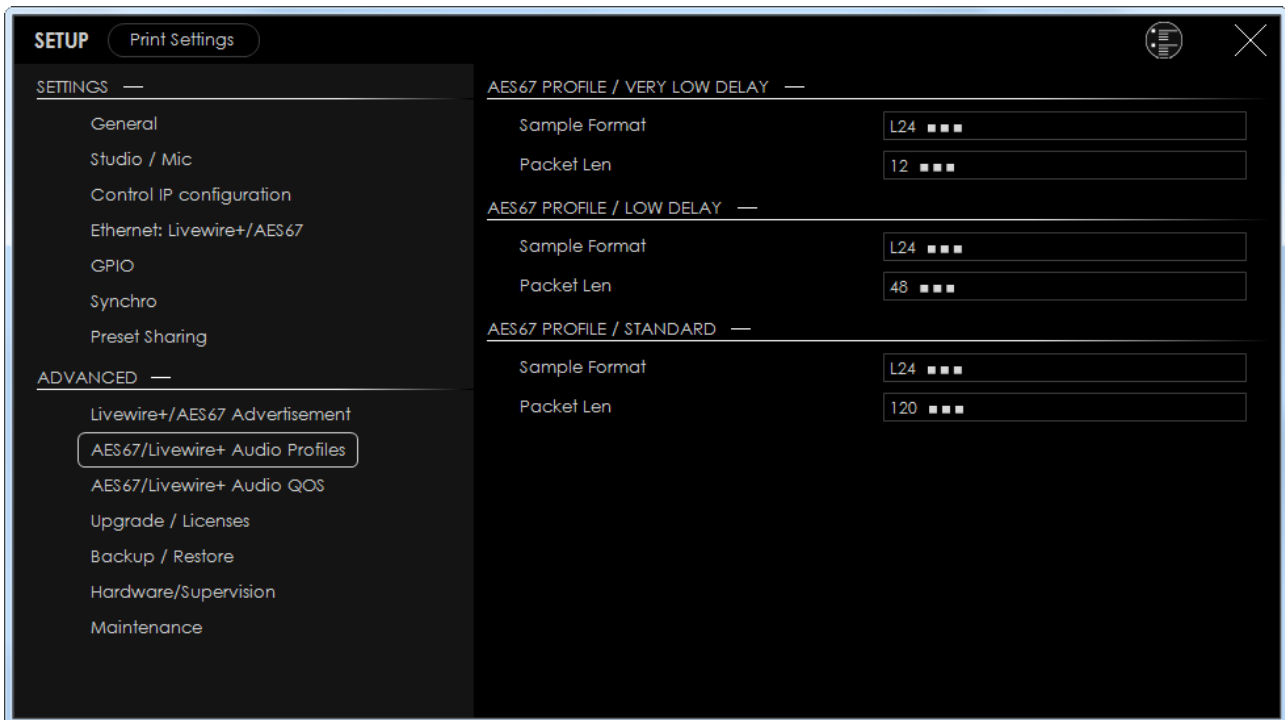
### Advanced – Livewire+/AES67 Advertisement



Allows MDNS Advertisements to be turned [On] and [Off].

## Advanced – Livewire+/AES67 Audio Profiles

This section is intended to control the packet length and sample format parameters for several AES67 AoIP traffic configurations.



Supported are three profiles with identical settings (but different default values) - Very Low Delay, Low Delay and Standard.

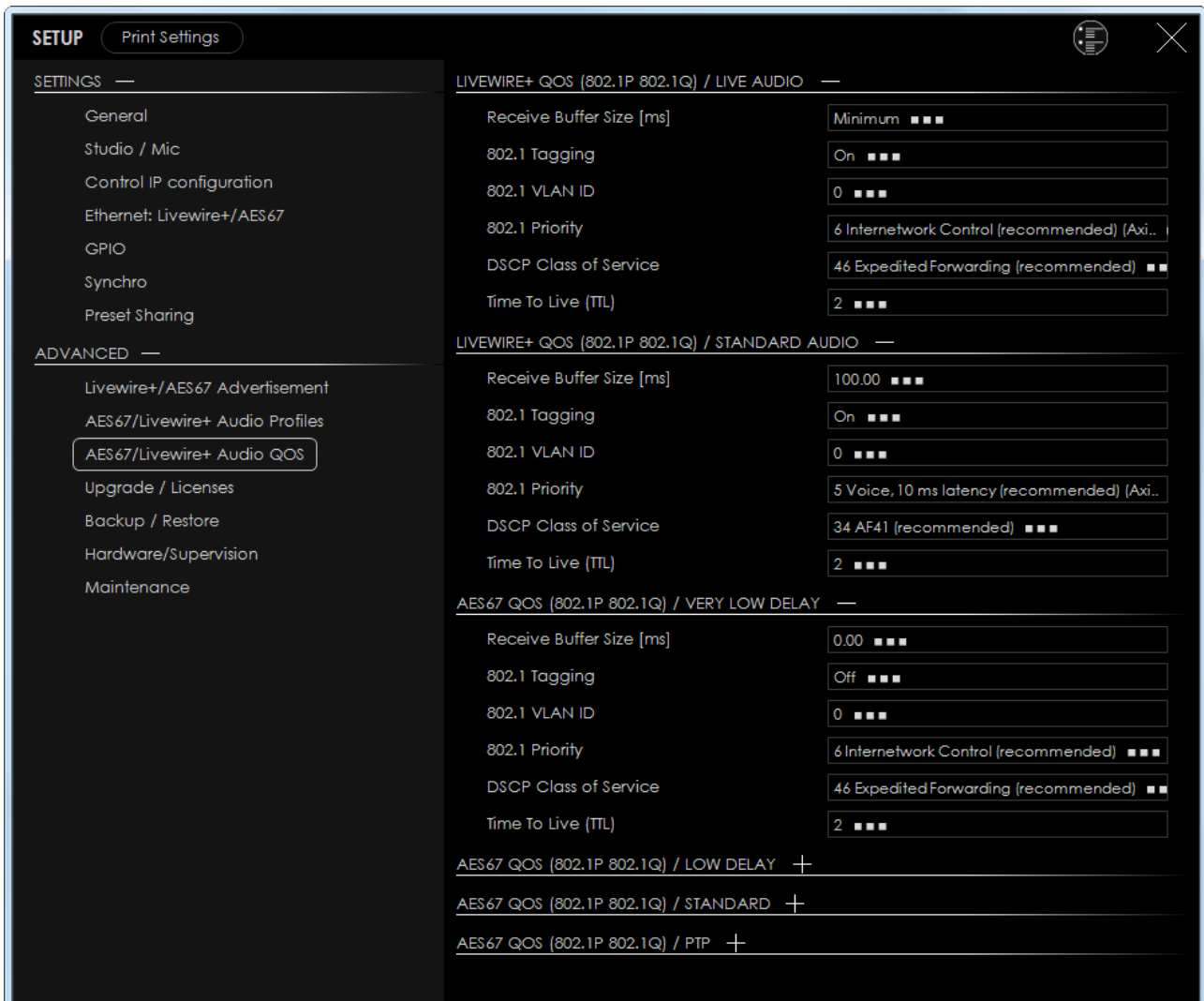
**Sample Format** – You can choose among the following options - L16, L24, AM824 and L32.

**NOTE:** The AM824 format is 32bit format with 24 bits of audio data and 8 bits for AES3 side-band data that was never fully standardized. The format is included for experimental purposes only.

**Packet Len (length)** – adjusts the AoIP packet length in samples. The available options are - 12, 48, 240. Shorter length will result in lower latency with higher bandwidth, and longer lengths will have lower bandwidth but more latency.

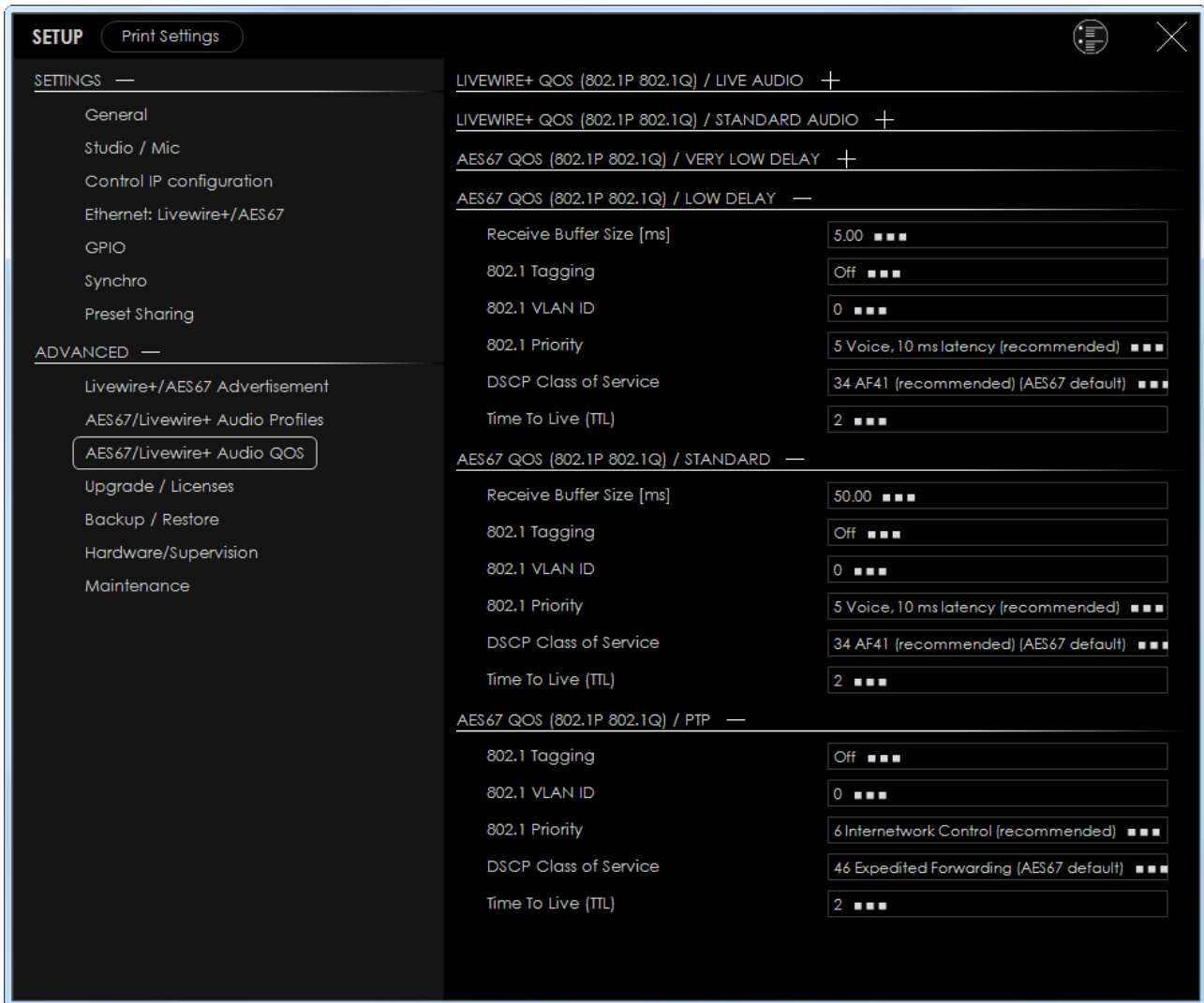
### Advanced – Livewire+/AES67 Audio QoS

Adjusts the 802.Ip QoS parameters of the AoIP formats and the 802.1Q VLAN tagging for AoIP. QoS settings are provided separately for each type of AoIP streams supported.



The default parameters are usually sufficient for most installations and it is not recommended the settings to be changed unless there is a specific application that requires so.

**NOTE** that improper configuration of these parameters can cause audio glitches and other network issues.



A full descriptions of all QoS functions is not in the scope of this manual. Brief description can be found below:

**Receive Buffer Size** – Sets the packet receive buffer size in milliseconds for AoIP streams (audio streams only). The default values set should be sufficient for the configuration and will not add overall latency of each stream type. Generally speaking, increasing the value will increase the audio latency, and reducing these numbers will add an overall latency.

**802.1 Tagging** – Defines whether or not packets are tagged with 802.1Q information, including VLAN ID and priority. To route a specific types of AoIP packets to specific VLANs with specific priorities, use this option in combination with appropriate switch configurations.

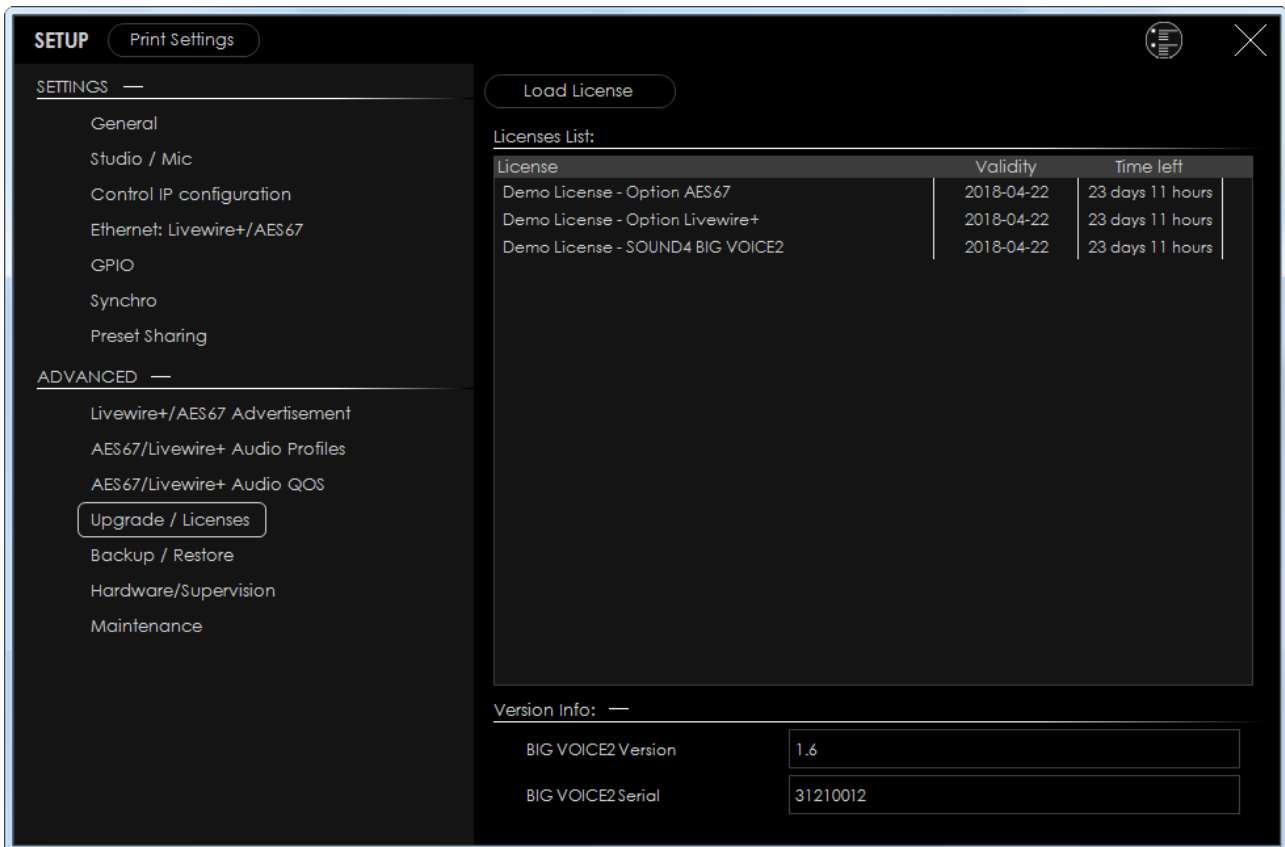
**802.1 VLAN ID** – Specify the 802.1 VLAN ID to be used when the tagging option is enabled.

**802.1 Priority** – Sets the 802.1p priority level in the 802.1Q target packet.

**DSCP Class of Service** – Specifies the Different Services Code Point for traffic management classification.



## Advanced – Upgrade/Licenses



There are two options of loading a new license/s. Both are explained in details below.

### Expired license

If your license has expired, a warning message “ Your main license has expired! Please contact SOUND4 for renew your main license” will appear on the screen.

To upload a new license follow the steps listed below:

1. Press [OK]. The “Setup - Upgrade / Licenses” screen will appear;
2. Press [License upload] and a new window requiring license file to be selected will open;
3. Go to the file directory, select the license and press [Open].

**NOTE:** All licenses are sent/provided in a ZIP file. It is not needed the file to be unzipped prior to their upload. They will be accepted by the program as they are.

4. Wait until the licenses are loaded;
5. Once the process is completed, a notification message will appear:
6. Press [OK] and the Main control window will appear.

### New license

1. Press [Load Licenses];
2. Go to the file directory, select the license and press [Open].

**NOTE:** All licenses are sent/provided in a ZIP file. It is not needed the file to be unzipped prior to their upload. They will be accepted by the program as they are.

3. Wait while the licenses are loaded;
4. Once the process is completed, press [OK] and close the Setup window so that the Main control can appear.

## Advanced – Backup/Restore

This section is dedicated to the Backup, Restore and Restore to Factory processes. To ease the completion of each option, thorough information as regards each opportunity can be found in the right part of the screen.

The screenshot displays the 'SETUP' interface with a 'Print Settings' button in the top right. A left sidebar lists settings categories: 'SETTINGS' (General, Studio / Mic, Control IP configuration, Ethernet: Livewire+/AES67, GPIO, Synchro, Preset Sharing) and 'ADVANCED' (Livewire+/AES67 Advertisement, AES67/Livewire+ Audio Profiles, AES67/Livewire+ Audio QOS, Upgrade / Licenses, **Backup / Restore**, Hardware/Supervision, Maintenance). The main area features three buttons: 'Backup', 'Restore', and 'Restore To Factory'. Below these are sections for 'Information' and 'Warning'.

**Information:**

- The "Backup" function will save all your processor data. Your Presets, history, access rights and Settings will be compacted into a backup file that you may store wherever you want.
- The "Restore" function will fully restore your processor from a backup file. Your Presets, history, access rights and current Settings will be replaced by the values contained in the file.
- The "Restore To Factory" will to completely re-initialize your processor. All of your data (Presets, history, accessrights and Settings) will be erased and replaced by Factory values.
- A backup file can also be used to duplicate a configuration on multiple processors.

**Warning:**

- Before restoring a processor, you must know the passwords which were configured when the backup file was created. Without those passwords it will be impossible for you to access the processor after the restore function is complete.

## Advanced – Hardware/Supervision

Allows set-up of the Display, SNMP and Windows share options. This section also provide all the needed information for the Temperature, Main CPU Usage and FAN.



**SNMP** – turn the option [On] or [Off] and specify SNMP Port, SNMO RO Community, SNMO RW Community, SNMP Trap Host and SNMP Trap Port.

**Windows Share** – turn the option [On] or [Off] and specify Windows Share description and Windows Share Workgroup.

**Power Supply** – displays the current status of the PSU 1 and PSU2 and Analog Power.

**Temperature** – displays the current temperature (in Celsius) of the Board, CPU, Sharc1 to 4 and IO Board.

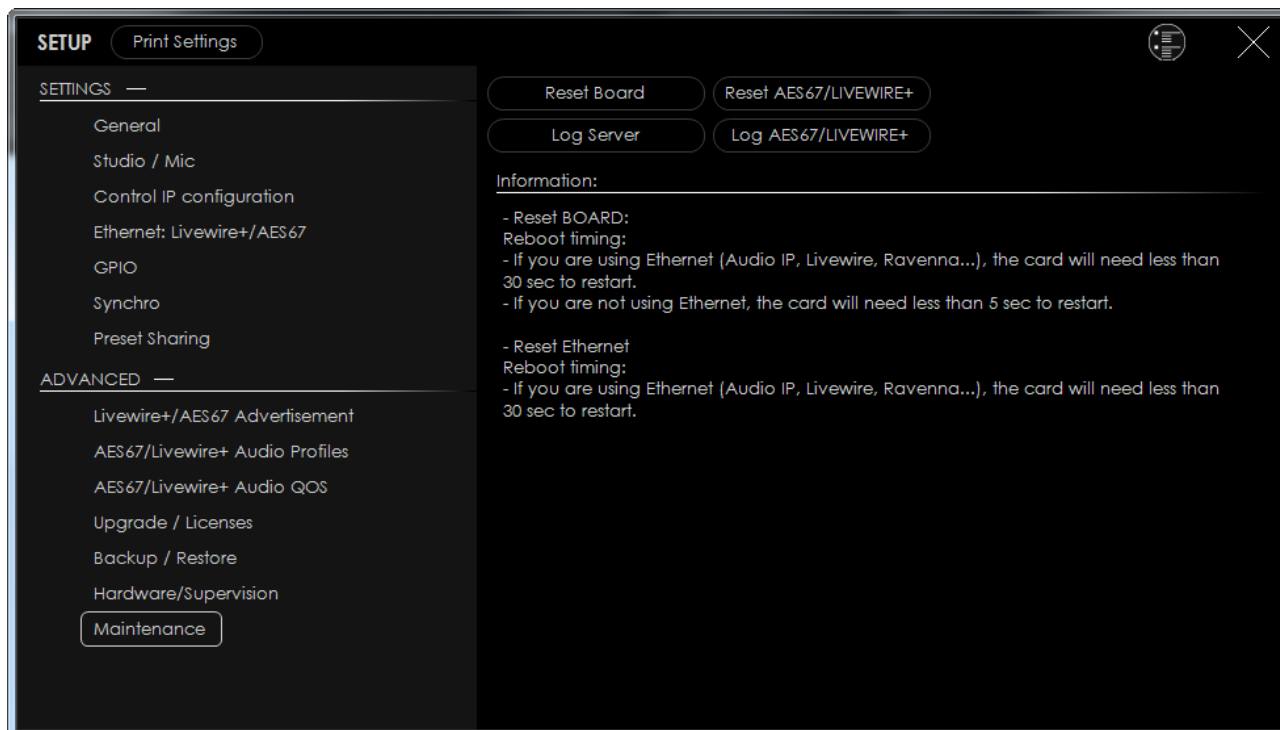
**Main CPU usage** – displays the current CPU usage in %.

**Fan** – displays the current status of FAN 1 & 2 in rotations per second.

**Remote assistance** – Turns [On] and [Off] the remote assistance access. It is recommended the remote assistance option to be enabled always.

## Maintenance

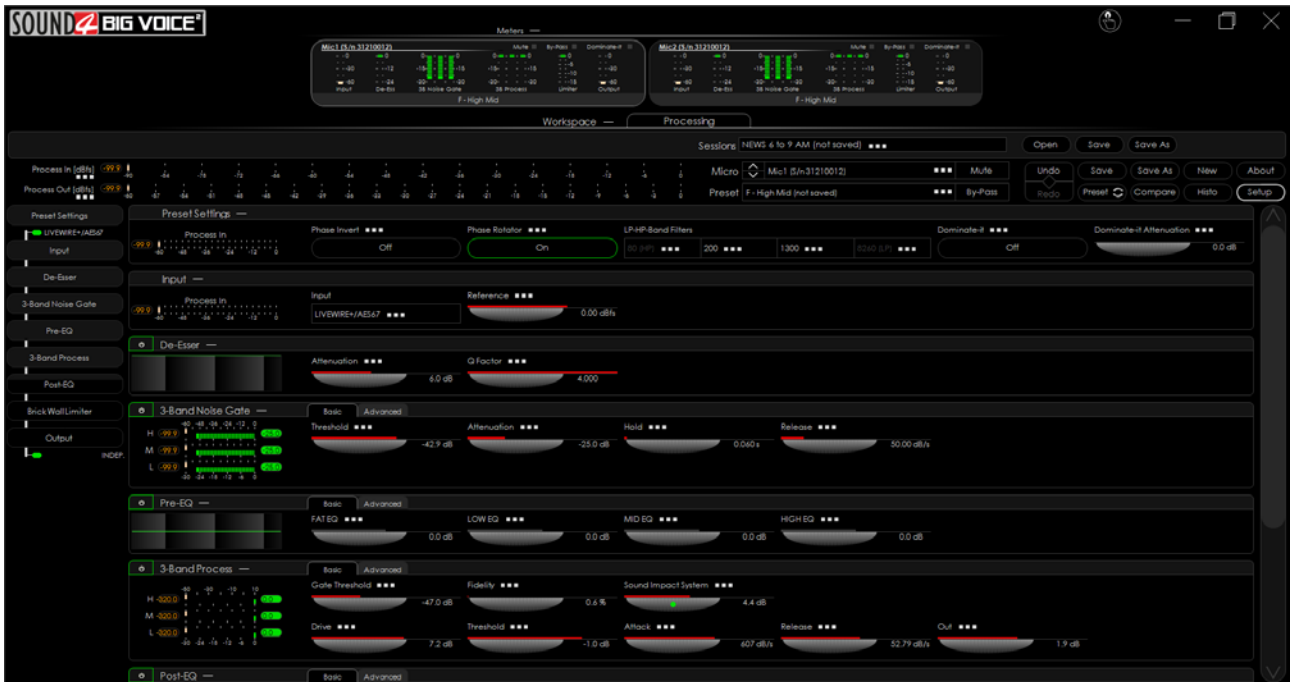
Intended to reset various components if the system. Information as regards the available options can be found in the right part of the screen. Upon selecting any of the reset options, a warning message will appear. To continue with the process, press [Ok].



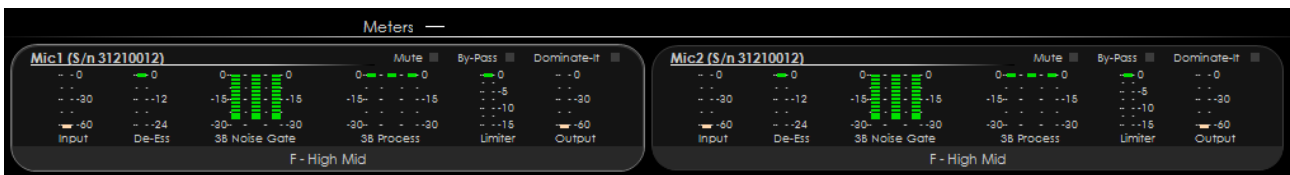
## STUDIO ACCOUNT

The Studio account is where the actual processing configuration happens. It grants you with full access to the session, preset and processing management options. The Setup menu is expanded and provides you with access to the inputs and outputs.

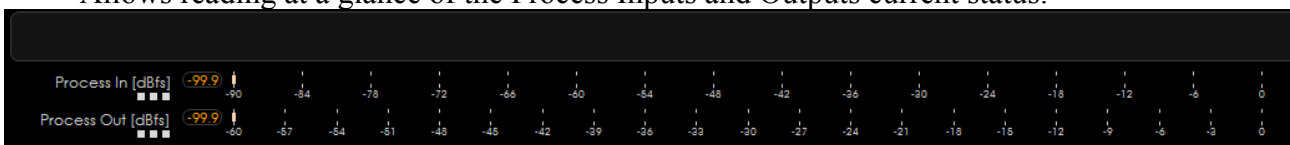
### Main menu and controls



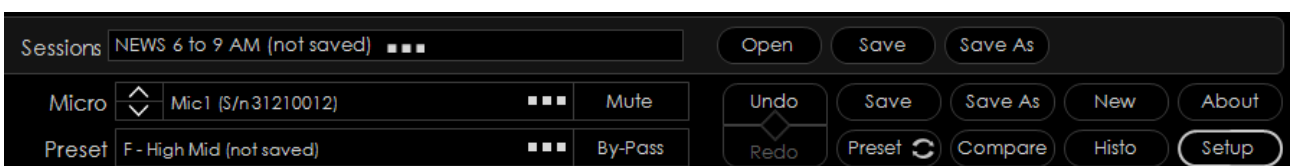
Overview of the two channels (Mic 1 and Mic 2) including channel name, level, mute/de-esser/gate status, currently loaded preset name and etc.



Allows reading at a glance of the Process Inputs and Outputs current status.



Sessions are used to load configurations for entire shows, and will select presets on the two microphone channels simultaneously. To change the session, click with the mouse cursor on the Sessions filed with the currently used one. This will open a list with all available options, and allow you to select a new one. A click on the name of the session will load it automatically to the device. For detailed explanation How a new session can be created, please [refer to “How a new session can be created” on page 71.](#)



**Micro** – allows you to toggle between two microphones and if need be - [Mute] them.  
**Preset** – allows you to change the preset of the Mic or [By-Pass] the audio.

[Undo]/[Redo] – will undo or redo the settings applied to the processing settings.

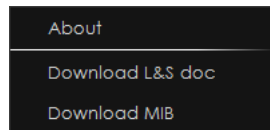
[Preset] – To select a preset, press on [Preset] button, and list of all presets will appear on the screen. Double click on the desired preset will load it automatically to the device. The preset can be used as it is, or some changes to the parameters can be applied. For detailed explanation How a new preset can be created, please [refer to “How a new preset can be created” on page 72.](#)

[Compare] – A list of presets will be loaded. Then you can click on a preset of choice and then on

[Reference] – Upon pressing the button, the software will toggle between the settings of the two presets allowing a comparison to be made.

[Histo] (History) – Will open a window with list of the presets used.

[About] – Will open a window with the following options.



- About – Displays the current information about the device, along with the current temperatures from the connected unit.
- Download L&S doc – SOUND4 provides great feature throughout its product line: Link & Share. This tool is designed to allow remote control and monitoring of the devices across the network, using simple text commands via Telnet. The list of commands is available by clicking on About in the remote control window, then choosing Download L&S doc. The XML file contains all commands, necessary syntax and parameters applicable to this device and its current version. Using Telnet access by port 3002, it is possible to type commands directly and see the values or change the parameters necessary, or it is possible to use various automation or script APIs to execute these commands to fully integrate SOUND4 products into your facility control and monitoring network.
- Download SNMP MIB File – The MIB file may vary from one firmware revision to another. Downloading this file from the device, guarantees that you have the proper MIB file.

[Setup] – will open the set-up menu. For detailed information on the process, please [refer to “Settings” on page 86.](#)

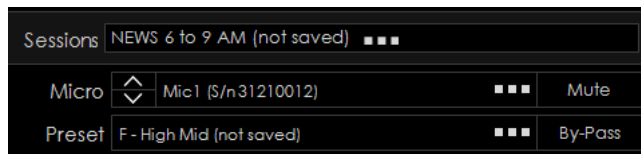
## How a new session can be created

The procedure is quite simple. Below you will find a step-by-step description of the process:

1. Press on [Preset] and choose a factory preset that you would like to use for the session;



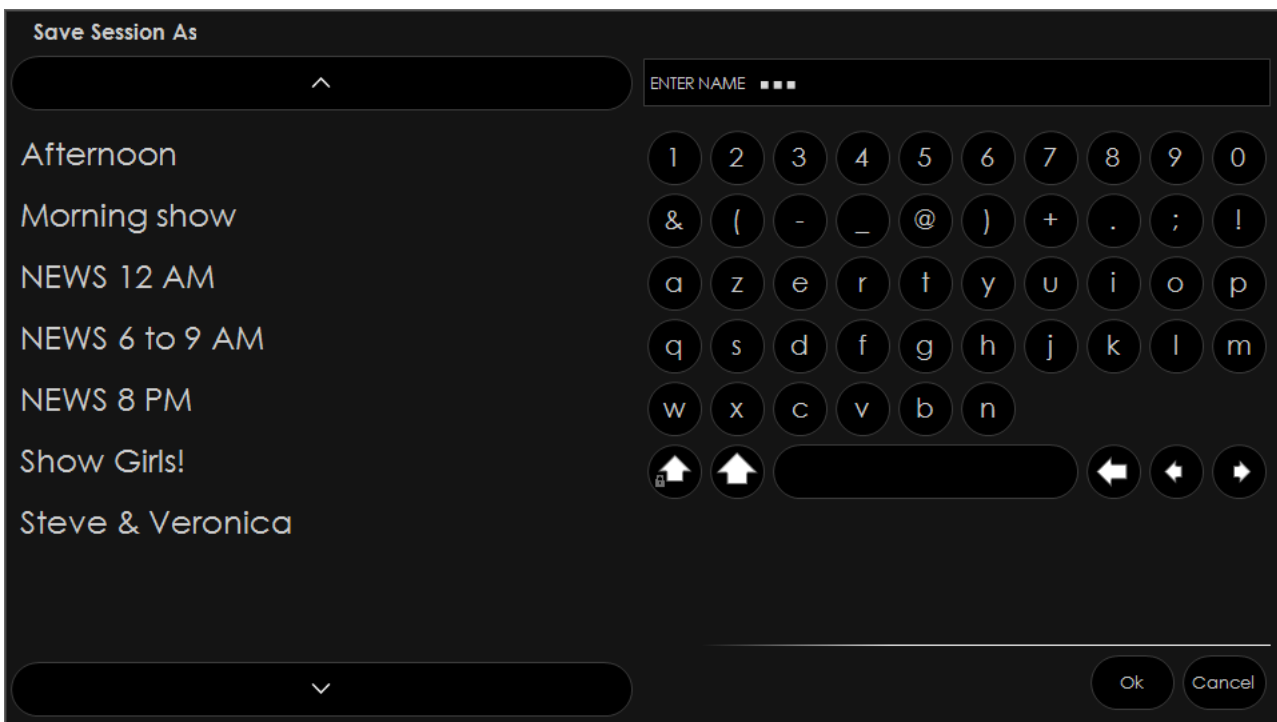
2. If need be, in section Processing, modify the parameters that you think would improve the enhancement of your signal and will make your station's sound unique. For detailed information on the available options, and how a new preset can be made, please [refer to "Processing" on page 79](#) and ["How a new preset can be created" on page 72](#);



3. In order to save the changes, press the [Save As] button.



4. The following window will appear:



5. Specify the Session Name in the relevant line, and press [OK]. The new session will be added to the list. Note that when specifying the name, you can either use the interactive keyboard, or write in the field directly.

## How a new preset can be created

The SOUND4 has a set of several factory presets. In order for a preset to be selected/used, the [Load] button should be pressed (the active preset is illuminated in green). Each of the factory presets can be used as a basis for creation of new user-defined preset. Once you are satisfied with the result all the changes could be saved.

### IT IS RECOMMENDED:

1. The user presets to be created prior to the installation of the SOUND4 in the broadcasting chain. Otherwise, any drastic changed of the audio quality and enhancements will be audible for the listeners.
2. Unless the new preset is created by a qualified/experienced broadcaster, it is recommended that no general changes to the base preset (if such is used) to be applied, as this can lead to unwanted signal distortion.

The procedure is quite simple. Below you will find a step-by-step description of the process:

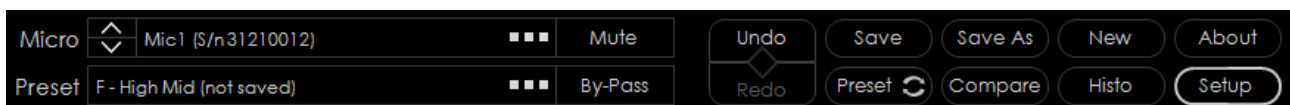
1. Press on [Preset] and choose a factory preset that you would like to use for a basis of the new one. It will be automatically uploaded in the device;



2. In section Processing, modify the parameters that you think would improve the enhancement of your signal and will make your station's sound unique. For detailed information on the available options, please [refer to "Processing" on page 79](#);
3. Once you are satisfied with the result, you will notice that after the currently selected preset, a the following message indicating that some changes are being made will appear "M&F - Soft tone (not saved)":

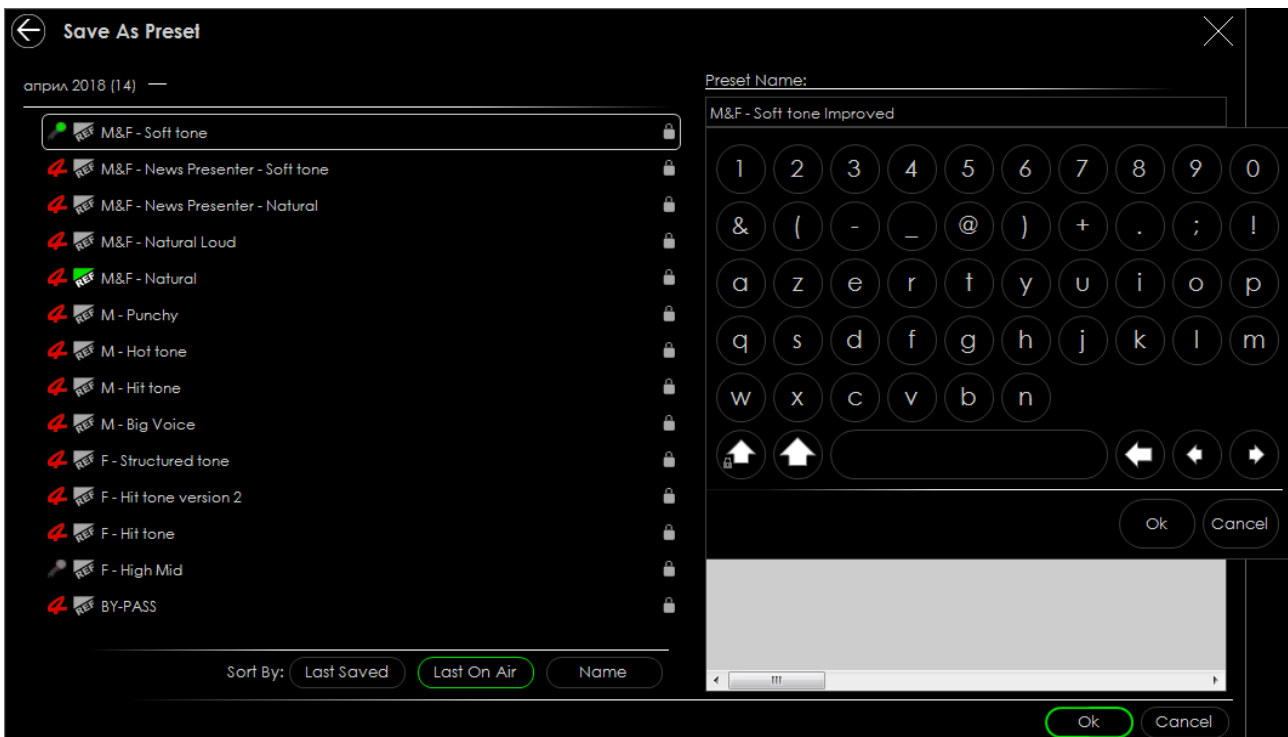


4. In order to save the changes select one of the user presets and press the [Save Ss] button.



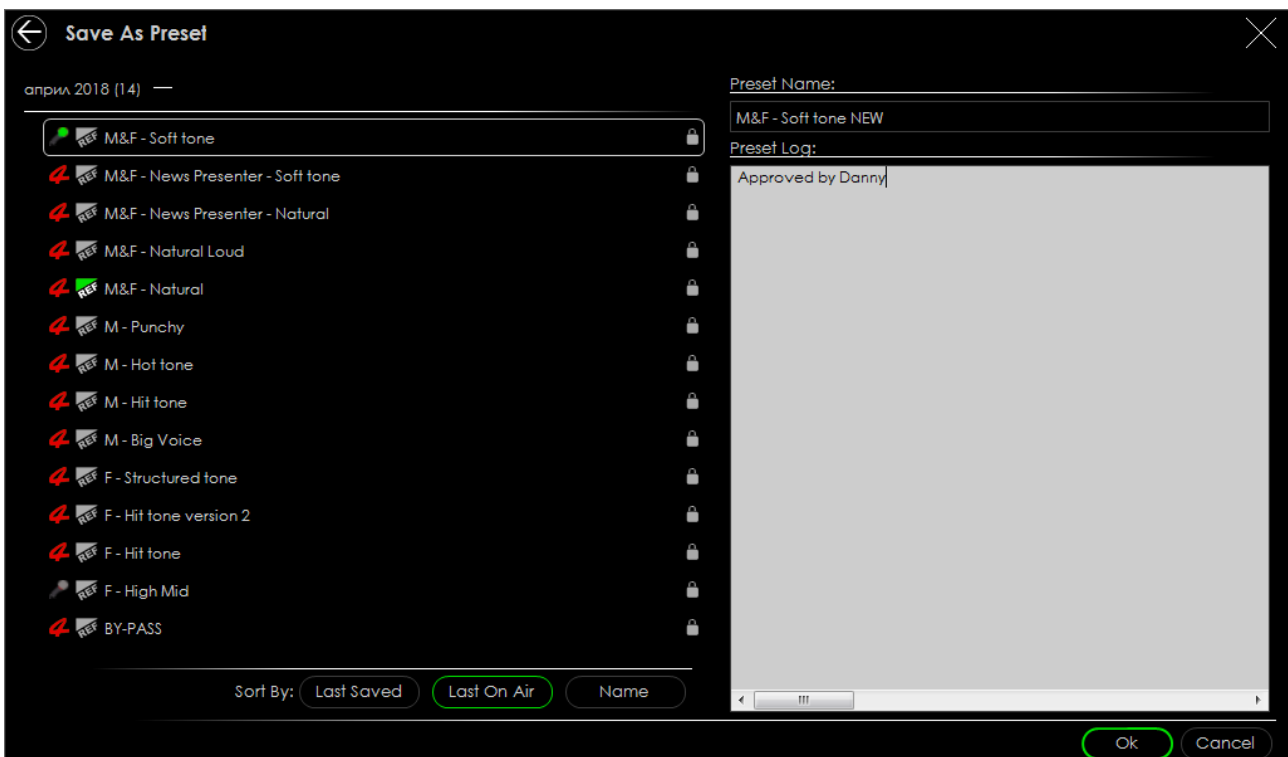


5. The following window will appear:




Specify the Preset Name in the relevant line, and press [OK]. Note that when specifying the name, you can either use the interactive keyboard, or write in the field directly.

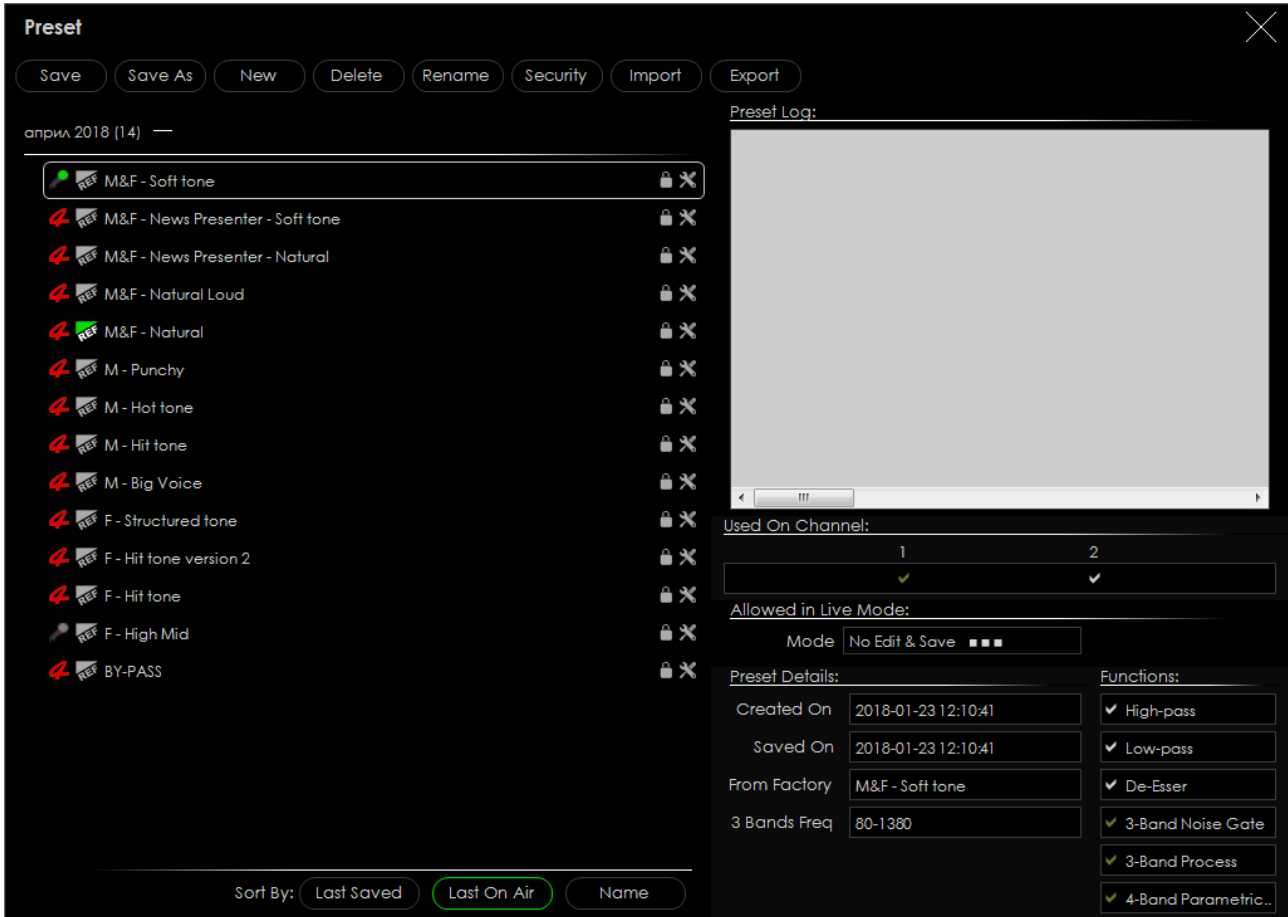
The Preset Log option allows you to apply notes to the new preset. For example, “Approved by Danny” and etc.



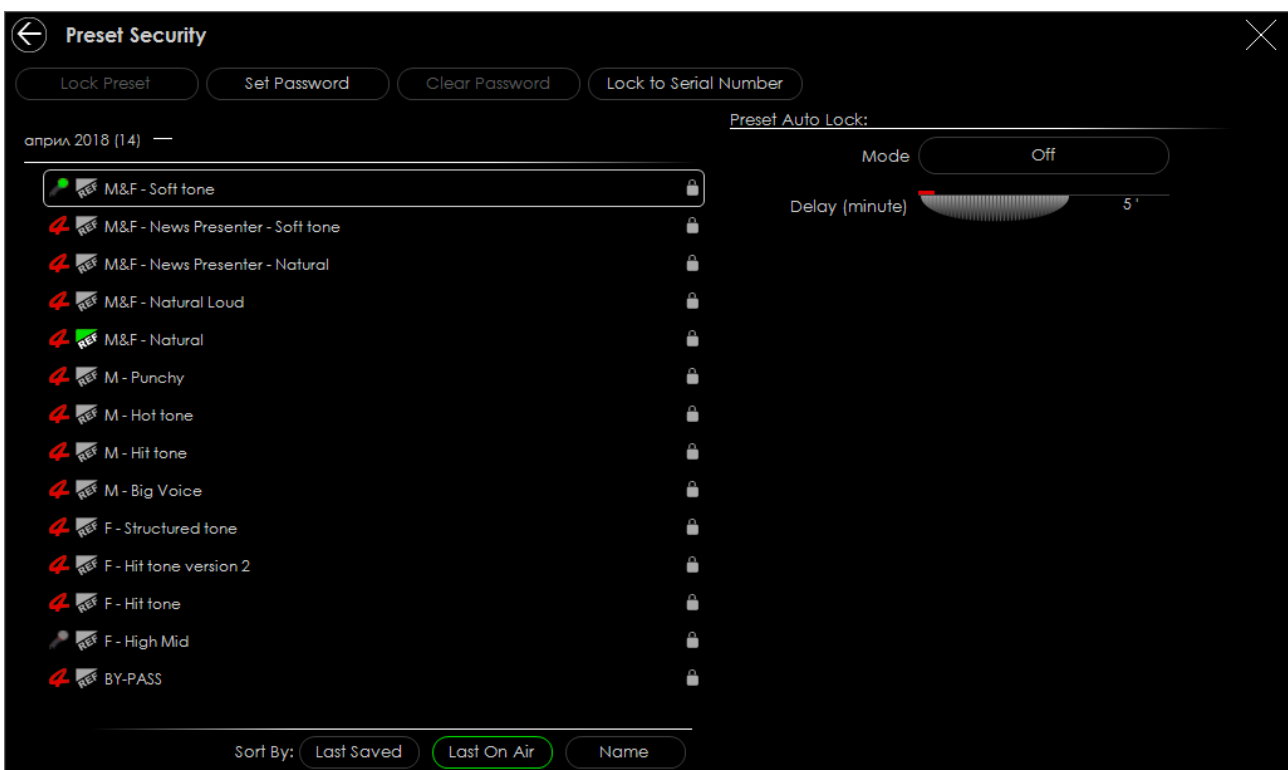
6. The newly created preset will be automatically chosen as ‘active preset’.

## Preset Security

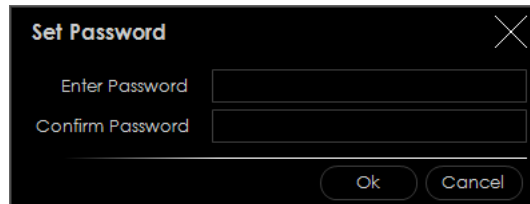
As many of the stations prefer to use the services of qualified personnel when creating the perfect preset, the SOUND4 supports the function the newly created preset to be secured. This is done via the  menu of the device. Section [Security].



Once [Security] is pressed the following window will appear:



[Set password] – the preset will be locked with a key known only by the creator. Thus, only users familiar with it would be able to import it into devices different than the one used for the purposes of creation;

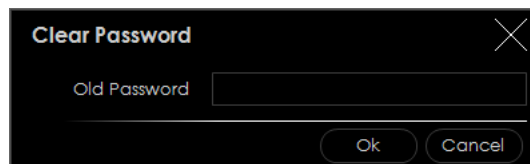


The 'Set Password' dialog box features a title bar with a close button (X). It contains two text input fields: 'Enter Password' and 'Confirm Password'. Below the fields are two buttons: 'Ok' and 'Cancel'.

Once a password is set, the padlock icon next to the locked preset will be illuminated in green.

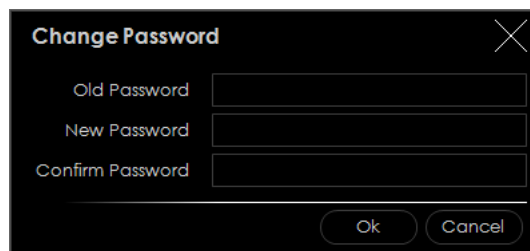


To clear the password preset, click on [Clear password]. Then enter the old password and press [Ok] - the preset will be unlocked.



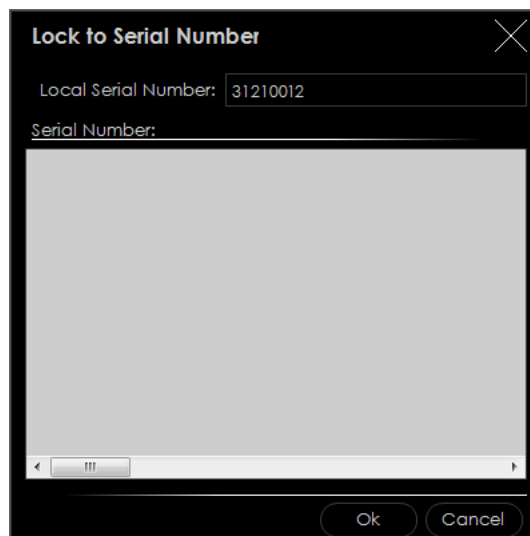
The 'Clear Password' dialog box has a title bar with a close button (X). It contains one text input field labeled 'Old Password'. Below the field are two buttons: 'Ok' and 'Cancel'.

To change the password, click on [Change password]. Then enter the required credentials and press [OK].



The 'Change Password' dialog box has a title bar with a close button (X). It contains three text input fields: 'Old Password', 'New Password', and 'Confirm Password'. Below the fields are two buttons: 'Ok' and 'Cancel'.

[Lock to Serial Number] – you can specify the serial number of the device on which the preset can be used. Only the unit with this serial number will be able to import this preset.

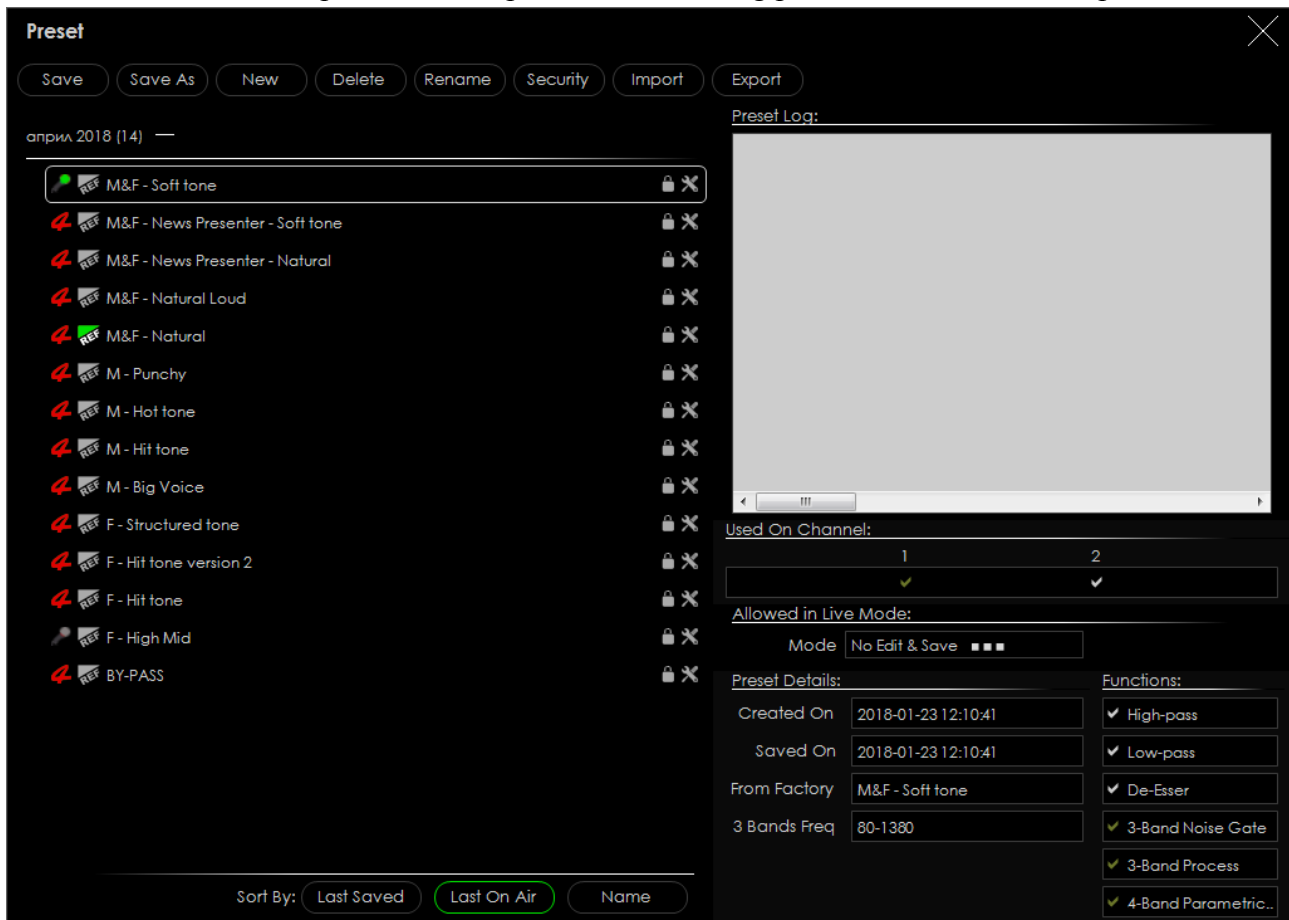


The 'Lock to Serial Number' dialog box has a title bar with a close button (X). It contains two text input fields: 'Local Serial Number' (with the value '31210012') and 'Serial Number:'. Below the fields is a large, empty rectangular area. At the bottom, there are two buttons: 'Ok' and 'Cancel'.

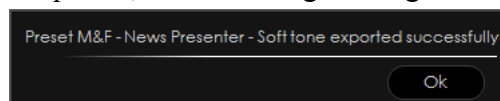
Depending on your preferences, both, one or none of the above explained options can be used.

## Preset Export

In order for a user preset to be exported the following procedure should be completed:



1. Open the [Preset] menu;
2. Select the preset to be exported and then press the [Export] button.
3. Select directory and confirm with [OK] to save the file on your computer.
4. Once the process is completed, the following message will appear:



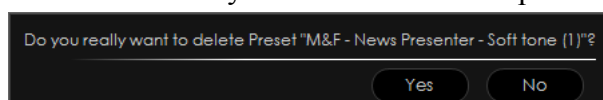
## Presets Import

1. Open the [Preset] menu;
2. Press the [Import] button;
3. Select the .s4imp file of the preset to be imported and press [OK] to confirm;
4. Once the process is completed, the following message will appear:



## Presets Delete

1. Open the [Preset] menu;
2. Select the preset to be deleted and then press the [Delete] button;
3. Confirm that you want to delete the preset:



4. The preset will be deleted.

## List of factory presets

---

### **M&F Open**

This preset is perfect for both male and female voices as it is designed to be very clean and with open sound.

### **M&F Open Plus**

Has a bit more punch than the M&F Open preset, but is still very clean and conservative.

### **RE20 Mic Punchy**

This preset offers plenty of punch and clarity.

### **SM-7 Mic Punchy**

The response has been tailored specifically to complement the characteristics of the SM-7.

### **M&F - Soft tone**

This “conservative” preset is perfect for both male and female voices. The 3-band processing is set with: 1) a bit higher drive level in the high band (centered at 1.38 kHz) than usual, 2) with slightly less drive in the mid and low band (80 Hz), along with moderate attack and release times. The high and mid processing bands are set to a bit lower threshold for just slightly more processing action.

### **M&F - News Presenter - Soft tone**

Just as the M&F - Soft Tone preset, the M&F - News Presenter - Soft Tone adds more neutral quality to it. The low band frequency has been increased to 90 Hz and the drive levels in the multiband processing have been set to “0” (no added or reduced drive in any band). The release times in the multiband processing section, on the other hand, are a bit slower than the ones in M&F - Soft Tone.

### **M&F - News Presenter – Natural**

This preset is almost identical to the M&F - News Presenter - Soft Tone preset, with the difference that a bit of action in the Fidelity section of the multiband processing has been added so as to give more neutral sound than M&F - News Presenter - Soft Tone.

### **M&F - Natural Loud**

Neutral yet aggressive preset, it focuses more processing effort on the mid and high bands with slightly lower thresholds. The low and high band frequencies are set at 250 Hz and 2.6 kHz. The attack times are similar to the ones set in the M&F - Soft Tone preset, but the release times are slowed down, with slightly faster release and higher output in the high band (compared to the other bands). The mid and low processing bands are also very slightly boosted in the output level. This preset adds a bit more action in the Fidelity section and leans on the final brick wall limiter to achieve its loudness.

### **M&F – Natural**

This preset is identical to the M&F - Natural Loud preset. With the only exception that the brick wall limiter is returned to 0 dB of additional drive and a Medium Fast release time. As an addition, the frequency of the High band has been changed to 2.11 kHz.

### **M – Punchy**

This preset is definitely more distinguished than the rest. It leans heavily on the high and mid bands of the processing with lowered thresholds in those bands. At the same time there is much less action in the low band due to a fairly high threshold. The low and high bands are set at 90 Hz and 2.26 kHz. All 3 bands have higher drive levels with a bit slower attack times and much faster release times. The accent is on the high and low bands with higher output levels from the processing section. This preset will provide you with excellent vocal clarity.

### **M - Hot tone**

The preset has even more aggressive feel than the M-Hot tone. The drive to all 3 bands has been increased (set to 8 dB) with faster still release times. The High band has been set to 2.11 kHz, and the Low band at 90 Hz. The multiband output section has a nice scoop to it with boosts in the high

and low bands and a cut in the mid band.

#### **M - Hit tone**

This preset combination between M - Punchy and M - Hot Tone. The Fidelity section is enabled so that a very slight pull back of the multiband in the mid and low bands to keep it from getting too muddy or aggressive could be guaranteed. The Sound Impact System is also enabled but set for more action than in M - Punchy. Drive in all three bands is a bit increased (1.2 dB), with the thresholds set for more activity in mid and high bands. The attack and release times set in all three bands is quite fast, with the even faster release in the mid band. The frequencies of the low and high bands are set to 80 Hz and 1.3 kHz. The M-Hit tone preset has a pretty substantial boost in the low end with a 5.8 dB increase in that band set on the output, while the mid band has a slightly smaller increase (1.6 dB). The high band actually has a very small cut (-0.2 dB). As a finale, this preset leans slightly on the final brick wall limiter with the added 1.6 dB of drive for extra loudness.

#### **M - Big Voice**

Fairly balanced preset, perfect for boss jock sound, with a bit of added drive in all 3 bands (1.6 dB) and thresholds set for more action in the high and midrange bands. The Sound Impact System is enabled so that an extra punch could be added. The attack and release times are moderate, and the output from the 3 bands is set to give a nice boost in the high and low end. The low and high frequencies are set to 90 Hz and 2.11 kHz.

#### **F - Structured tone**

Low and high band frequencies are set to 80 Hz and 1.3 kHz making the preset perfect for female voices. The compressor ratio in the multiband section across all 3 bands is less aggressive. Both the Fidelity and Sound Impact System are enabled with a bit of activity in the mid and high bands of the Sound Impact System section. The high band has a considerable boost in the drive (4.8 dB) with slightly less drive increase in the mid and low bands (1.2 dB). The attack time across all three bands is fairly fast. The release times are slowed down, with the slowest release in the high and mid bands. The final output from the multiband section has a slight boost in the high band (a 2 dB cut in the mid band), and a 3.4 dB boost on the low band. The brick wall limiter has an added 1.4 dB of drive to maintain loudness at the end.

#### **F - Hit tone**

This preset has a more aggressive ratio than the F-Structured tone. The Sound Impact System is set for equal activity in all 3 bands, an equal 1.2 dB boost in drive to all 3 bands, and a slightly lower threshold for the high band. This preset also features less cut in the mid band (-0.8 dB instead of -2 dB). Attack and release times, as well as the final limiter settings, are identical to the ones set in F - Structured Tone. The end result is a bit more of a high and midrange presence than the F - Structured Tone.

#### **F - High Mid**

The accent in this preset is on the high mid frequencies of the female voice. The low frequency is centered at 200 Hz, with the high frequency at 1.3 kHz, and the ratio is quite aggressive compared to the other presets. The Sound Impact System is enabled and set to 4.4 dB in all 3 bands. The drive is substantially increased to 7.2 dB with lowered thresholds in the high and mid bands. Attack and release times are both fairly slow, with the exception of a much faster release in the high band, along with a considerable (5.2 dB) boost in that band's output. In the final brick wall limiter section, the drive is reduced by 1.4 dB to compensate for the increased high band output from the multiband section and keep things from getting too harsh.

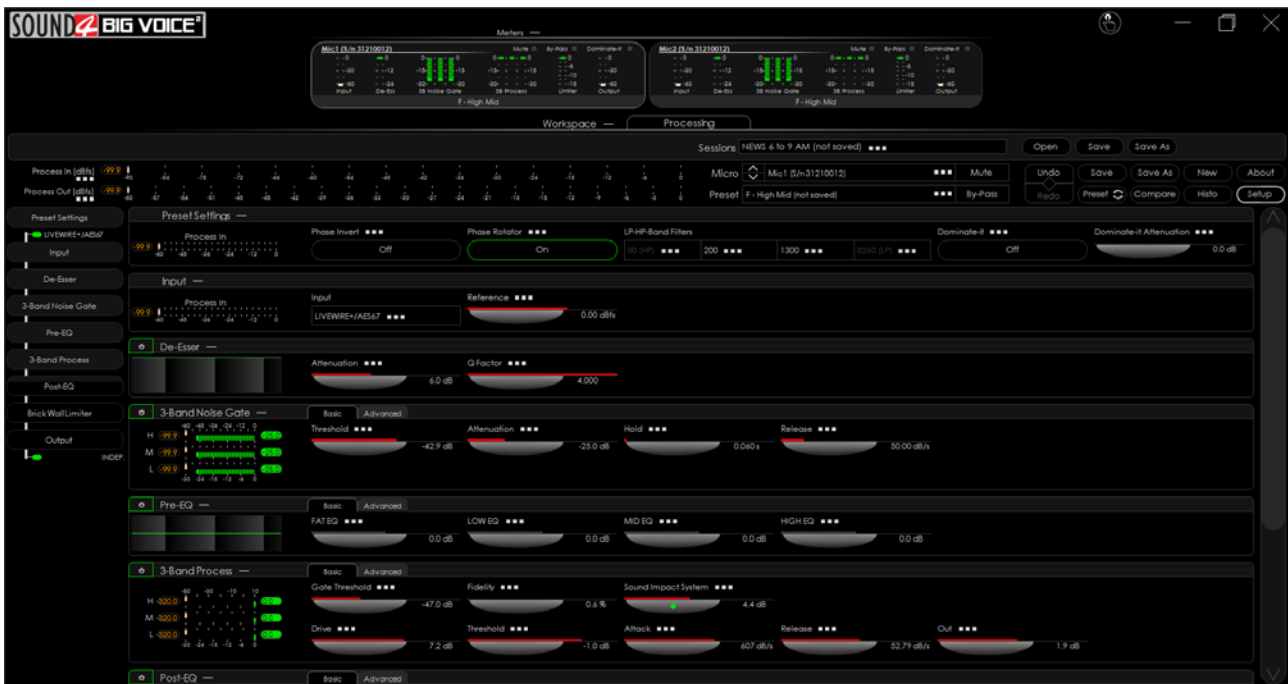
#### **BY-PASS**

This setting will bypass all processing on the channel. When a channel is not licensed for processing, this is the only available option.

## Processing

This chapter explains the adjustment of the processing included in the Big Voice. These parameters are stored and used in each preset. All channels using the same preset will be adjusted simultaneously.

Please bear in mind that you might not be able to achieve the sound desired from the first time, except if you are not an experienced broadcaster.



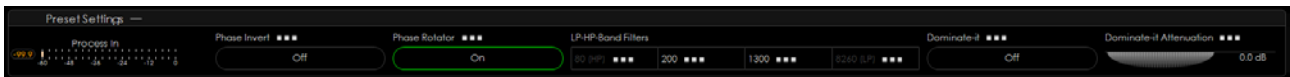
The processing chain also includes: Preset settings, Input, De-Esser, 3-Band Noise Gate, Pre-EQ, 3-Band Processing, Post-EQ, Brick Wall Limiter and Output. The 3-Band Noise Gate and processing sections have an “Advanced” tab that allows access to each band’s individual parameters.

**NOTE** that each section can be enabled or disabled individually. The Brick Wall Limiter cannot be entirely disabled. As a result, the output from a processing channel should never exceed 0 dBFS.

To enable a section that is in bypass mode, click the disabled power button. If the section in question is already enabled, a click on the illuminated power button will put the section in bypass mode.

A click on the ■■■ symbol next to each parameter will open a new window containing information as regards the Factory, Saved and Last value for the parameter in question or other available options.

## Preset Settings

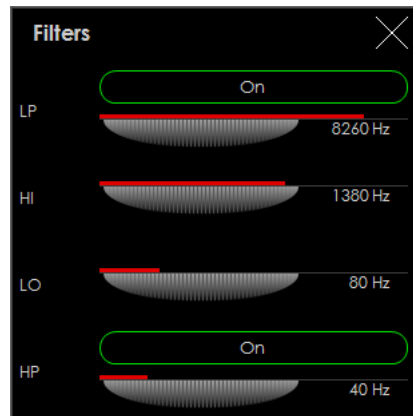


**Process In** – Displays the input level of the processing chain of the currently selected input.

**Phase Invert** – Can be turned [Off] or [On].

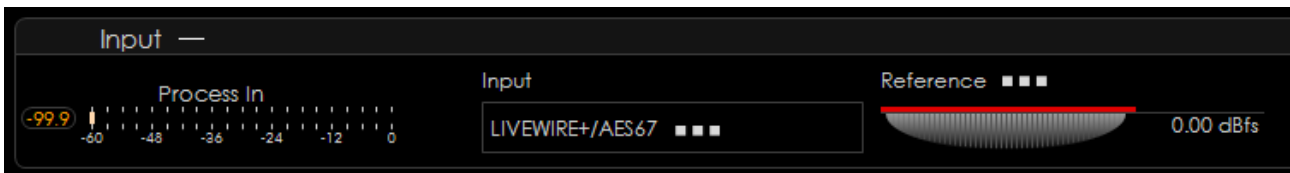
**Phase Rotator** – Can be turned [Off] or [On].

**LP-HP-Band Filters** – Allows the filters to be turned [Off] or [On] and their values set (as depicted below).



**Dominate it** and **Dominate-it Attenuation** are related parameters. Once the Dominate-it option is turned [On] you will be able to set an Attenuation value.

## Input

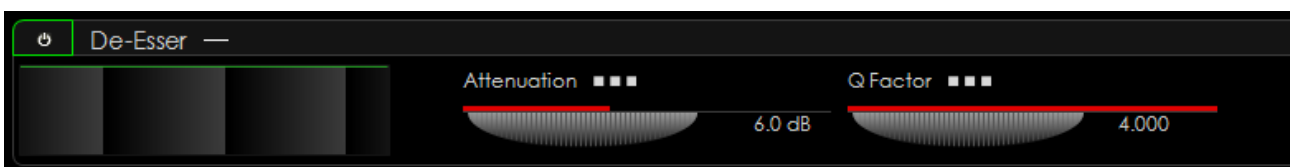


**Process In** – Displays the input level of the processing chain of the currently selected input.

**Input** – Displays and allows selection of the current input source for the selected processing channel. Gain, sensitivity, and other adjustments will also be displayed. The input selections available are: Mic, Line, Digital, and Livewire+/AES67. Once an Input is selected, the appropriate input level controls and parameters will be opened/enabled.

**Reference** – Set reference level in dBfs.

## De-Esser



The De-Esser automatically tracks and attenuates sibilants in the audio. The frequency is determined instantly and does not require manual adjustment.

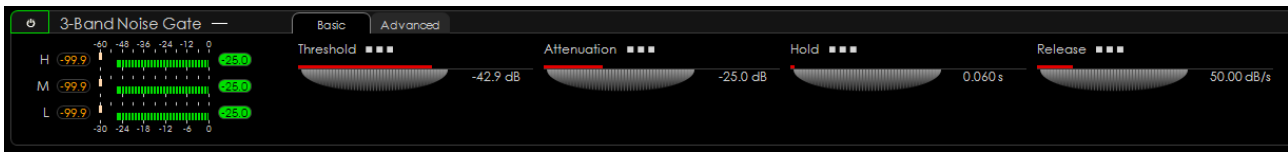
**Frequency Graph** – Displays the frequency response of the De-Esser filter in real time.

**Attenuation** – Allows the maximum amount of attenuation automatically applied to detected sibilants to be set.

**Q Factor** – Adjusts the width of the notch created around the detected frequency.



## 3-Band Noise Gate (Basic Controls)



The SOUND4 BIG VOICE<sup>2</sup> - Base has a 3-band noise gate. This can help gate noises in specific bands (for example, noises generated by doors, countertops and etc.) while still passing actual speech. Bear in mind that the attack time on the SOUND4 BIG VOICE<sup>2</sup> - Base gate is virtually instantaneous (set) and is not adjustable.

**Metering** – Indicates the Gain input level for each band.

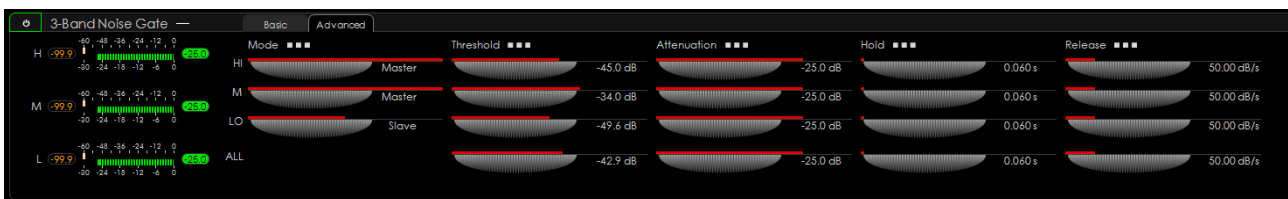
**Threshold** – Allows the input threshold level at which the gate will open to be set.

**Attenuation** – Defines the resting attenuation level for the gate when closed.

**Hold** – Sets the closing of the gate by delaying it with the specified amount of time when the input level falls below the specified threshold.

**Release** – Sets the speed (in dB per second) at which the gate closes when the input level falls below the specified threshold and the hold time elapses.

## 3-Band Noise Gate (Advanced Controls)



Generally speaking, the advanced controls expand the basic controls by adding additional metering, band coupling adjustments and individual access to each band controls.

**Metering (Advanced)** – Except for displaying input levels, the Advanced tab also displays the gate attenuation applied to each band.

**Mode** – this setting is used to adjust the coupling between each band’s gate, and how the threshold controls interact. This option does not directly affect the target, hold, or release settings as those controls are independent. Whether a band will be master, slave or alone is defined by the level set.

- *Master* – In order for the threshold for a band to operate independently from the others, the band should be set to Master. Have in mind that the gate activity for each band nevertheless if it is set to Master or Slave will still be coupled.
- *Slave* – when set to Slave, the threshold for the band’s gate will be slaved to the Master bands and will not have an effect.
- *Alone* – when set to Alone, that band’s gate activity and threshold will be completely decoupled from the other bands.

If, for example, you want to emulate a “wideband” gate, the mode of all three bands must be set to Master, and the threshold for all three bands should be identically set.

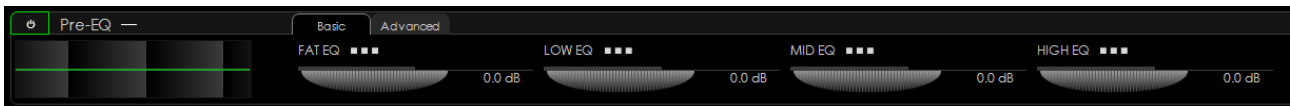
**Threshold** – Is used to set the input threshold level at which the gate for each band will begin to open. Depending on how the bands are coupled with the Mode, the behavior and interaction of these threshold controls will change.

**Attenuation** – Defines the resting attenuation level for the gate when closed.

**Hold** – Sets the closing of the gate by delaying it with the specified amount of time when the input level falls below the specified threshold.

**Release** – Sets the speed (in dB per second) at which the gate closes when the input level falls below the specified threshold and the hold time elapses.

## Pre-EQ (Basic)



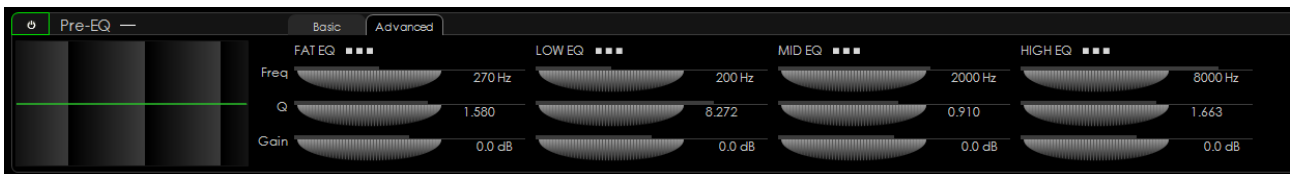
The 4-Band Parametric EQ section allows adjustment of the frequency response prior to the main 3-Band processing.

**Metering** – Displays the overall frequency response of the EQ section.

All four bands are fully parametric. The labeling of the bands is as follows:

- *FATEQ* – the lowest band, very useful when problematic rumble or hum frequencies should be eliminated, or when a little bump to make that low end punch pop through should be added.
- *LOW EQ* – can be used for cutting some of the typical low midrange mud due to proximity effect or to help enhance that classic big voice sound.
- *MID EQ* – adds intelligibility and clarity in the critical midrange frequencies.
- *HIGH EQ* – will add “sparkle” in the top end.

## Pre-EQ (Advanced)



**Metering** – Displays the overall frequency response of the EQ section.

All four bands are fully parametric. The labeling of the bands is as follows:

- *FATEQ* – the lowest band, very useful when problematic rumble or hum frequencies should be eliminated, or when a little bump to make that low end punch pop through should be added.
- *LOW EQ* – can be used for cutting some of the typical low midrange mud due to proximity effect or to help enhance that classic big voice sound.
- *MID EQ* – adds intelligibility and clarity in the critical midrange frequencies.
- *HIGH EQ* – will add “sparkle” in the top end.

Quick overview of the control options:

- *Frequency* – Allows the center frequency of the EQ band to be set.
- *Q* – Used to set the bandwidth of the band’s filter. Lower numbers result in a “wider” filter and higher numbers result in a narrower filter with a sharper “Q”.
- *Gain* – Adjusts the gain of each band.

## 3-Band Processing (Basic Controls)



This section combines a number of processing parameters and a few features incorporated and available in SOUND4 BIG VOICE<sup>2</sup> - Base only. Like the noise gate, in the basic tab, the parameters for all 3 bands are adjusted simultaneously.

**Metering** – Depicts/Indicates the amount of gain reduction applied in each of the 3 processing bands.

**Gate Threshold** – Allows gate to the action of the processing section to be set. Once the level reaches below the threshold, the action of the 3 bands will be frozen.

**Fidelity** – The Fidelity control is intended to maintain the fidelity and spectral balance of the original input signal (even if the audio is heavily processed) by proportionally modifying the processing thresholds in the background to reach the percentage set within the parameter. A visible indication of this action will not be evident but it will make a noticeable difference, especially with aggressive processing settings.

**Sound Impact System** – The Sound Impact System option makes the sound more impact and punchy. This is done by dynamically adjusting the timing constants based on the incoming audio and looking for changes smaller than the ones applied in this setting. The indicator placed in the middle of the control window will display when SIS is in effect.

**Drive** – Is used to apply more or less drive to the 3-Band processing section.

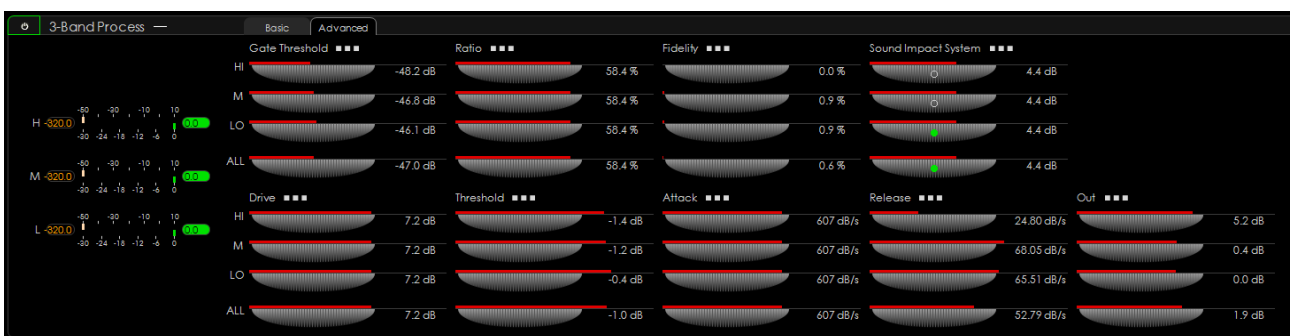
**Threshold** – Will trim the threshold level where the processing begins to work.

**Attack** – Is set in dB per second and is intended to control the attack time in the 3-Band processing section.

**Release** – Is set in dB per second and is used to control the release time for the 3-Band processing section.

**Out** – Is used to adjust the final output level of the 3-Band processing section.

## 3-Band Processing (Advanced Controls)



The advanced controls are virtually identical with the basic controls. They add additional metering and access to each band's controls. It includes individual adjustments for each band, as well as an "All" adjustment option that will modify all values at once.

**Metering** – Depicts the input levels of the 3-Band processing section as well as gain reduction applied to each band by the processing in the section.

**Gate Threshold** – Sets a gate to the action of the processing section. The action of the band will be frozen below the set threshold.

**Ratio** – Used to set the compression ratio of each band. The higher percentages are more aggressive and the lower ones are less aggressive.

**Fidelity** – The Fidelity control is intended to maintain the fidelity and spectral balance of the

original input signal (even if the audio is heavily processed) by proportionally modifying the processing thresholds in the background to reach the percentage set within parameter. A visible indication of this action will not be evident but it will make a noticeable difference, especially with aggressive processing settings.

**Sound Impact System** – The Sound Impact System option makes the sound more impact and punchy. This is done by dynamically adjusting the timing constants based on the incoming audio and looking for changes smaller than the ones applied in this setting. The indicator placed in the middle of the control window will display when SIS is in effect.

**Drive** – Is used to apply more or less drive to the 3-Band processing section.

**Threshold** – Will trim the threshold level where the processing begins to work.

**Attack** – Is set in dB per second and is intended to control the attack time in the 3-Band processing section.

**Release** – Is set in dB per second and is used to control the release time for the 3-Band processing section.

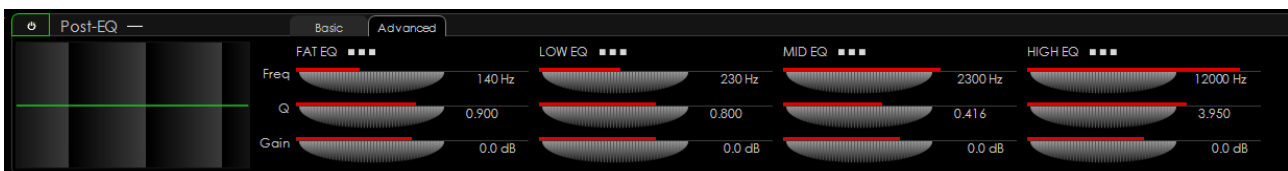
**Out** – Is used to adjust the final output level of the bands.

## Post-EQ (Basic)



The second 4-Band Parametric EQ is right after the 3-Band Processing and allows a final fine tuning to be made so that the desired sound texture could be obtained. It functions identically to the Pre-EQ section.

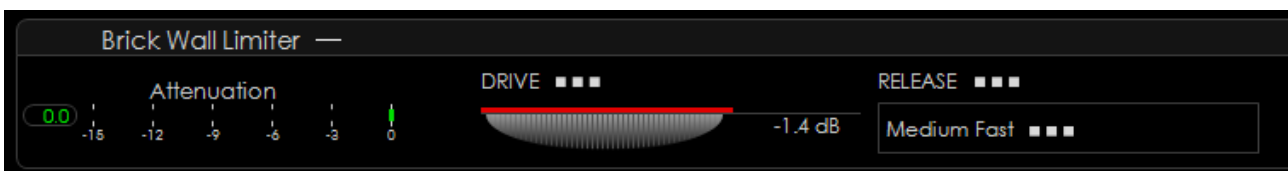
## Post-EQ (Advanced)



The advanced Post-EQ adds additional controls as follows:

- *Frequency* – Allows the center frequency of the EQ band to be set.
- *Q* – Used to set the bandwidth of the band’s filter. Lower numbers result in a “wider” filter and higher numbers result in a narrower filter with a sharper “Q”.
- *Gain* – Adjusts the gain of each band.

## Brick Wall Limiter



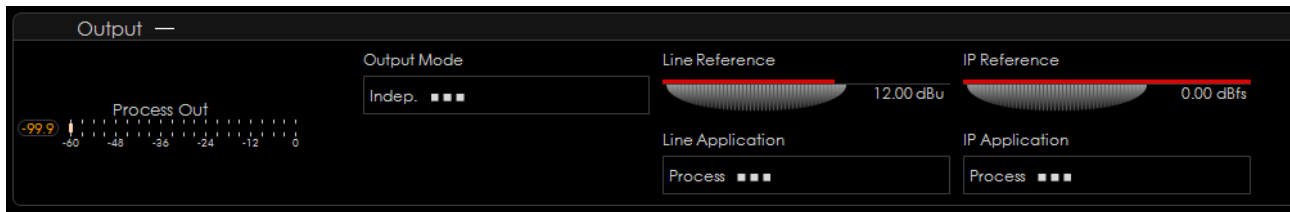
The final stage of the processing is the Brick Wall Limiter. It takes place right before the output, and is the only stage in the chain that cannot be entirely bypassed. Although the Drive can be switched ON and OFF (set to zero) the Brick Wall Limiter will not allow the output of the chain to exceed 0 dBFS.

**Metering** – Depicts the amount of gain reduction applied by the final Brick Wall Limiter.

**Drive** – Is used to trim the amount of drive applied to the Final Brick Wall Limiter.

**Release** – Is used to adjust the release time of the final limiter section. By default, the option is set to Medium Fast.

## Output

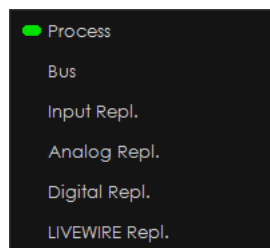


**Process Out** – Depicts the output level of the processing chain of the selected output(s).

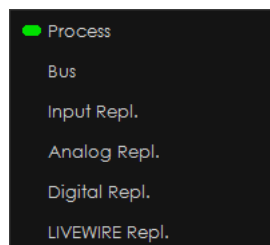
**Output Mode** – Displays the currently used output destination of the currently selected processing channel and allows selection of new one. You can choose between the Independent and Bus options:

- *Independent* – The channel will be routed to the corresponding processor output.
- *Bus* – The channel will be routed to the corresponding processor output and the selected mix bus.

**Line/ IP Reference** – Used to adjust the reference level of the corresponding outputs relative to the internal digital level.

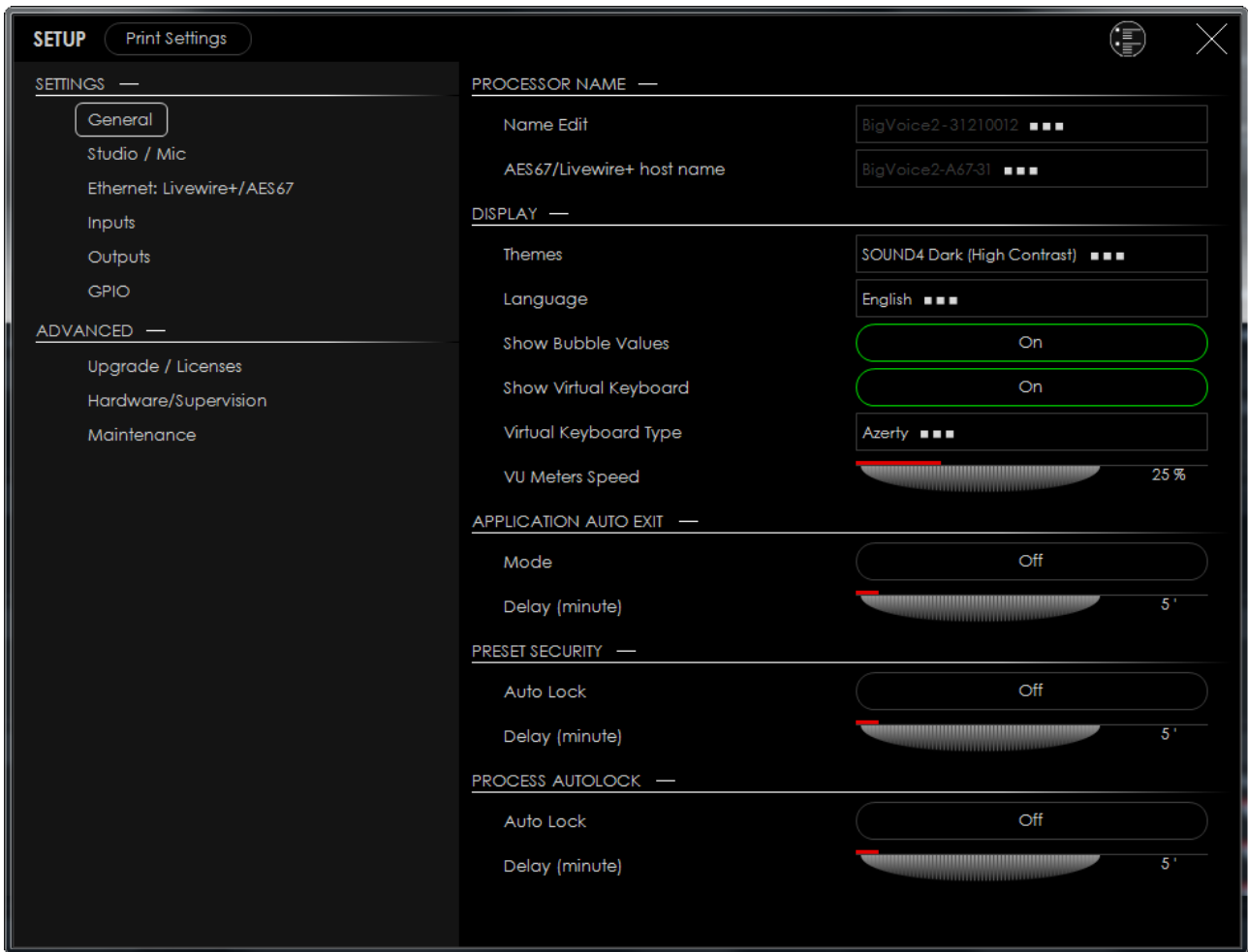


**Line/ IP Application** – Allows selection of the signals applied to each of the selected channel's outputs.



- *Process* – Routes post-processor audio to the output.
- *Bus* – Routes the selected mix bus to the output.
- *Analog Repl.* – Routes the selected processor input signal to the output.
- *Digital Repl.* – Routes the digital input directly to the output. (**NOTE:** AES/EBU inputs are “split” stereo pairs. AES input 1 Left will feed output 1, AES input 1 Right will feed output 2, and so on.)
- *LIVEWIRE Repl.*

## Settings – General



### Processor Name

Allows the name of the processor and AES67/Livewire+ host name to be customized, hence making it more recognizable.

### Display

- **Themes** – Select the software theme. Two options are available - Dark (high contrast) and Default.
- **Language** – Selects the language within the user interface. The available options are English, Spanish, and French. Changing this setting will require restarting the software.
- **Show Bubble Values** – Turns [On] and [Off] the bubble values.
- **Show Virtual Keyboard** – Turns [On] and [Off] the virtual keyboard.
- **Virtual Keyboard** – Selects the layout of the on-screen keyboard used when selecting sessions or presets. The available options are: Azerty and Qwerty.
- **VU Meter Speed** – This value controls the speed of the onscreen metering and is set in percent. Higher numbers will result in faster metering, though the default of 25% is sufficient.

### Application Auto Exit

Turns the application [On] and [Off] and sets delay time (the time that should elapse after the last user interaction so that the software could be closed).

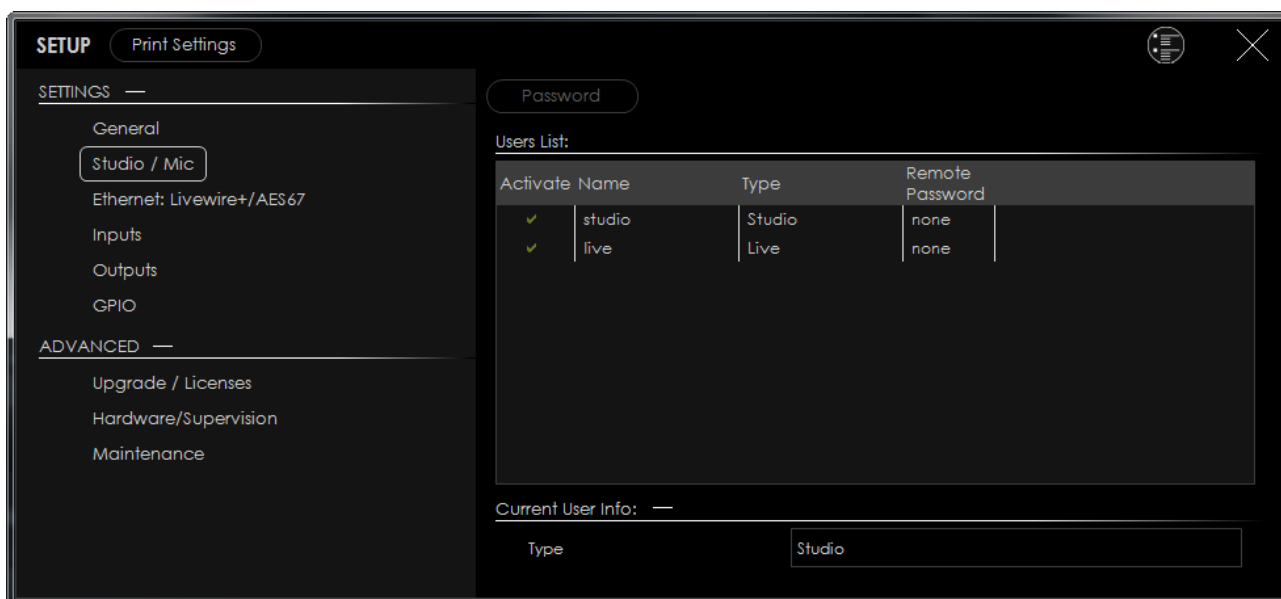
### Preset security

Turns the application [On] and [Off] and sets delay time.

### Process Autolock

Turns the application [On] and [Off] and sets delay time.

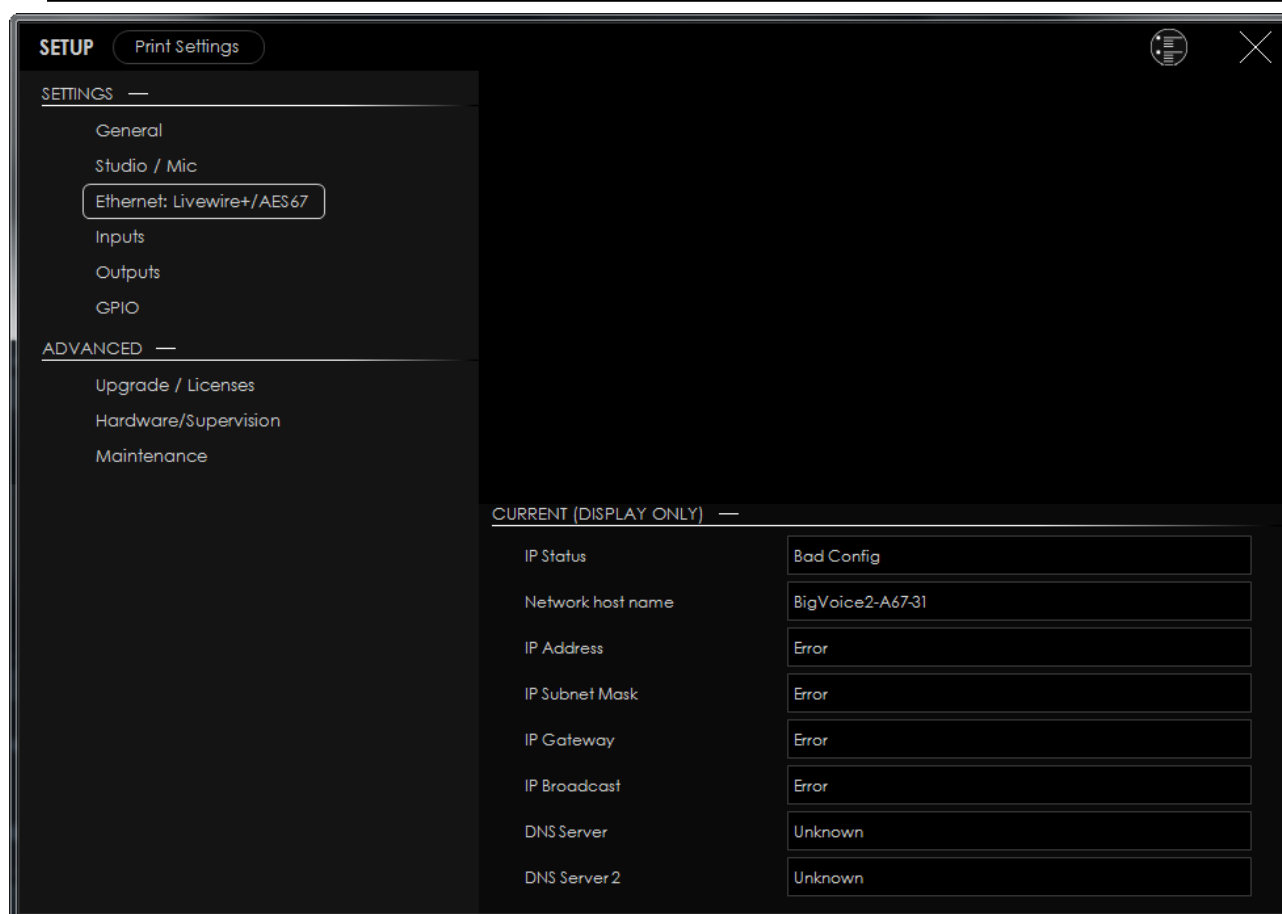
## Settings – Studio/Mic



### How to change or assign a new password

1. Click on the account/user;
2. Click on [Password];
3. For the Studio, Live and PresetSharing accounts leave the Old Password field blank. For the Admin account write the default password **admin** (if not changed);
4. Write the new password;
5. Confirm the new password;
6. Press [OK].
7. If the account did not had a password until now, an “ok” will be written in the Remote Password column. If a password is not assigned, the state will be marked as “none”.

## Settings – Ethernet: Livewire+/AES67



**SETUP** Print Settings

**SETTINGS** —

- General
- Studio / Mic
- Ethernet: Livewire+/AES67**
- Inputs
- Outputs
- GPIO

**ADVANCED** —

- Upgrade / Licenses
- Hardware/Supervision
- Maintenance

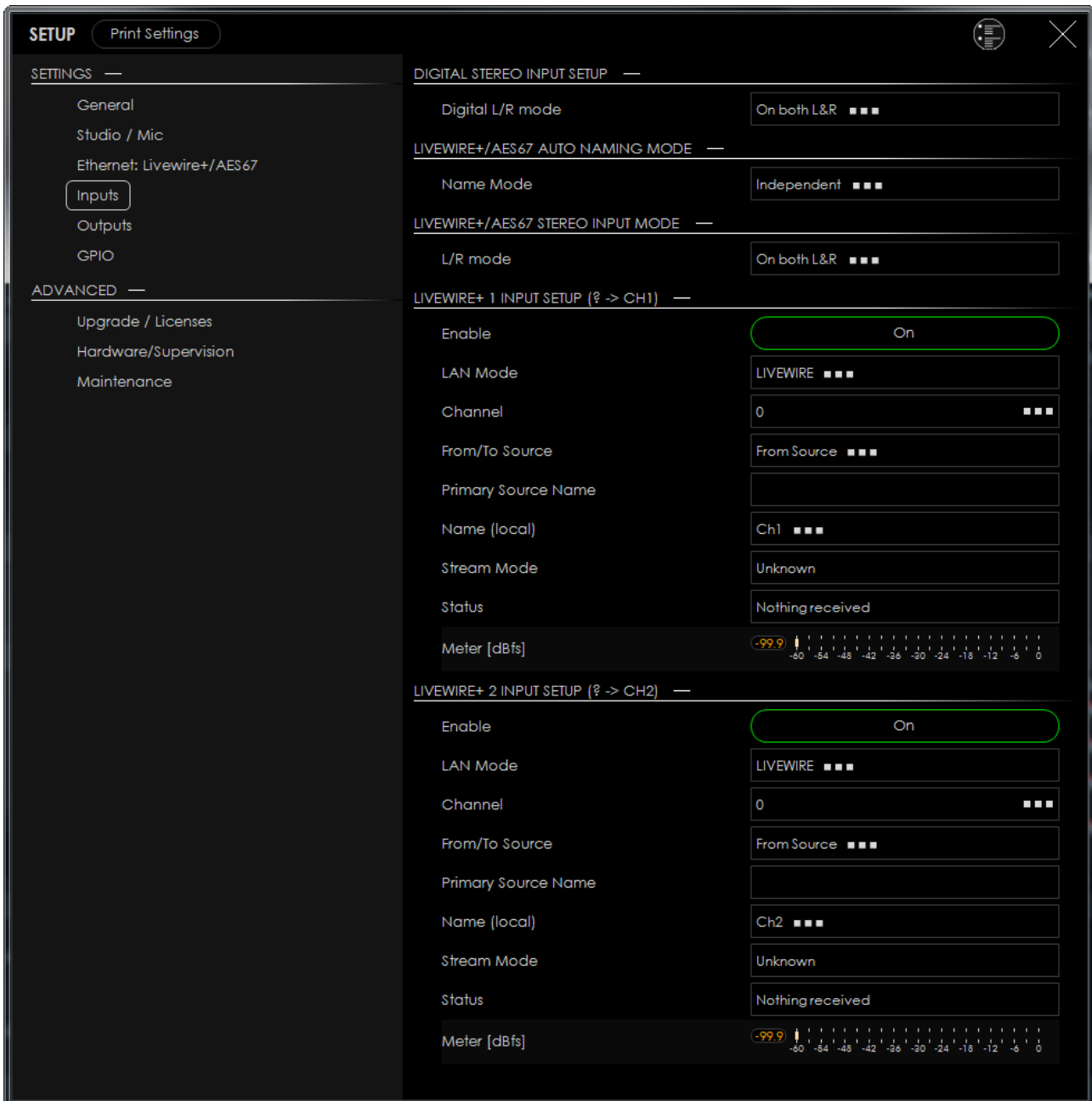
**CURRENT (DISPLAY ONLY)** —

IP Status	Bad Config
Network host name	BigVoice2-A67-31
IP Address	Error
IP Subnet Mask	Error
IP Gateway	Error
IP Broadcast	Error
DNS Server	Unknown
DNS Server 2	Unknown

**Current (Display only)** – displays the current information obtained from the device, thus allowing you to verify the applied settings.



## Settings – Inputs



Contains the mandatory settings to be applied to the inputs.

**Digital Stereo Input Setup** – Allows mode to the Digital L/R to be assigned. The following options are available - On both L&R or Separate L/R.

**Livewire+/AES67 Auto Naming Mode** – Choose the preferred option from the ■■■ menu - Independent, Use Chanel Name, Use Preset name.

**Livewire+/AES67 Stereo Input Mode** – From the ■■■ menu set the mode - On both L&R or Separate L/R.

### **Livewire+1 Input Setup (? -> CH1) / Livewire+2 Input Setup (? -> CH2)**

- Enable – Turns the option [On] or [Off];
- LAN Mode – Set the LAN mode used. The following options are available - AES67 or Livewire;
- Channel – Specify the number of channels;
- From/To Source – Specify source;
- Primary Source Name – Specify primary source name;

- Name (local) – Specify local name;
- Stream Mode – Depicts the current stream mode;
- Status – Depicts the current status mode;
- Meter (dBfs) – Indicates the current value.

## Settings – Outputs



**Analog1 Output Setup/ Analog2 Output Setup** – Allows you to setup the Post Gain, and the meter will indicate the current value.

**Digital Stereo Output Setup** – Allows mode to the Digital Stereo Output to be assigned. The following options are available - On both L&R or Separate L/R.

**Livewire+/AES67 Auto Naming Mode** – Choose the preferred option from the ■■■ menu - Independent, Use Chanel Name, Use Preset name.

**Livewire+/AES67 Stereo Input Mode** – From the ■■■ menu set the mode - On both L&R or Separate L/R.

**Livewire 1 (Process → ?) / Livewire 2 (Process → ?)**

- Enable – Turns the option [On] or [Off];
- Profile – From the ■■■ menu set the profile from one of the following options - Livewire Live Audio, Livewire Standard Audio, AES67 Very Low Delay, AES67 Low Delay, AES67 Standard, AES67 Custom.
- Channel – Specify the number of channels;
- Name (local) – Specify local name;
- Label (local) – Specify local channel;
- Source – From the ■■■ menu set the profile from one of the following options - Process, Bus, Input Repl., Analog Repl., Digital Repl., Livewire Repl.
- Cfg GPO – Allows the GPO to be configured;
- Status – Depicts the current status mode;
- Meter (dBfs) – Indicates the current value.

## Settings – GPIO

**SETUP**
Print Settings
☰
✕

SETTINGS —

- General
- Studio / Mic
- Ethernet: Livewire+/AES67
- Inputs
- Outputs
- GPIO

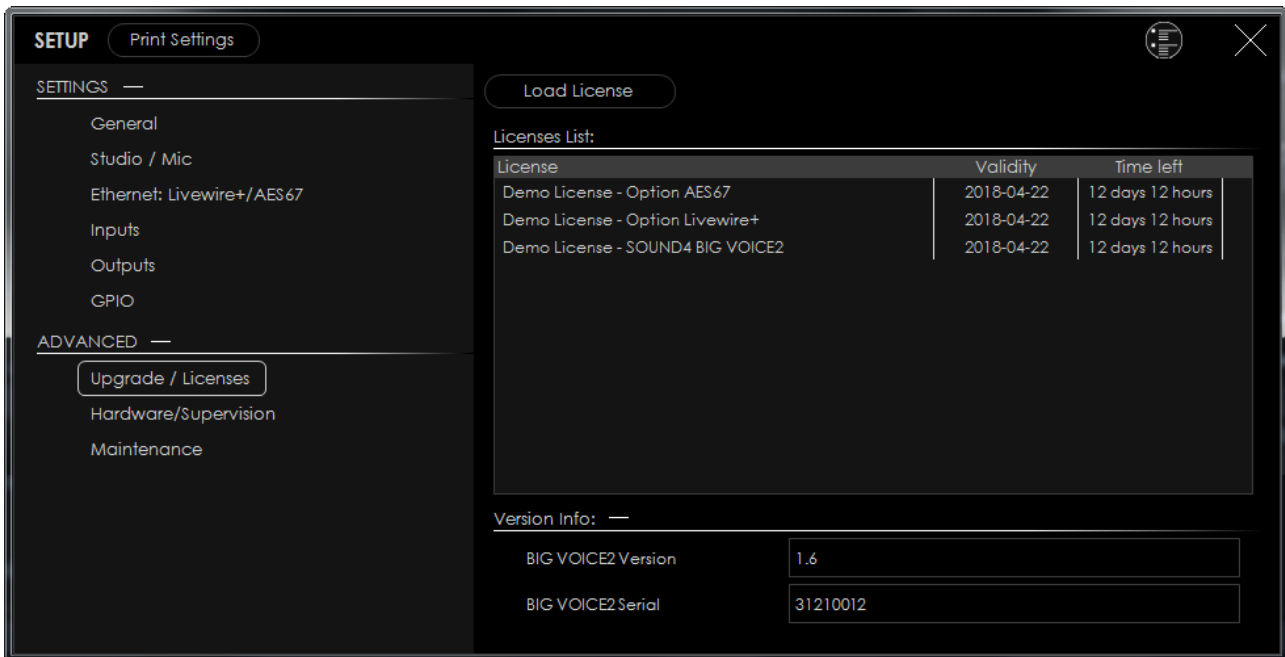
ADVANCED —

- Upgrade / Licenses
- Hardware/Supervision
- Maintenance

<b>Running</b> <b>Master GPI</b>						
Unused	⊖	GPI 1 (Pin 13)	No Action	No Action		
Unused	⊖	GPI 2 (Pin 12)	No Action	No Action		
Unused	⊖	GPI 3 (Pin 11)	No Action	No Action		
Unused	⊖	GPI 4 (Pin 10)	No Action	No Action		
Unused	⊖	GPI 5 (Pin 9)	No Action	No Action		
Unused	⊖	GPI 6 (Pin 8)	No Action	No Action		
Unused	⊖	GPI 7 (Pin 22)	No Action	No Action		
Unused	⊖	GPI 8 (Pin 6)	No Action	No Action		
<b>Running</b> <b>Master GPO</b>						
Unused	⊖	GPO 1 (Pin 15)	No Action			
Unused	⊖	GPO 2 (Pin 16)	No Action			
Unused	⊖	GPO 3 (Pin 17)	No Action			
Unused	⊖	GPO 4 (Pin 18)	No Action			
Unused	⊖	GPO 5 (Pin 19)	No Action			
Unused	⊖	GPO 6 (Pin 20)	No Action			
Unused	⊖	GPO 7 (Pin 21)	No Action			
Unused	⊖	GPO 8 (Pin 23)	No Action			

The general purpose inputs and outputs settings are applied through this page. Each GPI/GPO is set individually so as to fit the user's requirements.

## Advanced – Upgrade/Licenses



There are two options of loading a new license/s. Both are explained in details below.

### Expired license

If your license has expired, a warning message “Your main license has expired! Please contact SOUND4 for renew your main license” will appear on the screen.

To upload a new license follow the steps listed below:

1. Press [OK]. The “Setup - Upgrade / Licenses” screen will appear;
2. Press [License upload] and a new window requiring license file to be selected will open;
3. Go to the file directory, select the license and press [Open].

**NOTE:** All licenses are sent/provided in a ZIP file. It is not needed the file to be unzipped prior to their upload. They will be accepted by the program as they are.

4. Wait until the licenses are loaded;
5. Once the process is completed, a notification message will appear:
6. Press [OK] and the Main control window will appear.

### New license

1. Press [Load Licenses];
  2. Go to the file directory, select the license and press [Open].
- NOTE:** All licenses are sent/provided in a ZIP file. It is not needed the file to be unzipped prior to their upload. They will be accepted by the program as they are.
3. Wait while the licenses are loaded;
  4. Once the process is completed, press [OK] and close the Setup window so that the Main control can appear.

## Advanced – Hardware/Supervision

Allows set-up of the Display, SNMP and Windows share options. This section also provide all the needed information for the Temperature, Main CPU Usage and FAN.



**SNMP** – turn the option [ON] or [Off] and specify SNMP Port, SNMO RO Community, SNMO RW Community, SNMP Trap Host and SNMP Trap Port.

**Windows Share** – turn the option [ON] or [Off] and specify Windows Share description and Windows Share Workgroup.

**Power Supply** – displays the current status of the PSU 1 and PSU2 and Analog Power.

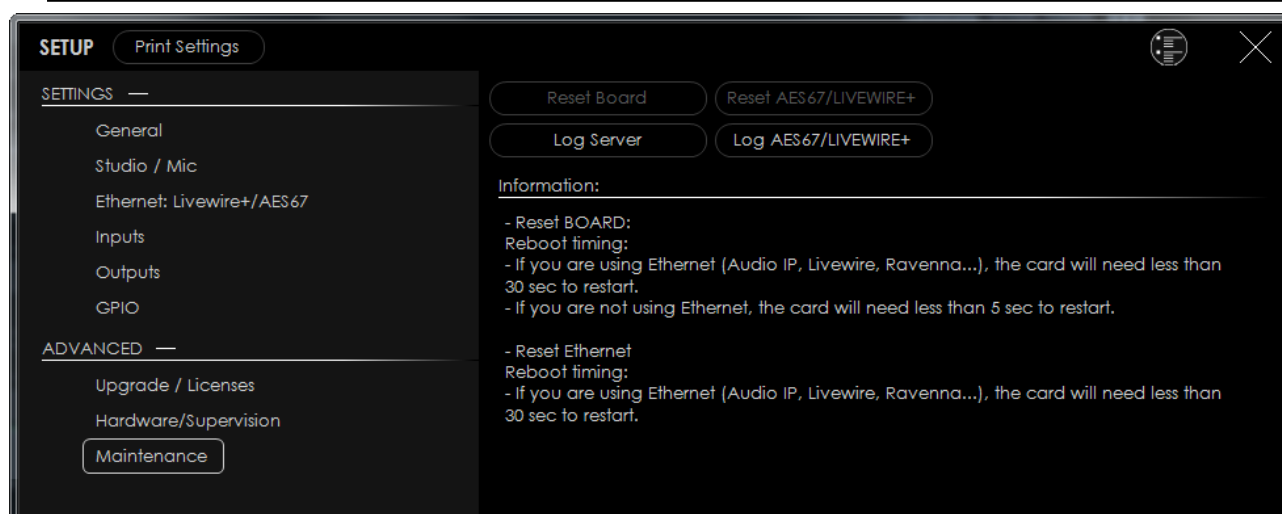
**Temperature** – displays the current temperature (in Celsius) of the Board, CPU, Sharc1 to 4 and IO Board.

**Main CPU usage** – displays the current CPU usage in %.

**Fan** – displays the current status of FAN 1 & 2 in rotations per second.

**Remote assistance** – Turns [On] and [Off] the remote assistance access. It is recommended the remote assistance option to be enabled always.

## Advanced – Maintenance



Intended to reset various components if the system. Information as regards the available options can be found in the right part of the screen. Upon selecting any of the reset options, a warning message will appear. To continue with the process, press OK.

## WARRANTY TERMS AND CONDITIONS

**I. TERMS OF SALE:** SOUND4 Ltd. products are sold with an understanding of “full satisfaction”; that is, full credit or refund will be issued for products sold as new if returned to the point of purchase within 30 days following their receipt, provided that they are returned complete and in an “as received” condition.

**II. CONDITIONS OF WARRANTY:** The following terms apply unless amended in writing by SOUND4 Ltd.

**A.** The Warranty Registration Card supplied with this product must be completed and returned to SOUND4 Ltd. within 10 days of delivery.

**B.** This Warranty applies only to products sold “as new.” It is extended only to the original end-user and may not be transferred or assigned without prior written approval by SOUND4 Ltd.

**C.** This Warranty does not apply to damage caused by improper mains settings and/or power supply.

**D.** This Warranty does not apply to damage caused by misuse, abuse, accident or neglect. This Warranty is voided by unauthorized attempts at repair or modification, or if the serial identification label has been removed or altered.

**III. TERMS OF WARRANTY:** SOUND4 Ltd. products are warranted to be free from defects in materials and workmanship.

**A.** Any discrepancies noted within FIVE YEARS of the date of delivery will be repaired free of charge, or the equipment will be replaced with a new or remanufactured product at SOUND4 Ltd. option.

**B.** Parts and labor for factory repair required after the five-year Warranty period will be billed at prevailing prices and rates.

### **IV. RETURNING GOODS FOR FACTORY REPAIR:**

**A.** Equipment will not be accepted for Warranty or other repair without a Return Authorization (RA) number issued by SOUND4 Ltd. prior to its return. An RA number may be obtained by calling the factory. The number should be prominently marked on the outside of the shipping carton.

**B.** Equipment must be shipped prepaid to SOUND4 Ltd.. Shipping charges will be reimbursed for valid Warranty claims. Damage sustained as a result of improper packing for return to the factory is not covered under terms of the Warranty and may occasion additional charges.



## PRODUCT REGISTRATION CARD

- All fields are required, or warranty registration is invalid and void

Your Company Name \_\_\_\_\_

Contact \_\_\_\_\_

Address Line 1 \_\_\_\_\_

Address Line 2 \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

Country \_\_\_\_\_

E-mail \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

Which SOUND4 Ltd. product did you purchase? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Product Serial # \_\_\_\_\_

Purchase date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Installation date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

\_\_\_\_\_  
Your signature\*

\*Signing this warranty registration form you are stating that all the information provided to SOUND4 Ltd. are truth and correct. SOUND4 Ltd. declines any responsibility for the provided information that could result in an immediate loss of warranty for the above specified product(s).

**Privacy statement: SOUND4 Ltd. will not share the personal information you provide on this card with any other parties.**