

# Streamer Max MKII Streamer Max Elite

## Audio Codec over IP-line MKII (Rev. 4.4 ENG)



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# **SAFETY WARNINGS / ISTRUZIONI PER LA SICUREZZA**

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**SAFETY WARNINGS**

**CONSIGNES DE SÉCURITÉ IMPORTANTES**

**ISTRUZIONI IMPORTANTI PER LA SICUREZZA**

**WICHTIGE SICHERHEITSHINWEISE**

**INSTRUCCIONES IMPORTANTES DE SEGURIDAD**

(Rel. 1.6)

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## PREFACE

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**For your own safety and to avoid invalidation of the warranty all text marked with these Warning Symbols should be read carefully.  
all the texts marked with the Warning Symbols.**



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Information in this manual is subject to change without notice and does not represent a commitment on the part of the vendor. The manufacturer shall not be liable for any loss or damage whatsoever arising from the use of information or any error contained in this manual, or through any mis-operation or fault in hardware contained in the product.

It is recommended that all maintenance and service on the product should be carried out by the manufacturer or its authorised agents. The manufacturer cannot accept any liability whatsoever for any loss or damage caused by service, maintenance or repair by unauthorised personnel

## SAFETY WARNINGS

*The installation and servicing instructions in this manual are for use by qualified personnel only.*

**Read All Instructions.** All safety and operating instructions must be read before operating the product. They also must be retained for future reference, as it contains a number of useful hints for determining the best combination of equipment settings for Yr particular application.

**Heed All Warnings.** All warnings on the product and those listed in the operating instructions must be adhered to.

**Heat.** This product must be situated away from any heat sources such as radiators or other products (including power amplifiers or transmitters) that produce heat.

**Power Sources.** This product must be operated from the type of power source indicated on the marking label and in the installation instructions. If you are not sure of the type of power supplied to your facility, consult your local power company. Make sure the AC main voltage corresponds to that indicated in the technical specifications. If a different voltage (ex. 110/115 VAC) is available, open the equipment closure and set the voltage switch on the main supply circuit, located behind the AC socket.

**Power Cord Protection.** Power supply cords must be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to the cords at AC wall plugs and convenience receptacles, and at the point where the cord plugs into the product.

**Use only with a cart,** stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

**Lightning.** For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the AC wall outlet and the audio connections. This will prevent damage to the product due to lightning and power line surges.

**Installation.** Configuration and installation should only be carried out by a competent installation engineer.

**Cabling.** Using high-quality wires, well protected. Make sure the cable integrity.



This symbol alerts you to the presence of dangerous voltage inside the closure – voltage which may be sufficient to constitute a risk of shock. Do not perform any servicing other than that contained in the operating instructions. Refer all servicing to qualified personnel.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



Do not change the voltage setting or replace the mains fuse without first turning the unit off and unplugging the mains cord.



Make sure the AC main voltage corresponds to that indicated in the technical specifications.

**THIS APPARATUS MUST BE EARTHED!**



To avoid the risk of fire use the correct value fuse, as indicated on the label stuck on the right side of the unit.



This apparatus uses a single pole mains switch and does therefore not separate the unit completely from the mains power. To completely separate from mains power (f.i. in the event of danger) unplug mains power cord. As the MAINS plug is the disconnect device, the disconnect device shall remain readily operable.

## CONSIGNES DE SÉCURITÉ IMPORTANTES

**Lire ces consignes.**

**Conserver ces consignes.**

**Observer tous les avertissements.**

**Suivre toutes les consignes.**

**Ne pas utiliser cet appareil à proximité de l'eau.**

**Ne pas obstruer les ouvertures de ventilation.** Installer en respectant les consignes du fabricant.

**Ne pas installer à proximité d'une source de chaleur** telle qu'un radiateur, une bouche de chaleur, un poêle ou d'autres appareils (dont les amplificateurs) produisant de la chaleur.

**Ne pas annuler la sécurité de la fiche de terre**, la troisième branche est destinée à la sécurité. Si la fiche fournie ne s'adapte pas à la prise électrique, demander à un électricien de remplacer la prise hors normes.

**Protéger le cordon d'alimentation** afin que personne ne marche dessus et que rien ne le pince, en particulier aux fiches, aux prises de courant et au point de sortie de l'appareil.

**Utiliser uniquement les accessoires spécifiés par le fabricant.**

**Utiliser uniquement avec un chariot**, un support ou une table spécifié par le fabricant ou vendu avec l'appareil. Si un chariot est utilisé, déplacer l'ensemble chariot–appareil avec précaution afin de ne pas le renverser, ce qui pourrait entraîner des blessures.

**Débrancher l'appareil** pendant les orages ou quand il ne sera pas utilisé pendant longtemps.

**Confier toute réparation à du personnel qualifié.** Des réparations sont nécessaires si l'appareil est endommagé d'une façon quelconque, par exemple: cordon ou prise d'alimentation endommagé, liquide renversé ou objet tombé à l'intérieur de l'appareil, exposition de l'appareil à la pluie ou à l'humidité, appareil qui ne marche pas normalement ou que l'on a fait tomber.

**NE PAS exposer cet appareil aux égouttures et aux éclaboussures.** Ne pas poser des objets contenant de l'eau, comme des vases, sur l'appareil.



Ce symbole indique la présence d'une tension dangereuse dans l'appareil constituant un risque de choc électrique.



Ce symbole indique que la documentation fournie avec l'appareil contient des instructions d'utilisation et d'entretien importantes.



Avant de modifier le commutateur de changement de tension ou remplacer le fusible il faut débrancher l'appareil de la prise électrique. Pendant son usage, l'appareil doit être branché à la prise de terre.



Utiliser le fusible principal AC avec la valeur qui est indiquée sur l'étiquette collée sur le coffret.



Assurez-vous que la tension principale AC correspond à celle indiquée dans les spécifications techniques.



L'interrupteur d'alimentation interrompt un pôle du réseau d'alimentation excepté le conducteur de terre de protection. En cas de danger, débrancher le cordon d'alimentation. Parce que la prise du réseau de alimentation est utilisée comme dispositif de déconnexion, ce dispositif doit demeurer aisément accessible.



## ISTRUZIONI IMPORTANTI PER LA SICUREZZA

**Leggere le presenti istruzioni.**

**Conservare queste istruzioni.**

**Osservare tutte le avvertenze.**

**Seguire scrupolosamente tutte le istruzioni.**

**Non usare questo apparecchio in prossimità di acqua.**

**Non ostruire alcuna apertura per il raffreddamento.** Installare l'apparecchio seguendo le istruzioni.

**Non installare l'apparecchio accanto a fonti di calore** quali radiatori, aperture per l'afflusso di aria calda, forni o altri apparecchi (amplificatori inclusi) che generino calore.

**Non rimuovere il terminale di connessione a terra sul cordone di alimentazione:** esso ha lo scopo di tutelare l'incolumità dell'utilizzatore. Se la spina in dotazione non si adatta alla presa di corrente, rivolgersi ad un elettricista per far eseguire le modifiche necessarie.

**Evitare di calpestare il cavo di alimentazione o di comprimerlo,** specialmente in corrispondenza della spina e del punto di inserzione sull'apparato.

**Utilizzare solo dispositivi di collegamento e gli accessori specificati dal produttore.**

**Utilizzare l'apparecchio** solo con un carrello, un sostegno, una staffa o un tavolo di tipo specificato dal produttore o venduto insieme all'apparecchio. Se si utilizza un carrello, fare attenzione negli spostamenti per evitare infortuni causati da ribaltamenti del carrello stesso.

**Scollegare l'apparecchio dalla presa di corrente** durante i temporali o quando inutilizzato a lungo.

**Per qualsiasi intervento,** rivolgersi a personale di assistenza qualificato. È necessario intervenire sull'apparecchio ogniqualvolta si verificano danneggiamenti di qualsiasi natura. Ad esempio, la spina o il cavo di alimentazione sono danneggiati, è entrato liquido nell'apparecchio o sono caduti oggetti su di esso, l'apparecchio è stato esposto alla pioggia o all'umidità, non funziona normalmente o è caduto.

**Non esporre a gocciolamenti o spruzzi.** Non appoggiare sull'apparecchio oggetti pieni di liquidi, ad esempio vasi da fiori.



Questo simbolo indica la presenza di alta tensione all'interno dell'apparecchio, che comporta rischi di scossa elettrica.



Questo simbolo indica la presenza di istruzioni importanti per l'uso e la manutenzione nella documentazione in dotazione all'apparecchio.



Non sostituire il fusibile o cambiare la tensione di alimentazione senza aver prima scollegato il cordone di alimentazione. **L'APPARATO DEVE ESSERE CONNESSO A TERRA.**



Sostituire il fusibile generale con uno di identico valore, come indicato sulla etichetta applicata sul mobile dell'apparato



Assicurarsi che la tensione di rete corrisponda a quella per la quale è configurato l'apparecchio.



Questo apparato utilizza un interruttore di alimentazione di tipo unipolare e l'isolamento dalla rete elettrica non è pertanto completo. Per ottenere un isolamento totale (ad esempio in caso di pericolo), scollegare il cordone di alimentazione. Inoltre, poichè la spina di alimentazione è utilizzata come dispositivo di sezionamento, essa deve restare facilmente raggiungibile.

## WICHTIGE SICHERHEITSHINWEISE

**Diese Hinweise LESEN.**

**Diese Hinweise AUFHEBEN.**

**Alle Warnhinweise BEACHTEN.**

**Alle Anweisungen BEFOLGEN.**

**Dieses Gerät NICHT in der Nähe von Wasser verwenden.**

**KEINE Lüftungsöffnungen verdecken.** Gemäß den Anweisungen des Herstellers einbauen.

**Nicht in der Nähe von Wärmequellen,** wie Heizkörpern, Raumheizungen, Herden oder anderen Geräten (einschließlich Verstärkern) installieren, die Wärme erzeugen.

**Die Schutzfunktion des Schukosteckers NICHT umgehen.** Bei Steckern für die USA gibt es polarisierte Stecker, bei denen ein Leiter breiter als der andere ist; US-Stecker mit Erdung verfügen über einen dritten Schutzleiter. Bei diesen Steckerausführungen dient der breitere Leiter bzw. der Schutzleiter Ihrer Sicherheit. Wenn der mitgelieferte Stecker nicht in die Steckdose passt, einen Elektriker mit dem Austauschen der veralteten Steckdose beauftragen.

**VERHINDERN, dass das Netzkabel gequetscht oder darauf getreten wird,** insbesondere im Bereich der Stecker, Netzsteckdosen und an der Austrittsstelle vom Gerät.

**NUR das vom Hersteller angegebene Zubehör** und entsprechende Zusatzgeräte verwenden.

**NUR in Verbindung** mit einem vom Hersteller angegebenen oder mit dem Gerät verkauften Transportwagen, Stand, Stativ, Träger oder Tisch verwenden. Wenn ein Transportwagen verwendet wird, beim Verschieben der Transportwagen-Geräte- Einheit vorsichtig vorgehen, um Verletzungen durch Umkippen.

**Das Netzkabel dieses Geräts** während Gewittern oder bei längeren Stillstandszeiten aus der Steckdose ABZIEHEN.

**Alle Reparatur- und Wartungsarbeiten** von qualifiziertem Kundendienstpersonal DURCHFÜHREN LASSEN. Kundendienst ist erforderlich, wenn das Gerät auf irgendeine Weise beschädigt wurde, z.B. wenn das Netzkabel oder der Netzstecker beschädigt wurden, wenn Flüssigkeiten in das Gerät verschüttet wurden oder Fremdkörper hineinfließen, wenn das Gerät Regen oder Feuchtigkeit ausgesetzt war, nicht normal funktioniert oder fallen gelassen wurde.

**Dieses Gerät vor Tropf- und Spritzwasser SCHÜTZEN.** KEINE mit Wasser gefüllten Gegenstände wie zum Beispiel Vasen auf das Gerät STELLEN.



Dieses Symbol zeigt an, dass gefährliche Spannungswerte, die ein Stromschlagrisiko darstellen, innerhalb dieses Geräts auftreten.



Dieses Symbol zeigt an, dass das diesem Gerät beiliegende Handbuch wichtige Betriebs- und Wartungsanweisungen enthält.



Vor Änderung der Netzspannung oder Sicherungswechsel Netzkabel trennen.  
Das Gerät muss für den Betrieb geerdet werden.



Hauptsicherung nur mit einer gleichwertigen austauschen  
(s. entsprechende Etikette).



Vor Einschalten Netzspannungseinstellung am Gerät überprüfen bzw. anpassen.



Inpoliger Netzschalter. In Notfälle oder für Wartungsarbeiten Netzkabel trennen. Der Netzstecker fungiert auch als Trennelement muss deshalb zugänglich bleiben.

## INSTRUCCIONES IMPORTANTES DE SEGURIDAD

**LEA** estas instrucciones.

**CONSERVE** estas instrucciones.

**PRESTE ATENCION** a todas las advertencias.

**SIGA** todas las instrucciones.

**NO** utilice este aparato cerca del agua.

**NO obstruya ninguna de las aberturas de ventilación.** Instálese según lo indicado en las instrucciones del fabricante.

**No instale el aparato cerca de fuentes de calor** tales como radiadores, registros de calefacción, estufas u otros aparatos (incluyendo amplificadores) que produzcan calor.

**NO anule la función de seguridad del enchufe polarizado** o con clavija de puesta a tierra. Un enchufe polarizado tiene dos patas, una más ancha que la otra. Un enchufe con puesta a tierra tiene dos patas y una tercera clavija con puesta a tierra. La pata más ancha o la tercera clavija se proporciona para su seguridad. Si el toma corriente no es del tipo apropiado para el enchufe, consulte a un electricista para que sustituya el toma corriente de estilo anticuado.

**PROTEJA el cable eléctrico** para evitar que personas lo pisen o estrujen, particularmente en sus enchufes, en los toma corrientes y en el punto en el cual sale del aparato.

**UTILICE únicamente los accesorios especificados por el fabricante.**

**UTILICESE únicamente** con un carro, pedestal, escuadra o mesa del tipo especificado por el fabricante o vendido con el aparato. Si se usa un carro, el mismo debe moverse con sumo cuidado para evitar que se vuelque con el aparato.

**DESENCHUFE el aparato** durante las tormentas eléctricas, o si no va a ser utilizado por un lapso prolongado.

**TODA reparación** debe ser llevada a cabo por técnicos calificados. El aparato requiere reparación si ha sufrido cualquier tipo de daño, incluyendo los daños al cordón o enchufe eléctrico, si se derrama líquido sobre el aparato o si caen objetos en su interior, si ha sido expuesto a la lluvia o la humedad, si no funciona de modo normal, o si se ha caído.

**NO esponga** este aparato a chorros o salpicaduras de líquidos. **NO** coloque objetos llenos con líquido, tales como floreros, sobre el aparato .



**Este símbolo indica que la unidad contiene niveles de voltaje peligrosos que representan un riesgo de choques eléctricos.**



**Este símbolo indica que la literatura que acompaña a esta unidad contiene instrucciones importantes de funcionamiento y mantenimiento.**



**Antes de cambiar la alimentación de voltaje o de cambiar el fusible, desconecte el cable de alimentación. Para reducir el riesgo de descargas eléctricas, esta unidad debe ser conectada a tierra.**



**Remplazé el fusible con lo mismo, que corresponde a lo indicado en el panel del equipo.**



**Antes de encender, controlar que la línea de alimentación de voltaje corresponda a la indicada.**



**El interruptor de alimentación es unipolar. En el caso de peligro, desconecte el cable de alimentación. Porque la clavija de conexión a red sirve por la desconexión de la unidad, la clavija debe ser ubicada en proximidad de la unidad.**

## UNPACKING AND INSPECTION

Your equipment was packed carefully at the factory in a container designed to protect the unit during shipment. Nevertheless, we recommend making a careful inspection of the shipping carton and the contents for any signs of physical damage.

### Damage & Claims

If the damage is evident, do not discard the container or packing material. Contact your carrier immediately to file a claim for damages. Customarily, the carrier requires you, the consignee, to make all damage claims. It will be helpful to retain the shipping documents and the waybill number.

Save all packing materials! If You should ever have to ship the unit (e.g. for servicing), it is best to ship it in the original carton with its packing materials because both the carton and packing material have been carefully designed to protect the unit.

Under normal conditions, no user maintenance or calibration is required. Internal links and preset controls may be set to configure the unit during installation. Any service work required should be carried out by qualified service personnel only.

We are able to offer further product support through our worldwide network of approved dealers and service agents.

To help us provide the most efficient service please would you keep a record of the unit serial number and date and place of purchase to be quoted in any communication regarding this product.

The actual equipment Serial Number is indicated on the silver label stuck on the rear panel of the equipment closure.



### Tools And Equipment Needed

Only standard technician's tools are required to install this equipment.

# FIRST INSTALLATION RECOMMENDATIONS

## POWER SUPPLY CABLE

A power supply cable of approx. 2 mt lengths is supplied with the device, which has a moulded IEC plug attached – this is a legal requirement. The type of plug for the power supply depends on the country in which it is delivered.

If for any reason, you need to use this appliance with a different plug, you should use the following wiring guidelines in replacing the existing plug with the new one:

<b>Earth</b>	Green, or green and yellow
<b>Neutral (N)</b>	Blue
<b>Live (L)</b>	Brown

Supply cables should be laid in such a manner that one does not step or walk on them. They should not be squashed by any objects.

### THIS EQUIPMENT MUST BE EARTHED.

The chassis is always connected to mains earth to ensure your safety: check your mains wiring and earthing before switching on.

## PROTECTION AGAINST LIGHTNING



Should the device be put out of action due to being struck by lightning or excess voltage, disconnect it from the power supply without delay. Do not reconnect until the device has been checked. If in doubt contact the technical support service.

Make sure there is a suitable lightning protection to protect the device. Alternatively, you should disconnect all connectors from the device during a storm or when the device is going to be unsupervised or not used for a longer period of time.

These measures will protect against damage by lightning or excess voltage.



## VENTILATION

The equipment will operate as a free-standing unit without requiring any special cooling arrangement. However, slots and openings in the product are provided for ventilation. They ensure reliable operation of the product, keeping it from overheating. These openings must not be blocked nor covered during operation.

YOU MUST LEAVE AT A MINIMUM ONE RACK UNIT OF EMPTY SPACE ABOVE THE EQUIPMENT TO ENHANCE VENTILATION AND TO GET A LONGER EQUIPMENT LIFE.

## DEVICE INSTALLATION

### Best setup location

The device should be installed in a 19" rack. Avoid direct sunlight, close proximity to radiators and air conditioning, dust, water, and chemicals. Choose a rack location that permits a clear view to the indicators on the device and ensure a sufficient heat dissipation of the device.

### Power supply

The device is designed for operation with 100 to 240 V AC, 50 Hz to 60 Hz. Check the corresponding device labelling for compatibility to the domestic line voltage and frequency before connecting the IEC power connector to the mains supply!



### WARNING

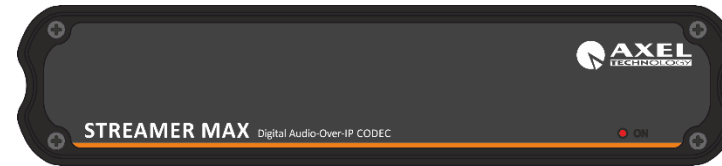
Disconnect mains power plug before you open the housing. Repair of the equipment must only be carried out by authorized and qualified personnel.

Power Supply	Please make sure that the device and the contained fuse(s) (please see p. 20) are compatible to the domestic line voltage and frequency. If the device is compatible, connect the power supply cord fully to the IEC power connector at the rear side of the device and a mains power outlet. The “LCD Screed” will then turn on.
Network configuration	For delivery, the device is configured with default settings for the first connection via the IP interface.
Connect to network	Connect a network patch cable to the “10/100-Base-T” connector on the rear side of the device and your existing IP network.
Web interface	The device can be fully operated with an internet browser via the integrated web interface. Use a computer that is connected to the same IP network that the <b>Streamer Max</b> device is connected to. Start an internet browser, Firefox/Mozilla >V2.0 Google Chrome both with Java Script activated and enter the configured IP address in the address bar of the browser. If the IP address has not been changed in step 2, please enter the default address in the address bar of the browser: <b>192.168.99.70</b> .
Ready!	These first steps are only intended for a quick first start and do not cover all device functions. Pease read carefully the entire manual to be able to use all functions of the device.
Important note on the Username and password	The equipment comes out from Axel Technology with a standard username: admin and password: admin Each time a NEW user, with administration rights is created, the user <b>admin</b> disappears and it is replaced by the new one just created. If all users are deleted, the standard admin – admin comes out again

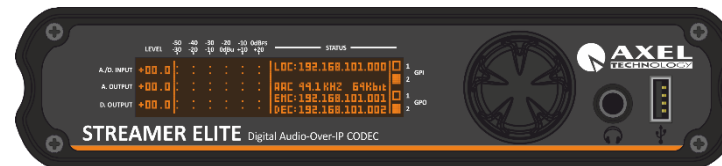
## DEVICE GENERAL DESCRIPTION

### FRONT PANEL

#### *Streamer Max MKII*



#### *Streamer Max Elite*

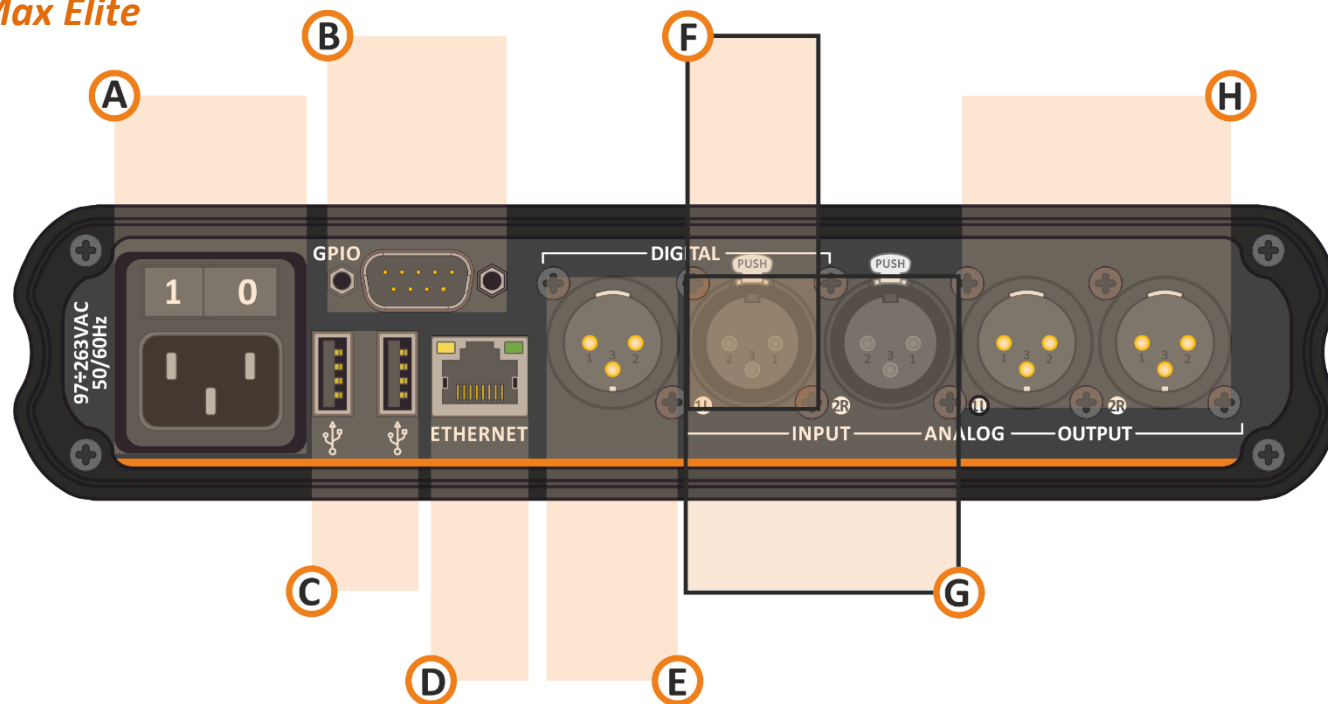


- DEVICE NAMEPLATE, Plate stating product name and description.
- USB Port - Type A (only Streamer Elite).
- LCD Display (only Streamer Elite).
- Jog Shuttle (only Streamer Elite).
- ON Led indicator (only Streamer Max MKII).
- Headphone Jack 6.3mm Female Connector **FOR THE DECODED SIGNAL** (only Streamer Elite).

## REAR PANEL

### Streamer Max MKII

### Streamer Max Elite



- A. Universal Power Supply 90Vac - 240Vac 50/60Hz.
- B. GPIO Port with 4 optocouplers on DB9 PIN Female connector.
- C. 2 USB port - Type A.
- D. LAN/WAN Ethernet port.
- E. 1 Digital stereo output.
- F. 1 Digital stereo input.
- G. 2 Analog mono input.
- H. 2 Analog mono output.

# 1. INTRODUCTION

## 1.1 APPLICATION AND PURPOSE

**Studio-to-transmitter link (STL Connection):** Streamer MAX can be used for all kind of links between mobile and studio. Being easy to use and set avoids any setting problem and allows those non specialized to easily use it. Moreover a lot of Radio Station is turning into Audio-Over-IP as StudioTransmitter Link from the Main audio Studio directly to the Transmitting Site. A different purpose for Streamer MAX is the permanent link between Outcast News Room or OB Studios and the Master Control Room. Today fast internet connection are available almost everywhere, so if a Radio Broadcaster need to offer a good audio quality, and not the telephone quality, could use this Equipment. Axel Technology White Paper Networked Audio-Over-IP solution 6 3.

**Public Address:** The new Streamer MAX are designed also to distribute audio easily in a complex system. It can be used in several applications to broadcast audio files like background music at the same time to the specific messages, like live announcements, in areas previously identified.

**Background Music:** It's a perfect solution for Malls, Hotels, Shopping Centres and other surfaces with many different sound zones. The integrated web server allows you to check in remote mode the parameters of each single Streamer MAX box.

**Voice evacuation:** emergency situation In locations where crowds gather such as a stadium, an efficient sound distribution is required especially in case of emergency. Playback to the complete circuit the standard “Alarm Tones” or general code of behaviour in case of emergency. Using the right Streamer MAX box it is possible to lead people to the nearest exit.

**Advertising Network Split Areas:** In large companies with locations and branches at different remote sites (like Market Chains) MAX series distribute your sound and your advertising message troughout the chain. It is also possible to split Advertising areas to generate different market areas.

**Zoned sound reinforcement:** MAX Series is a very flexible sound distribution system and can help to create the right atmosphere in your selected zone. For example in a museum you may also enable a single Streamer MAX to explain a particular picture.

**Control operation:** MAX Series can be used also where special security features are required (for example in a tunnel). You can create several priority levels to be used according to fire brigade, ambulance and police procedures. Axel Technology White Paper Networked Audio-Over-IP solution 7

**Rail, Metro Station, Ships:** MAX series allows to creation of an audio distribution system using only one CAT5 cable. In a ship you can distribute the sound in each location (hall, restaurant, control bridge, cabins) with the option to make an announcement only in certain predefined areas in independent mode.

## 1.2 STREAMER MAX MKII – VERSION AVAILABLE

CODE#	MODEL	COMMERCIAL DESCRIPTION
A116010000	STREAMER MAX MKII	Bidirectional Encoder/Decoder for streaming audio over IP. Analog and AES/EBU I/O. Formats: PCM, MP3, AAC, Vorbis, Shoutcast, Icecast. Distributes audio over standard TCP/IP, LAN, WAN and UMTS networks with external modem. GPIO. Unicast/Multicast
A116010001	STREAMER MAX ELITE MKII	Bidirectional Encoder/Decoder for streaming audio over IP. Graphic display and encoder. Analog and AES/EBU I/O. Formats: PCM, MP3, AAC, Vorbis, Shoutcast, Icecast. Streams audio over standard TCP/IP, LAN, WAN and UMTS networks with external modem. GPIO. Unicast/Multicast

## 1.3 USE OF THIS MANUAL

This manual is for the **Streamer MAX MKII** and **Streamer Max MKII Elite**. Certain features may be altered without prior notice.



## 2. FIRST DEVICE START

After important setting changes we suggest you always to reboot the device (For example: after a device upgrade, or changes on IP address).

### 2.1 STARTING YOUR STREAMER MAX - QUICK SETUP

Turn **ON** the **STREAMER MAX** device with the power switch, on the rear panel:

Connect the device to your **LAN** with an ETHERNET CABLE. Your device could be controlled by one of the following methods:

1. The device could be controlled by a web page on your browser. The device is programmed with a **Streamer MAX MKII** output factory programmed with a Static IP. In the address field of your browser, type the default IP address: **192.168.99.70**. You will see the Home Page.



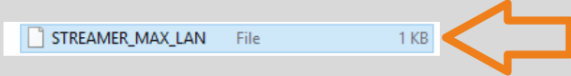
To configure the device via web browser Streamer Max need to set the network card on your PC class 99 and enter a free IP that is NOT 70 because 70 already in use in the **Streamer Max**. It's not possible to use the internal DHCP.

**Web browsers supported:**

- Internet Explorer 8.0
- Mozilla Firefox
- Google Chrome
- Safari

- It can set **STREAMER MAX ELITE** parameters by using the Jog Shuttle Wheel on the device panel. by using the Jog Shuttle Wheel on the right you can edit all the available parameters.

### CHANGE THE DEVICE IP ASSIGNMENT

<p><u>Turn off</u> the device and take a standard USB key and insert it in REAR.</p>	
<p>Insert the USB key in the USB Port of the device REAR (Specifically, the closer one of the power supply).</p>	 <p style="color: red; text-align: center;">Specifically this one</p>
<p>Turn on the device and wait in about 60 sec. The device will write the IP in TXT file into the USB key.</p>	



## HOME PAGE

**GENERAL INFORMATION**

Name	Date	GPI	GPO	Selected Network	Data Mode	Rel. FW	Rel. Web
Streamer Max	23/08/18	1	2	LAN	Multicast Server	1.1.2	1.1.0
Location	Time	DHCP Status	IP Address	Subnet Mask	Default Gateway		
-----	15:04:58	Disabled	192.168.099.70	255.255.255.000	192.168.099.100		

**ENCODER STATUS** — CONNECTED

DT: --- Rtcp: Ok Q: Ok Jitter: 3% Buffer: 500msec

Left Right

Audio Input	Gain	RMS-L	RMS-R	Peak-L	Peak-R
Analogic	12.0 + 2.7 dB	-13.2 dBu	-13.5 dBu	-7.4 dBu	-8.0 dBu
Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Rtp-Udp	MP3	192 kbps	Stereo	44.1 kHz

**DECODER STATUS** — CONNECTED

DT: --- Rtcp: Ok Q: Ok Jitter: 3% Buffer: 500msec

Left Right

Dig Out Gain	An Out	RMS-L	RMS-R	Peak-L	Peak-R
0.0 dB	Disabled	-12.6 dBu	-13.6 dBu	-6.0 dBu	-6.2 dBu
Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Rtp-Udp	MP3	192 kbps	Stereo	44.1 kHz

In the previous screen, you can read for some parameters of your device. To see all parameters and to change them you have to login with a special Username and password.

Click **LOGIN** at top-right.

The equipment comes out from Axel Technology with a standard username – the default admin:

Username: **admin** (case sensitive)

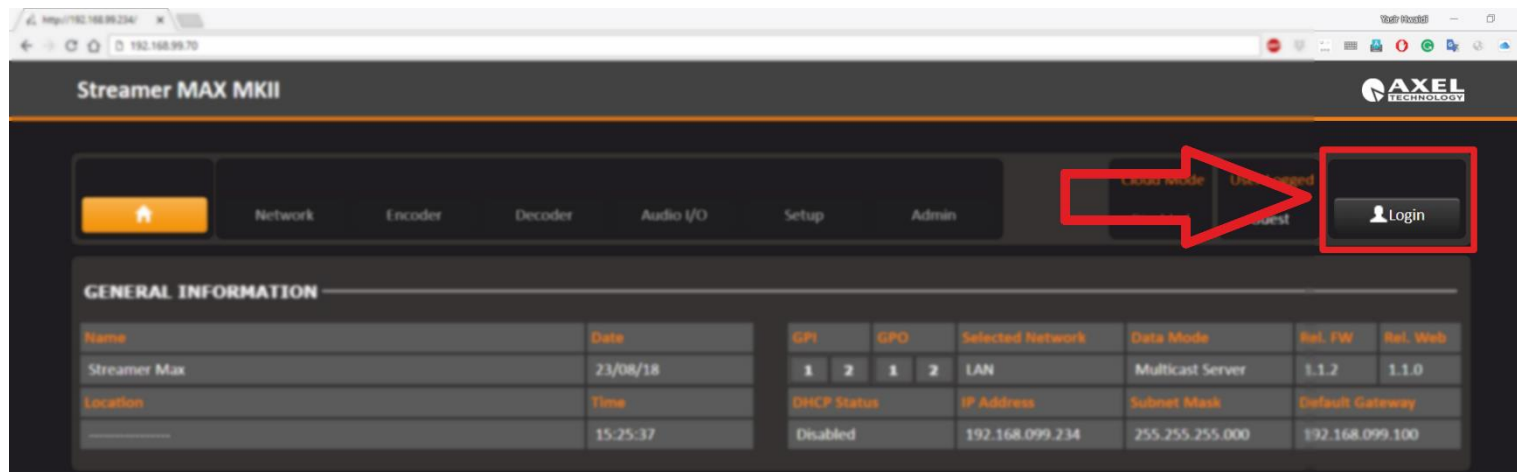
password: **admin** (case sensitive)

**NB:** Each time a NEW user, with administration rights is created, the user **admin** disappears and it is replaced by the new one just created. If all users are deleted, the default admin comes out again, in order to create and enter the device settings.

## 2.2 LOGIN

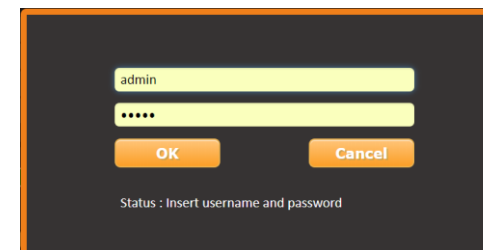
In the **Home Page**, you can read for some parameters of your device. To see all parameters and to change them you have to login with a special Username and password.

Click **LOGIN** at top-right.



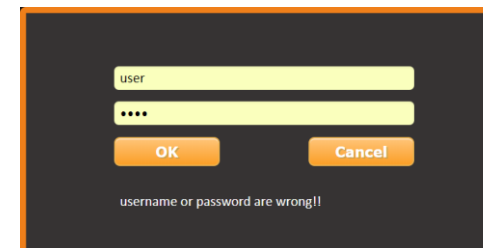
You will see the Login mask as shown in this picture:

In the first field type for your **Username**, and in the second one type for the **Password**. Then click on **Login**.

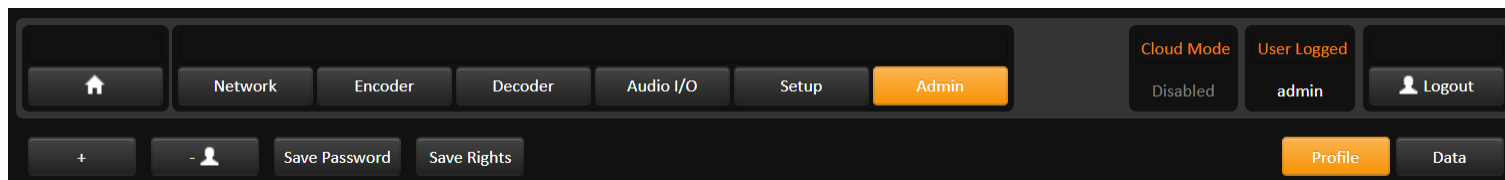


If you see the following message you typed a wrong **Username** or a wrong **Password**.

Type them again and retry.

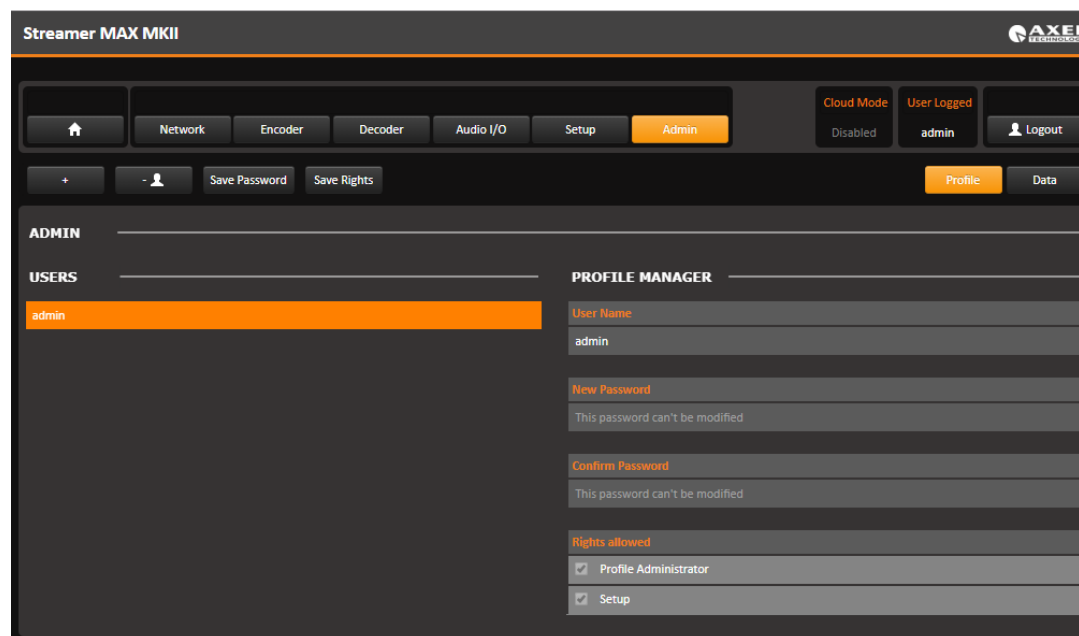


## 2.2.1 ADMIN



From the **Admin Page**, you can manage all the users and the user classes. You can create or delete users choosing between the available user classes:

### Profile Administrator Setup



### Profile Administrator

The Full Administrator manages all user profiles, accesses all pages (except the calibration).

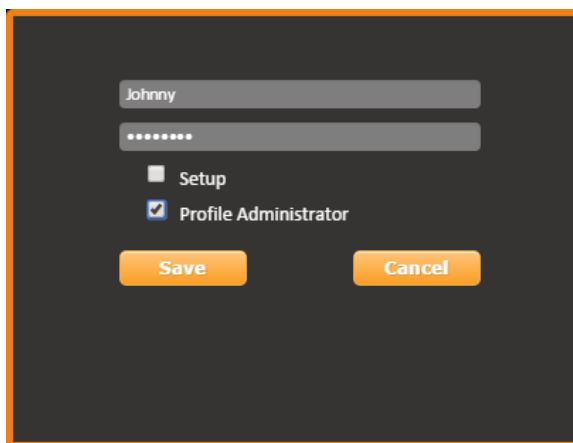
**Default Administrator (Default User):** The default administrator is the default user of the device, it is under the Full Administrator category, but it has fixed access credentials (user: admin – pwd: admin). This user is visible only when the system has no other profile Administrators.

## Setup

Non-administrator user that accesses all pages. The technician is the one who controls all the hardware parameters of the machine and the control of information pages.

To create a new user click on the button  in the **Admin** tab, **Profile** page.

And insert the new user name and the new password in the following spaces:



The screenshot shows a dark-themed user creation form. It features two input fields: the first contains the text 'Johnny' and the second contains a masked password '.....'. Below the fields are two checkboxes: 'Setup' (unchecked) and 'Profile Administrator' (checked). At the bottom of the form are two orange buttons labeled 'Save' and 'Cancel'.

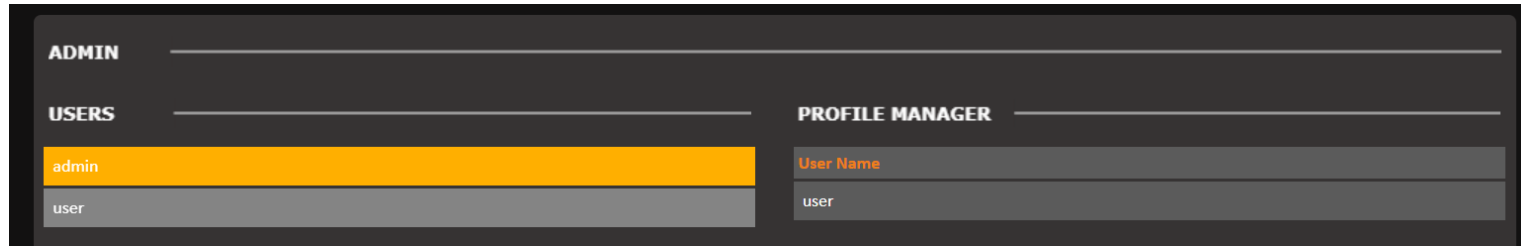
Decide what kind of user you want. Decide if the user can modify the **Setup** or if he is a **Profile Administrator**.

1. Be aware that the user and admin are case sensitive.
2. For the password field there are no minimal limitation.
3. No complexion requirement must be reached.
4. At least one character must be filled.
5. No Empty password allowed.
6. The maximum length is 50 characters.
7. Backspace is a character, and considered as character.

After every Rights changes click on **Save Rights**.

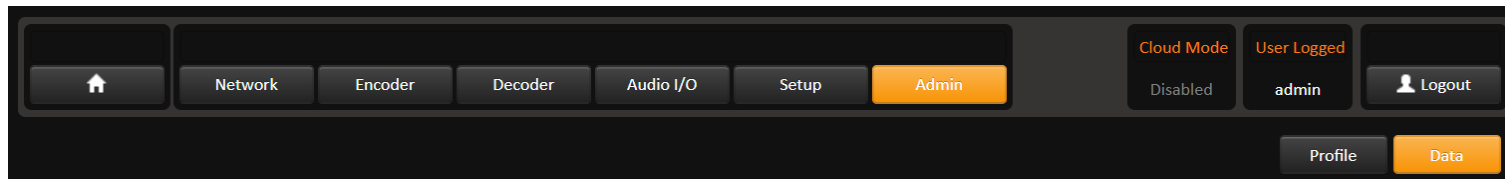
To remove the user, click on it from the **Users** side and click on  button.

But, once from the new user the Profile Administrator is removed, **Streamer Max MKII** creates automatically one more time the “**admin**” user with all rights allowed. This admin user is highlighted in yellow, as per picture below:



**NOTE:** It is not possible to change the password for admin user.

## 2.2.2 DATA



Every section of the **Data** panel has a status bar showing the progress of every operation you do.



**Upload:** you can upload from here a configuration file to set all the **Streamer MAX MKII** parameters.

**Download:** you can download from here a (.json) file with all **Streamer MAX MKII** settings.

**ACCESS LOG**
**STATUS**

Refresh
Download

```

[1970-05-14 03:18:24] Logout: Default_admin
[1970-05-14 04:05:19] Login: Default_admin, Rights: SETUP-ADMIN
[1970-05-14 06:58:59] Logout: Default_admin
[1970-05-14 23:01:10] Login: Default_admin, Rights: SETUP-ADMIN
[1970-05-14 23:51:11] Logout: Default_admin
[1970-05-15 01:55:50] Login: Default_admin, Rights: SETUP-ADMIN
[1970-05-15 02:45:51] Logout: Default_admin
[1970-05-15 05:23:32] Login: Default_admin, Rights: SETUP-ADMIN
                    
```

**Refresh:** click here to refresh the access log list of the picture.

**Download:** you can download from here a (.log) file with the whole access log list.

**TRAP EVENT LOG**
**STATUS**

Refresh
Download

```

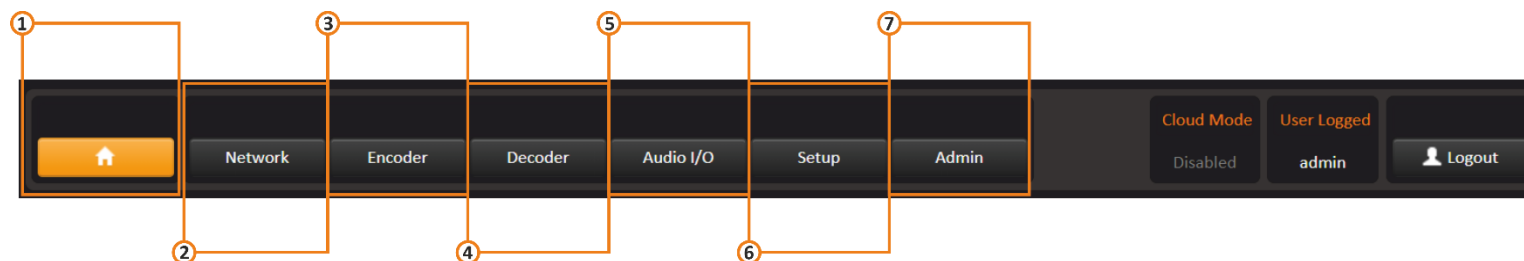
[1970-01-01 01:02:24] Trap: COLD START
[1970-01-01 01:04:17] Trap: COLD START
[1970-01-01 02:05:20] Trap: COLD START
[2018-03-23 14:22:03] Trap: COLD START
[2018-03-23 15:24:06] Trap: COLD START
[2018-04-10 17:09:26] Trap: COLD START
[1970-01-01 01:00:24] Trap: COLD START
[1970-01-01 01:20:28] Trap: COLD START
                    
```

**Refresh:** click here to refresh the trap event log list of the pictur.

**Download:** you can download from here a .log file with the whole trap event log list.

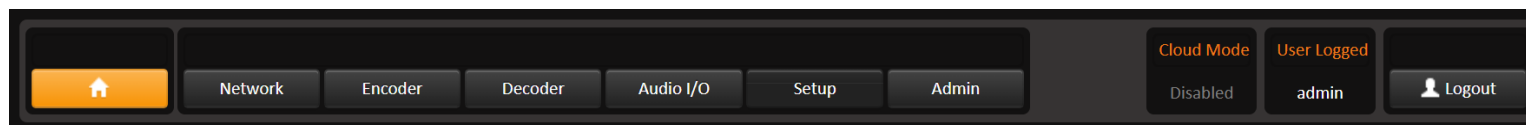
## 3. WEB INTERFACE

At the top of the page you can see a fast summary mask with all the current parameters and warnings as shown in the following picture:



1. **Home page:** you can read from this part all the main information is reported.
2. **Network:** from this part, it is possible to access and modify the value for Ethernet.
3. **Encoder:** from this part, the user can access on all the encoding features.
4. **Decoder:** from this part, can set all the parameters to receive your audio from your Shoutcast.
5. **AUDIO I/O:** from this part, can set parameters for the Input Audio Setup and for the Output Audio Setup.
6. **Setup:** from this part, in this page it's possible to set some working parameters about Streamer MAX MKII.
7. **Admin:** can manage all the users and the user classes.

### 3.1 HOME



The central front bar allows to browse inside the **Streamer Max MKII**. This bar is mainly divided in two sections, the Home page where it is possible to see the status of the equipment and the Settings, as **Network**, **Encoder**, **Decoder**, **Audio I/O**, **Setup** and **Admin**. All these pages are under Admin/Password protection.

### 3.1.1 GENERAL INFORMATION

In the lower side some general information are reported, as **Streamer Max MKII** name, the Location where it is installed, the IP Ethernet Address. The internal clock time and date information are reported together with **GPI** and **GPO**, and the Release Firmware and web page.

GENERAL INFORMATION					
<b>Name</b>	<b>Date</b>	<b>GPI</b>	<b>GPO</b>	<b>Selected Network</b>	<b>Data Mode</b>
Streamer Max	23/08/18	1 2	1 2	LAN	Multicast Server
<b>Location</b>	<b>Time</b>	<b>DHCP Status</b>	<b>IP Address</b>	<b>Subnet Mask</b>	<b>Default Gateway</b>
-----	15:04:58	Disabled	192.168.099.70	255.255.255.000	192.168.099.100
<b>Rel. FW</b>	<b>Rel. Web</b>				
1.1.2	1.1.0				

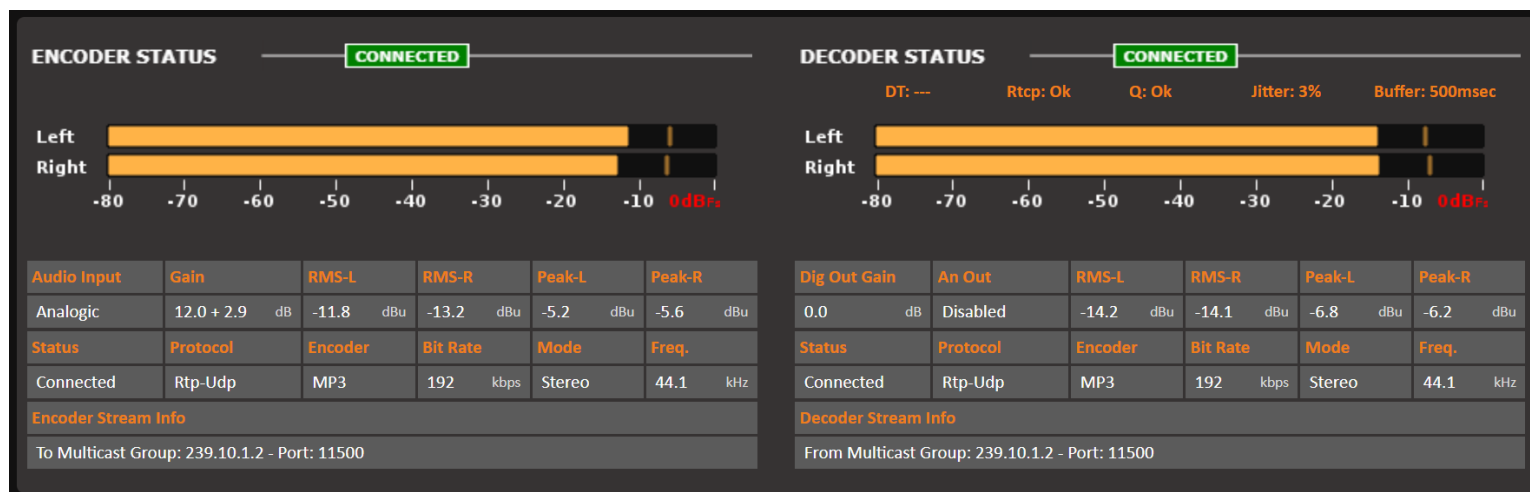
### 3.1.2 NTP TIME AND DATA SYNC

If the Date and Time are with a red label below the box, this means that Streamer Max MKII has not been able to synchronize via NTP the time and the clock.

All the information proposed in this page are only to be visualized.

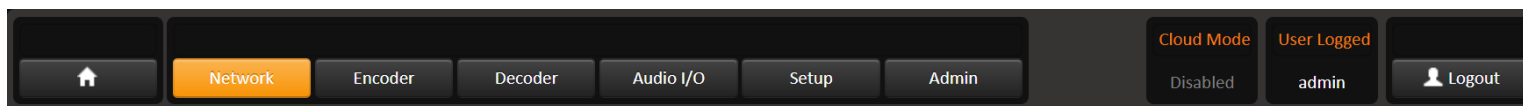
The **HOME** page is mainly divided in two:

in the Left side all the information about the Encoder and in the Right side all the information about the decoder.





## 3.2 NETWORK

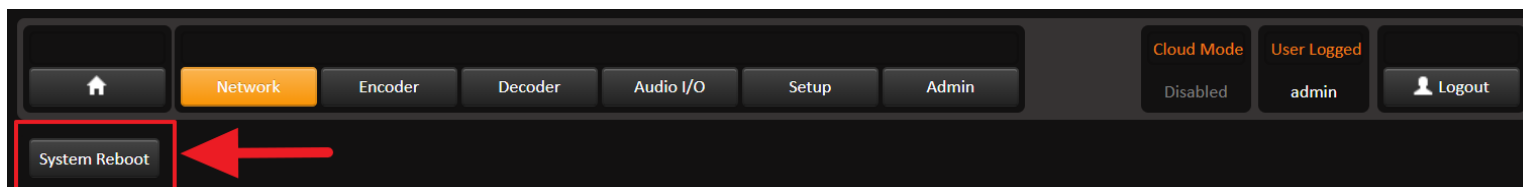


By pressing this button, it is possible to access and modify the value for Ethernet.

**Streamer Max MKII** is featured with double IP (Main IP Address and Recovery IP Address).

In **MAIN IP ADDRESS SETUP**, you can set an **IP** Address, Subnet Mask, and Gateway for the network card.

### System Reboot



Click here to rebooting the system.

After important setting changes we suggest you always to reboot the device (For example: after a device upgrade, or changes on IP address).

### NETWORKS

Here can find the status of the IP network settings.

NETWORKS			
DHCP Status	IP Address	Subnet Mask	Default Gateway
Disabled	192.168.099.234	255.255.255.000	192.168.099.100

Each time a modify has been done, **Streamer Max MKII** must be rebooted otherwise changes maybe not applied.

If you want to change the **Main IP address** click on **CHANGE IP ADDRESS & REBOOT** at the right of the Network section.



## MAIN IP ADDRESS SETUP

**DHCP MODE:** from here can be disable/enable the DHCP mode (Dynamic Host Configuration Protocol).

If you enable the **DHCP Mode** you do not know what IP has been assigned by **DHCP server**. If the user set a **Recovery IP Address** as 192.168.120.120, **Subnet Mask** as 255.255.255.0 via web browser it is possible to reach the unit using this standard and fixed IP address. Then the user can see what IP has been assigned by the DHCP Server from the Home page, in the right side of Home -> Status -> IP Address

**IP Address:** double click at the IP Address to change it.

**Subnet Mask:** double click to change it.

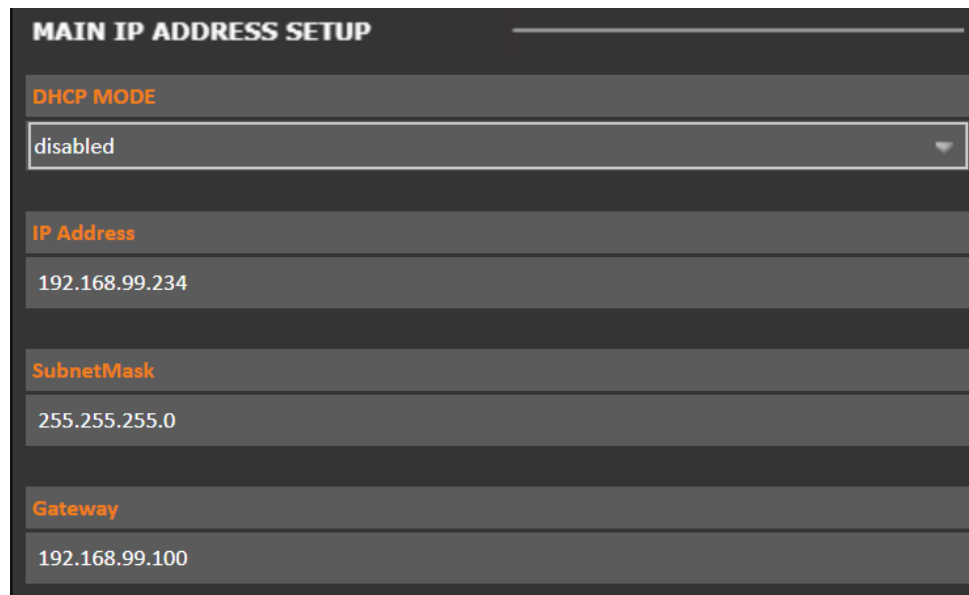
**Gateway:** double click to change it.

## DNS

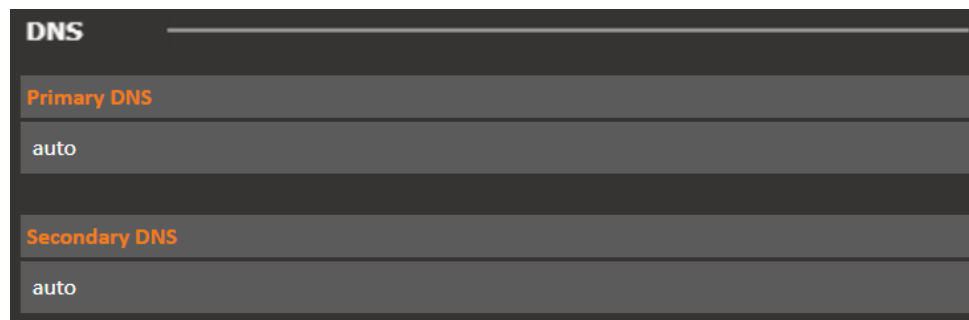
**Primary DNS:** double click to change it.

**Secondary DNS:** double click to change it.

You can type here auto to let your **ISP** gives you a **DNS service** or you can assign the **DNS** you prefer as Google DNS or Open DNS.



MAIN IP ADDRESS SETUP	
<b>DHCP MODE</b>	disabled
<b>IP Address</b>	192.168.99.234
<b>SubnetMask</b>	255.255.255.0
<b>Gateway</b>	192.168.99.100



DNS	
<b>Primary DNS</b>	auto
<b>Secondary DNS</b>	auto

## RECOVERY IP ADDRESS SETUP

To open the **RECOVERY IP ADDRESS SETUP**, click on it.

it is a setting that allow the user to configure a different and Static IP from the “Main IP Address” and help the user to find the Streamer Max MKII in case the Main IP Address is lost or in the case the user want to use a DHCP Mode Enabled.

**CHANGE DEFAULT ADDRESS & REBOOT:** click here to change the RECOVER IP ADDRESS to default.

If you want to change the **Recovery IP Address** click on **CHANGE DEFAULT ADDRESS & REBOOT** from the **RECOVERY IP ADDRESS SETUP** as shown in this picture.

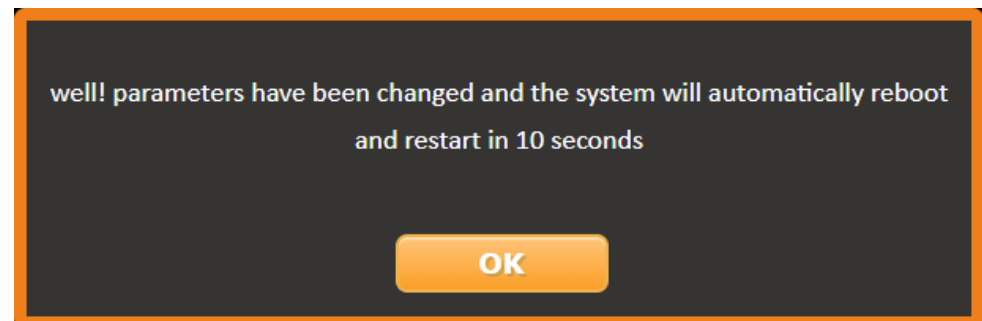
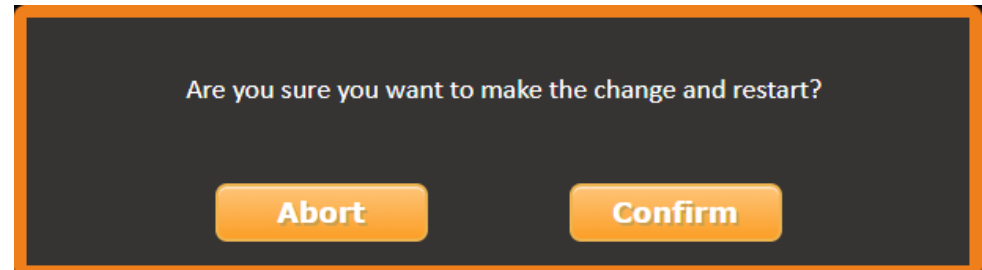
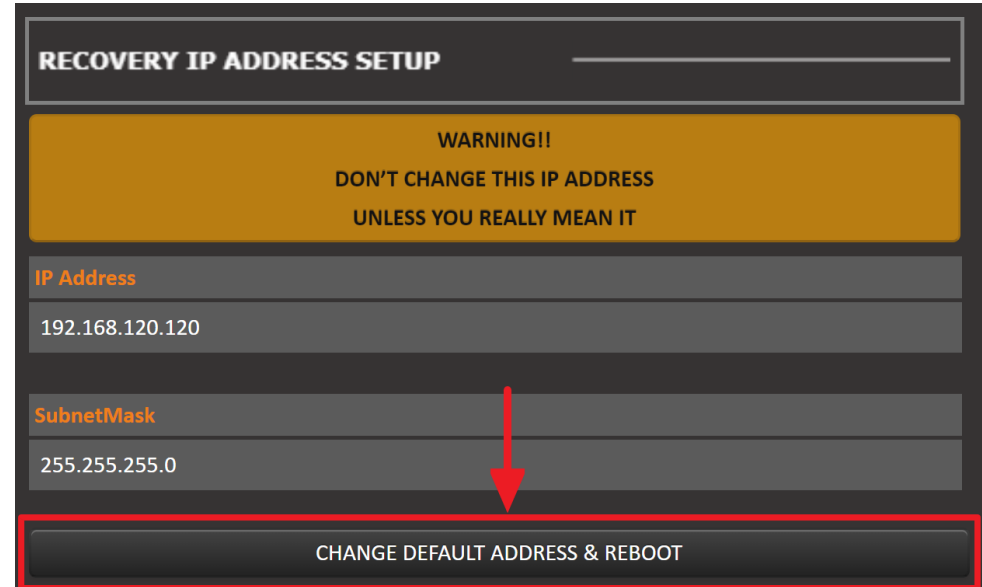
After that must show the Popup confirmation message.

**Confirm:** to apply the change and set the new IP Address.

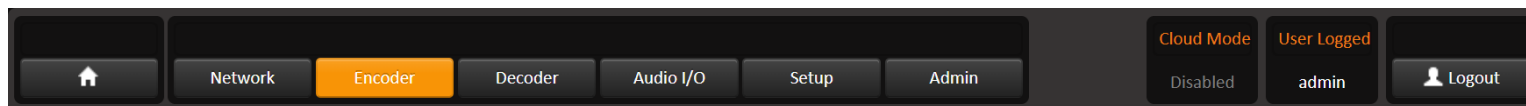
**Abort:** To cancel the change of IP Address.

Then you have to wait until the device set the new parameters and reboot.

Just do a refresh to your browser after that and login with the new IP Address.



### 3.3 ENCODER



By pressing the **Encoder** button, the user can access on all the encoding features.

#### ENCODER SETTING

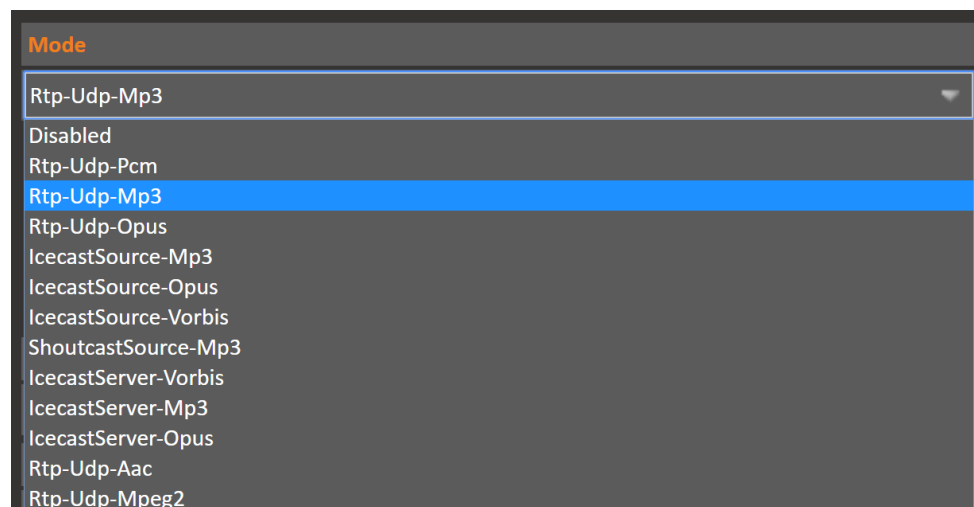
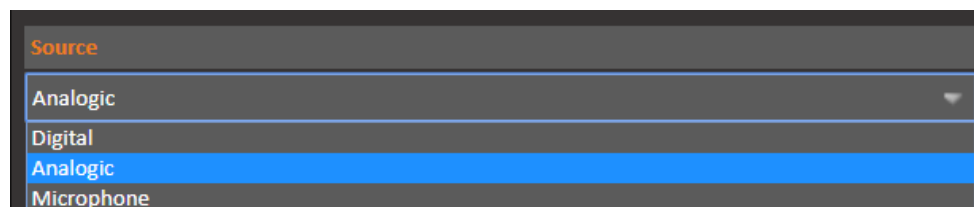
Here reported below each single parameter explained singly.

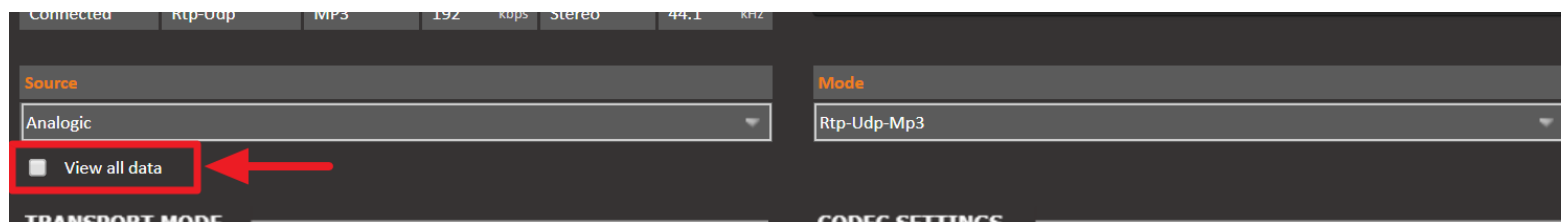
**Source:** this is the input of the **Streamer Max MKII**. Should be Analogic, Digital or Microphone.

ENCODER SETTINGS						
Status	Protocol	Encoder	Bit Rate	Mode	Freq.	
Connected	Rtp-Udp	MP3	192 kbps	Stereo	44.1	kHz

**Mode:** This menu allows the user to select how to encode the Audio. All the possible combination is strictly related to below different Encoder. It can select one of this drop list: -

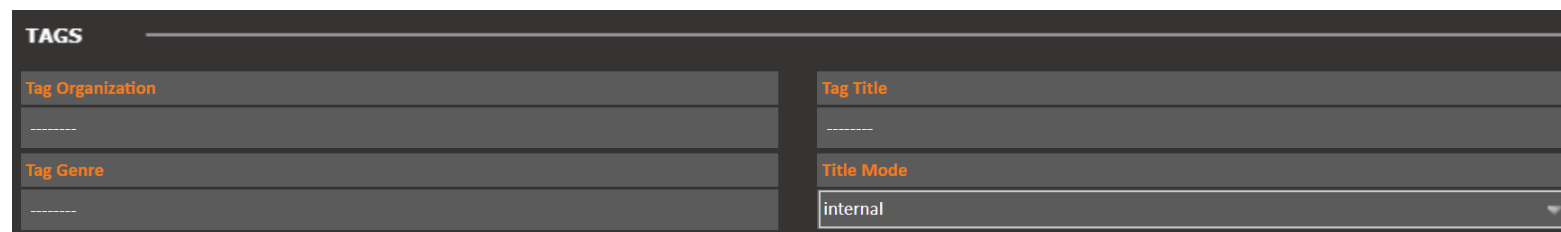
- Disabled
- Rtp-Udp-Pcm
- Rtp-Udp-Mp3
- Rtp-Udp\_Opus
- Icecast-Mp3
- Icecast-Opus
- Icecast-Vorbis
- Icecast-Aac
- Shoutcast-Mp3
- Shoutcast-Opus
- Shoutcast-Vorbis
- Shoutcast-Aac
- Rtp-Udp-Aac
- Rtp-Udp-Mpeg2





### View all data

If you enable **View all data** at of the **Encoder page** you can set some Tags. this section is optional, you fill it only if you want to attach metadata at your audio stream. You can also decide if the **Title Mode** is internal or external. If it is external it does not depend on your Streamer Max.



If you have an external icecast server remember to select in [Encoder Settings > Mode](#) one of:

- **IcecastSource-Mp3**
- **IcecastSource-Opus**
- **IcecastSource-Vorbis**

## ICECAST SOURCE

Here you can set all the parameters to stream your audio into a specific mount point of your icecast.

Set the **URL** of your icecast server, the **Password** for the authentication, the **Mount** in which your audio will be sent. Then set the **User Name**, the **Stream Name** and the **Port** in which your audio will be sent. Then listeners can connect to the icecast server to reach your audio stream via web.

<b>TRANSPORT MODE</b>	_____
<b>ICECAST SOURCE</b>	_____
<b>URL</b>	0.0.0.0
<b>Password</b>	_____
<b>Mount</b>	_____
<b>USER NAME</b>	_____
<b>Stream Name</b>	_____
<b>Port</b>	8000

## SHOUTCAST SOURCE

If you have an external shoutcast server remember to select in **Encoder Settings->Mode**:

- ShoutcastSource-Mp3”.

Here you can set all the parameters to stream your audio into a specific mount point of your shoutcast.

Set the **Url** of your shoutcast server and the Password for the authentication.

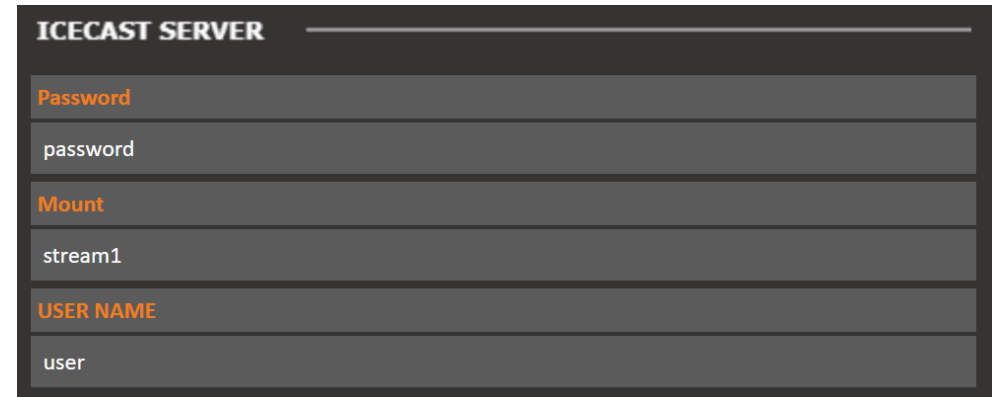
Then set the Port, and the Stream Name in which your audio will be sent.

Then listeners can connect to the shoutcast server to have access to your audio stream via web.

<b>SHOUTCAST SOURCE</b>	_____
<b>URL</b>	0.0.0.0
<b>Password</b>	_____
<b>Port</b>	8000
<b>Stream Name</b>	_____

## ICECAST SERVER

You can also distribute the audio directly to your listeners as if your **Streamer Max MKII** would be an icecast server. Set here the new **Password**, the **Mount** and the new **User Name** for your audio stream reception.



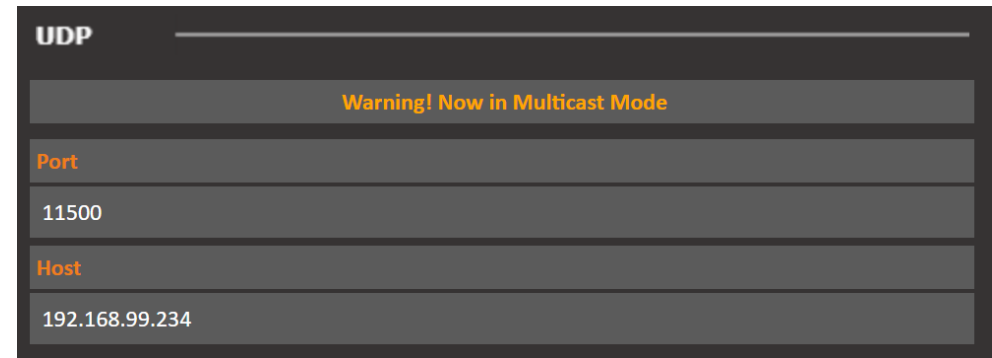
The screenshot shows the 'ICECAST SERVER' settings panel. It contains three input fields: 'Password' with the value 'password', 'Mount' with the value 'stream1', and 'USER NAME' with the value 'user'.

## UDP

Here you can set the **Port**, the **Host** . Every time you select in **Encoder Settings->Mode**:

- Rtp-Udp-Pcm
- Raw-Udp-Mp3
- Rtp-Udp-Opus
- Rtp-Udp-Aac.

you can set these parameters.



The screenshot shows the 'UDP' settings panel. At the top, there is a warning message: 'Warning! Now in Multicast Mode'. Below this, there are two input fields: 'Port' with the value '11500' and 'Host' with the value '192.168.99.234'.

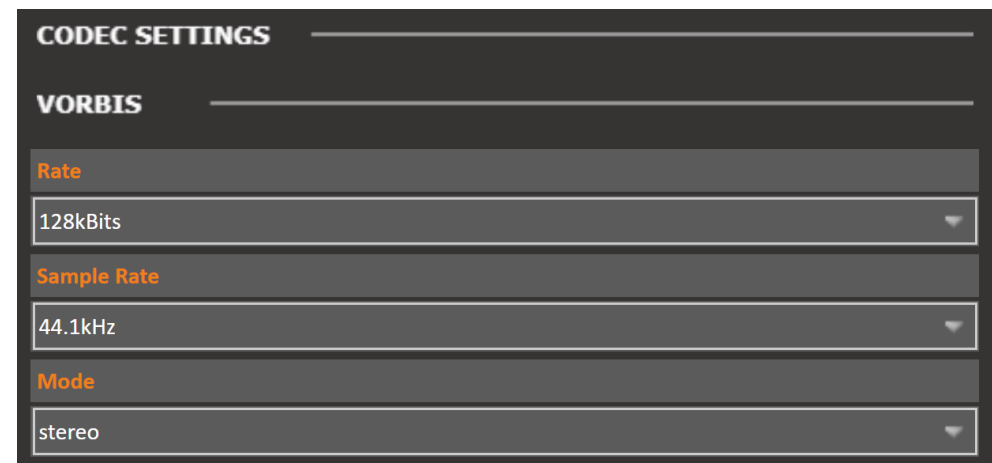
## VORBIS

Here you can set the **Rate**, the **Sample Rate** and the **Mode** of the OGG VORBIS audio encoding.

Every time you select in **Encoder Settings>Mode**:

- IcecastSource-Vorbis
- IcecastServer-Vorbis

you can set these parameters.



The screenshot shows the 'CODEC SETTINGS - VORBIS' panel. It contains three dropdown menus: 'Rate' set to '128kBits', 'Sample Rate' set to '44.1kHz', and 'Mode' set to 'stereo'.

### MP3

Here you can set the **Rate**, the **Sample Rate** and the **Mode** of the MP3 audio encoding.

Every time you select in [Encoder Settings>Mode](#) one of:

- Rtp-Udp-Mp3
- IcecastSource-Mp3
- ShoutcastSource-Mp3
- IcecastServer-Mp3

you can set these parameters.

**MP3**

**Rate**

192kBits

**Sample Rate**

44.1kHz

**Mode**

stereo

### OPUS

Here you can set the **Rate**, the **Sample Rate** and the **Mode** of the OPUS audio encoding.

Every time you select in [Encoder Settings>Mode](#) one of:

- IcecastSource-Opus
- IcecastServer-Opus

you can set these parameters.

**OPUS**

**Rate**

128kBits

**Sample Rate**

48kHz

**Mode**

Auto

### PCM

Here you can set the **Rate**, the **Sample Rate** and the **Mode** of the PCM audio encoding.

Every time you select in [Encoder Settings>Mode](#):

- Rtp-Udp-Pcm

you can set these parameters.

**PCM**

**Sample Rate**

32kHz

**Mode**

stereo



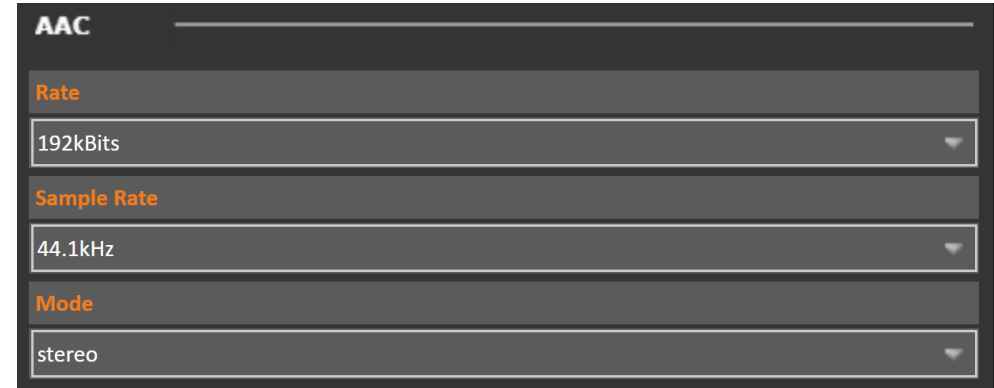
### AAC

Here you can set the **Rate**, the **Sample Rate** and the **Mode** of the AAC audio encoding.

Every time you select in *Encoder Settings>Mode*:

- Rtp-Udp-Aac

you can set these parameters.



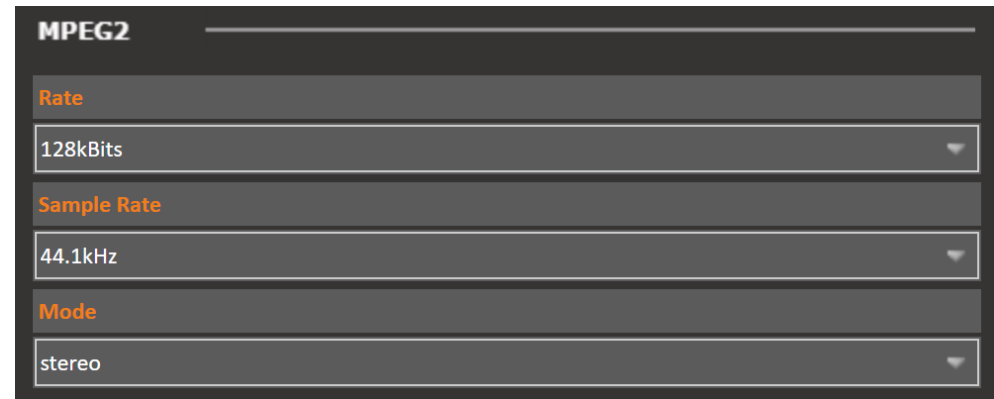
### MPEG2

Here you can set the **Rate**, the **Sample Rate** and the **Mode** of the MPEG2 audio encoding.

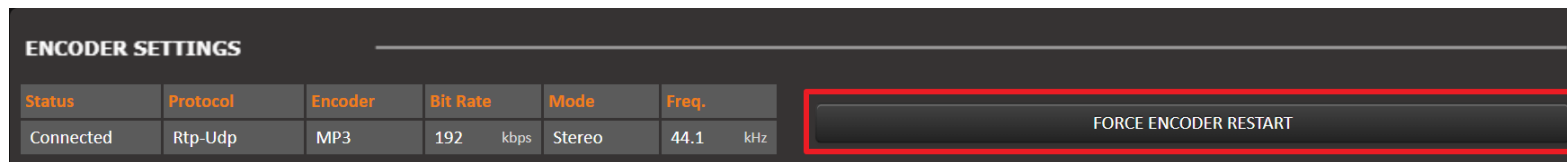
Every time you select in *Encoder Settings>Mode*:

- Rtp-Udp-Mpeg2

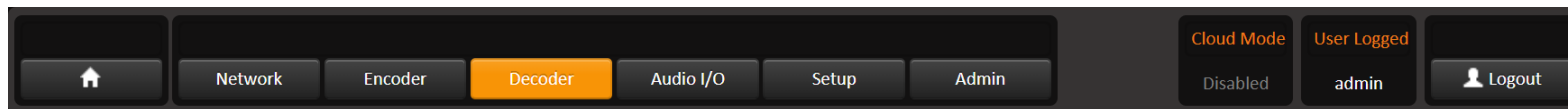
you can set these parameters.



**Force Encoder Restart:** This command forces the encoder restart



## 3.4 DECODER



By pressing the **Decoder** button, the user can access on all the Decoding features.

### DECODER SETTINGS

In **Mode** you have to set the protocol of communication and the format of the audio stream in reception.

It can select one of this drop list: -

- Disabled
- Rtp-Udp-Pcm
- Rtp-Udp-Mp3
- Rtp-Udp\_Opus
- Icecast-Mp3
- Icecast-Opus
- Icecast-Vorbis
- Icecast-Aac
- Shoutcast-Mp3
- Shoutcast-Opus
- Shoutcast-Vorbis
- Shoutcast-Aac
- Rtp-Udp-Aac
- Rtp-Udp-Mpeg2

#### DECODER SETTINGS

Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Icecast	MP3	128 kbps	Stereo	44.1 kHz

**Mode**

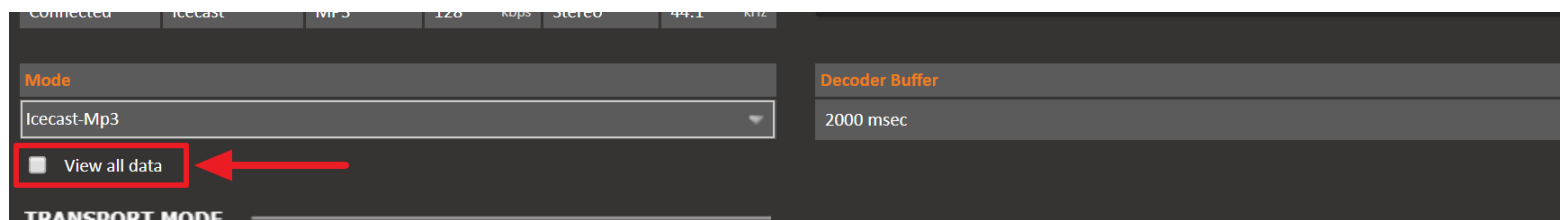
Icecast-Mp3

- Disabled
- Rtp-Udp-Pcm
- Rtp-Udp-Mp3
- Rtp-Udp-Opus
- Icecast-Mp3
- Icecast-Opus
- Icecast-Vorbis
- Icecast-Aac
- Shoutcast-Mp3
- Shoutcast-Opus
- Shoutcast-Vorbis
- Shoutcast-Aac
- Rtp-Udp-Aac
- Rtp-Udp-Mpeg2

In **Decoder Buffer** you set the time buffer of the decoder.

**Decoder Buffer**

2000 msec



### View all data

If you enable **View all data** at of the **Decoder page** can see all decoder parameters of **TRANSPORT MODE** and **CODEC SETTINGS**.

### SHOUTCAST MODE

If you have an external Shoutcast server remember to select in [Decoder Settings > Mode](#) one of:

- Shoutcast-Mp3
- Shoutcast-Opus
- Shoutcast-Vorbis
- Shoutcast-Aac

Here you can set all the parameters to receive your audio from your Shoutcast.

Set the **Url** of your Shoutcast server. Set the Password and the User Name for the authentication.

#### SHOUTCAST

<b>URL</b>	10.0.127.80
<b>Password</b>	**
<b>USER NAME</b>	**

### ICECAST

If you have an external Icecast server remember to select in [Decoder Settings > Mode](#) one of:

- Icecast-Mp3
- Icecast-Opus
- Icecast-Vorbis
- Icecast-Aac

Here you can set all the parameters to receive your audio from your Icecast.

Set the **Url** of your Icecast server. Set the Password and the User Name for the authentication.

#### ICECAST

<b>URL</b>	http://10.0.127.83:8000/mpd
<b>Password</b>	**
<b>USER NAME</b>	**

## UDP

Here you can set the **Port**. Every time you select in [Decoder Settings > Mode](#) one of:

- Rtp-Udp-Pcm
- Raw-Udp-Mp3
- Rtp-Udp-Opus
- Rtp-Udp-Aac

the decoder refers to the previously set parameters.



UDP

Port

5000

## PCM

Here you can set the **Mode**, the **Sample Rate** of the PCM audio stream in reception. Every time you select in [Decoder Settings > Mode](#):

- Rtp-Udp-Pcm

the decoder refers to these previously set parameters.



PCM

Mode

stereo

Sample Rate

32kHz

## AAC

Here you can set the **Mode**, the **Sample Rate** of the AAC audio stream in reception. Every time you select in [Decoder Settings > Mode](#) one of:

- Icecast-AAC
- Shoutcast-AAC
- Rtp-Udp-Aac

the decoder refers to these previously set parameters.



AAC

Mode

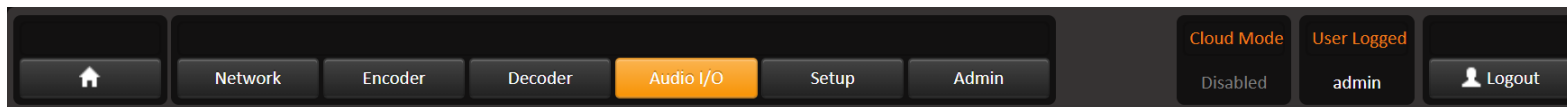
stereo

Sample Rate

48kHz

### 3.5 AUDIO I/O

Here you can set parameters for the Input Audio Setup and for the Output Audio Setup.

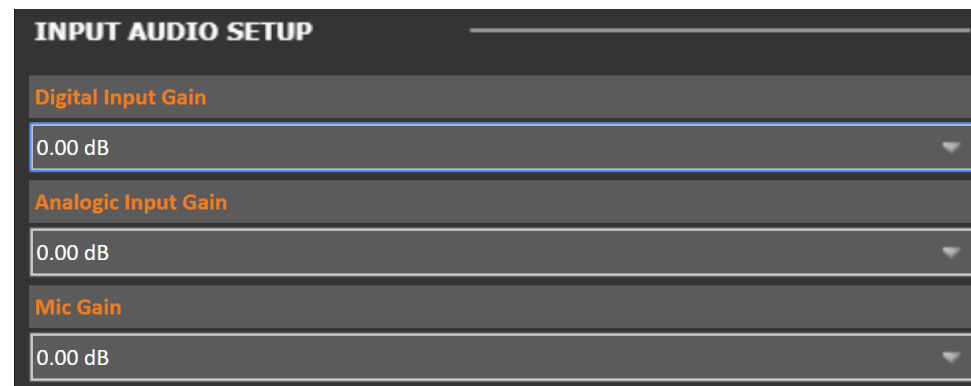


#### AUDIO INPUT

Audio Input	Gain	RMS-L	RMS-R	Peak-L	Peak-R
Analogic	0.0 + 0.4 dB	-19.5 dBu	-19.6 dBu	-19.5 dBu	-19.6 dBu

#### INPUT AUDIO SETUP

- Decide here the dB level for the Gain of the digital Input. It's changeable between **20 dB** and **-20 dB** through the drop-down list.
- Decide here the dB level for the Gain of the analogic Input. It's changeable between **20 dB** and **-20 dB** through the drop-down list.
- Decide here the dB level for the Gain of the Mic input. It's changeable between **0 dB** and **-60 dB** through the drop-down list.



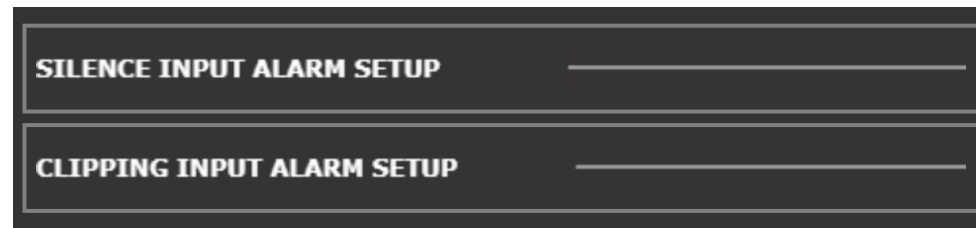
#### INPUT AGC SETUP

Decide here the **dBr** Threshold for the **AGC (automatic gain control)** on the encoder side.

Decide here if you want to **enable** or **disable** the speed for the AGC on the encoder side.



## ALARMS SYSTEM



Click on to open the function setup.

### SILENCE INPUT ALARM SETUP

#### Encoder Silence Mask

Decide here if you want to mask or unmasked the silence control on the encoder side.

#### Encoder Silence Trap Enable

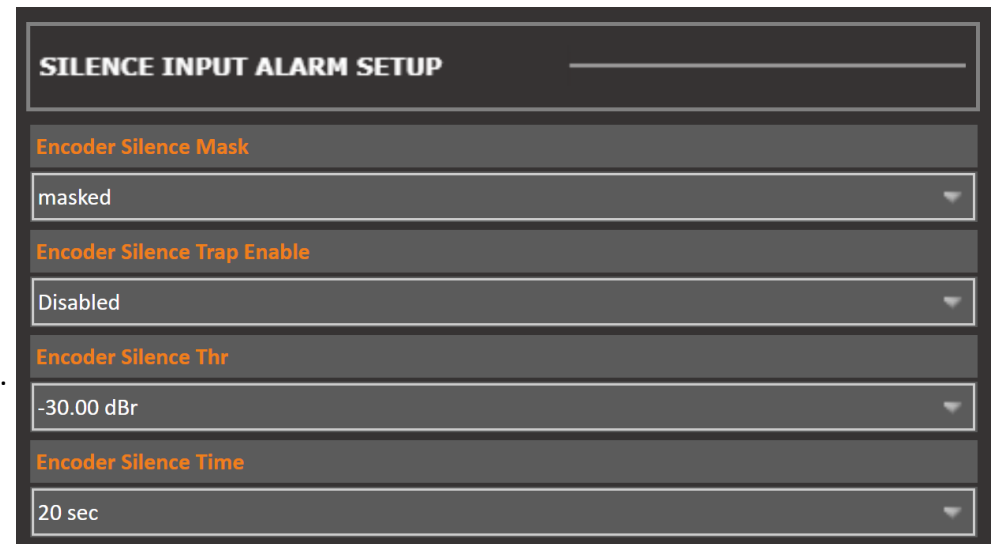
If the Encoder Silence Mask is unmasked you can decide to send an encoder trap to your **SNTP server**, if you have one.

#### Encoder Silence Thr

Decide here the dBr Threshold for the silence control on the encoder side.

#### Encoder Silence Time

Decide here the time for the encoder silence control. Beyond this time a silence control alarm is created.



**SILENCE INPUT ALARM SETUP**

**Encoder Silence Mask**  
masked

**Encoder Silence Trap Enable**  
Disabled

**Encoder Silence Thr**  
-30.00 dBr

**Encoder Silence Time**  
20 sec

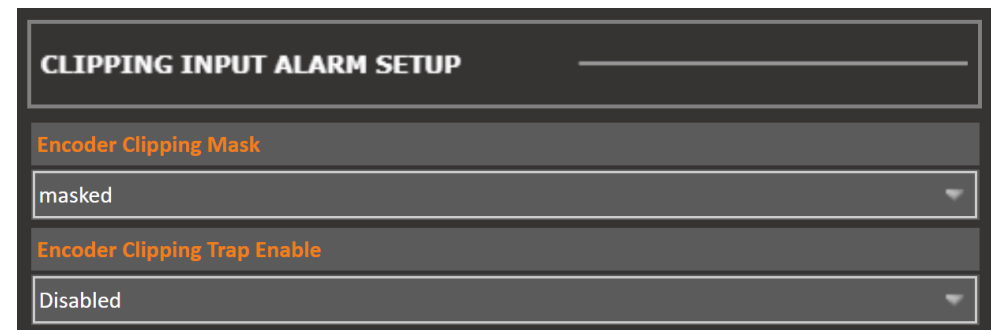
### CLIPPING INPUT ALARM SETUP

#### Encoder Clipping Mask

Decide here if you want to mask or unmasked the the clipping control on the encoder side.

#### Encoder Clipping Trap Enable

If the Encoder Clipping Mask is unmasked you can decide to send an encoder trap to your SNTP server, if you have one.



**CLIPPING INPUT ALARM SETUP**

**Encoder Clipping Mask**  
masked

**Encoder Clipping Trap Enable**  
Disabled

## AUDIO OUTPUT

Dig Out Gain	An Out	RMS-L	RMS-R	Peak-L	Peak-R
0.0 dB	Disabled	-31.3 dBu	-30.7 dBu	-22.7 dBu	-23.2 dBu

### OUTPUT AUDIO SETUP

#### Digital Output Gain

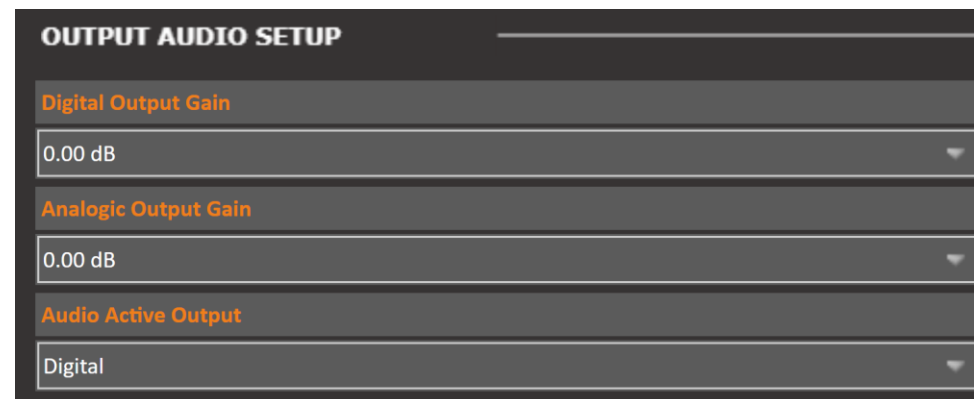
Decide here the **dB** level for the Gain of the **digital Output**.

#### Analogic Output Gain

Decide here the **dB** level for the Gain of the **analogic Output**.

#### Audio Active Output

Decide here what kind of audio you want to activate for the Output.



**OUTPUT AUDIO SETUP**

Digital Output Gain: 0.00 dB

Analogic Output Gain: 0.00 dB

Audio Active Output: Digital

### OUTPUT AGC SETUP

#### Decoder Agc Thr

Decide here the **dB**r Threshold for the **AGC** (*automatic gain control*) on the decoder side.

#### Decoder Agc Speed

Decide here if you want to **enable** or **disable** the speed for the **AGC** on the decoder side

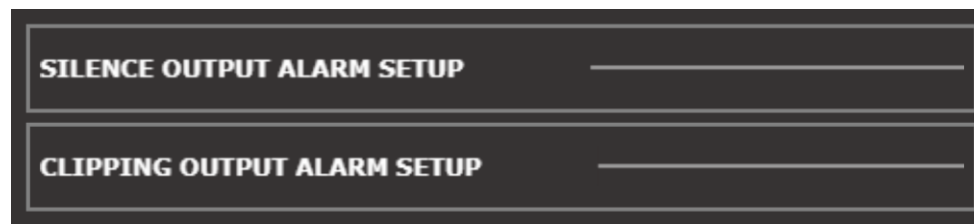


**OUTPUT AGC SETUP**

Decoder Agc Thr: -3.00 dB

Decoder Agc Speed: Disabled

## ALARMS SYSTEM



Click on to open the function setup.

### SILENCE OUTPUT ALARM SETUP

#### Decoder Silence Mask

Decide here if you want to **mask** or **unmasked** the silence control on the decoder side.

#### Decoder Silence Trap Enable

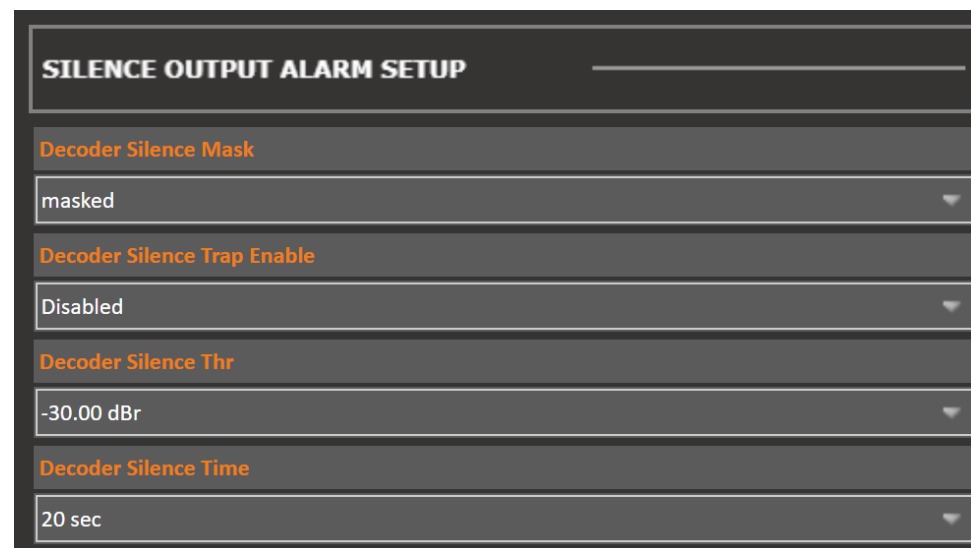
If the Decoder Silence Mask is unmasked you can decide to send a decoder trap to your **SNTP server**, if you have one.

#### Decoder Silence Thr

Decide here the **dBr Threshold** for the silence control on the decoder side.

#### Decoder Silence Time

Decide here the time for the decoder silence control. Beyond this time a silence control alarm is created.



The screenshot shows the 'SILENCE OUTPUT ALARM SETUP' configuration page with the following settings:

- Decoder Silence Mask:** masked
- Decoder Silence Trap Enable:** Disabled
- Decoder Silence Thr:** -30.00 dBr
- Decoder Silence Time:** 20 sec

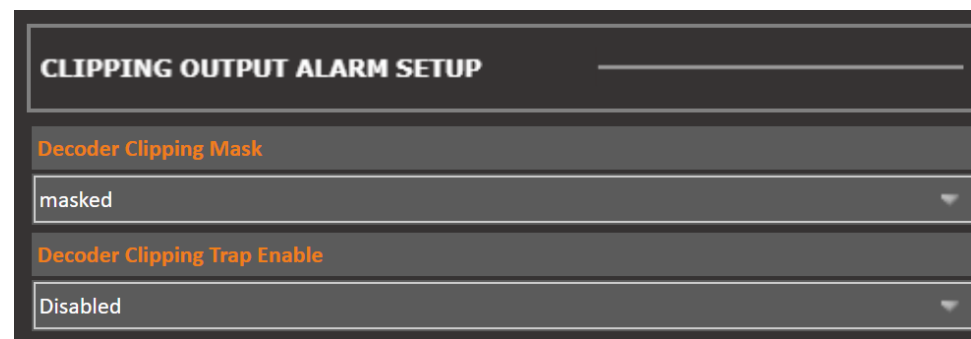
### CLIPPING OUTPUT ALARM SETUP

#### Decoder Clipping Mask

Decide here if you want to **mask** or **unmasked** the clipping control on the decoder side.

#### Decoder Clipping Trap Enable

If the Encoder Clipping Mask is unmasked you can decide to send a decoder trap to your **SNTP server**, if you have one.

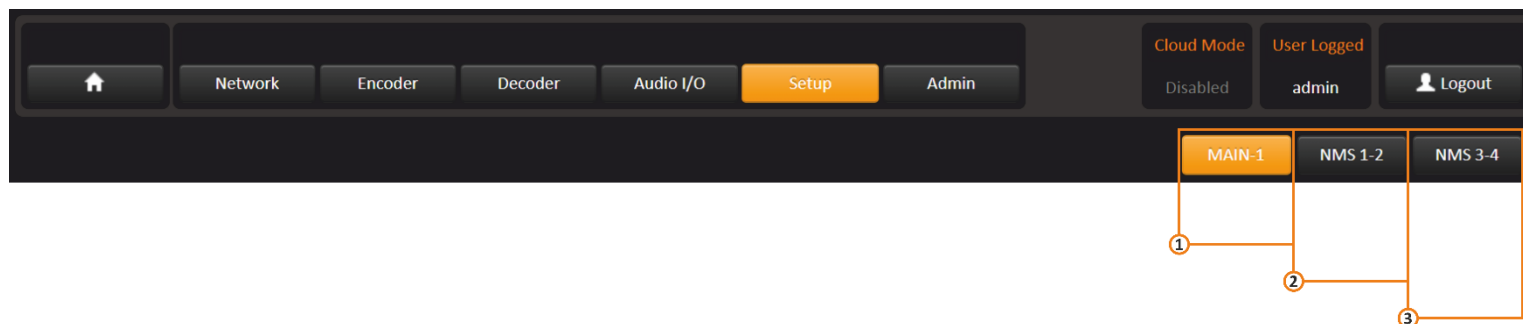


The screenshot shows the 'CLIPPING OUTPUT ALARM SETUP' configuration page with the following settings:

- Decoder Clipping Mask:** masked
- Decoder Clipping Trap Enable:** Disabled



## 3.6 SETUP



In this page it's possible to set some working parameters about **Streamer MAX MKII**. This section is divided in three different sub-sections:

1. **MAIN-1**
2. **NMS 1-2**
3. **NMS 3-4.**

### 3.6.1 MAIN -1

#### NAME

Here can gave the device a **Name, Location, Operator** and that to create an ordinate streaming network and mapping your targets.

#### NAME

**Target Name Ref**

Streamer Max

**Target Location Ref**

-----

**Target Operator Ref**

-----

#### HTTP SETTING

##### HTTP Band Mode

Settings for the network band audio available.  
Available set: **low, normal, high band** or **gprs band**.

#### HTTP SETTINGS

**HTTP Band Mode**

normalBand
▼

## ACTIVITY HEART SIGNAL

### Activity Heart Signal

Each “n” minutes as express in the box, the **Streamer MAX MKII** sends a trap to the **NMS** System in order to understand that the **Streamer MAX MKII** is “alive” and working correctly.

## CLOUD MODE

### Trap Dispatch Timing

At this stage, **Cloud Mode** must be disabled. Next Firmware release will be improved with this feature.

## PROPAGATION

It is possible from here to send via **UDP** an action on remote **GPIO**

## COMMUNICATION MODE

**Scenario 1:** Point-to-point connection using **RTP-UDP**.

**Scenario 2:** Point-to-point connection using **RTP-UDP** with Internet.

**Scenario 3:** Point-to-point connection using **IceCast2 Source** with Internet.

**Scenario 4:** Multiple connection using **IceCast2 Server** with Internet.



**ACTIVITY HEART SIGNAL**

Trap Dispatch Timing

0 min



**CLOUD MODE**

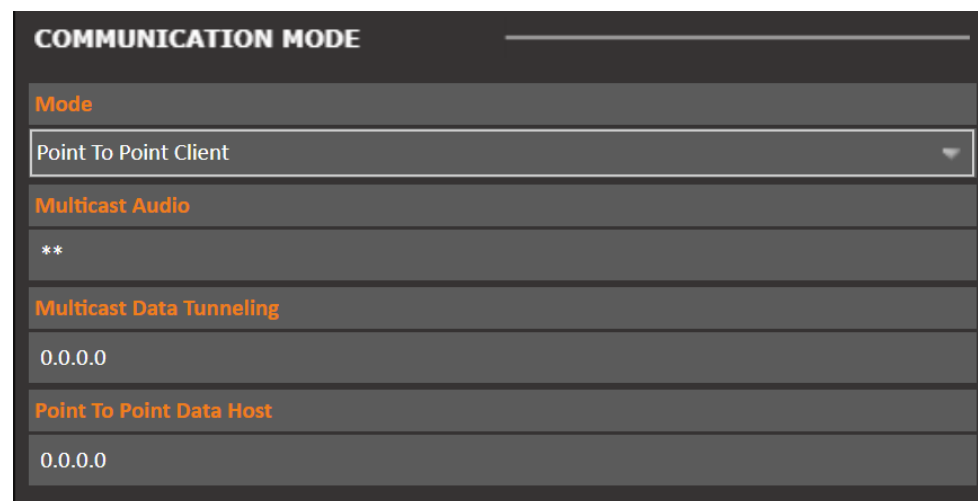
Cloud Mode

disabled



**PROPAGATION**

GPIO Udp Port	Active
11000	Off
Serial Udp Port	Mode
12000	Disabled



**COMMUNICATION MODE**

Mode

Point To Point Client

Multicast Audio

\*\*

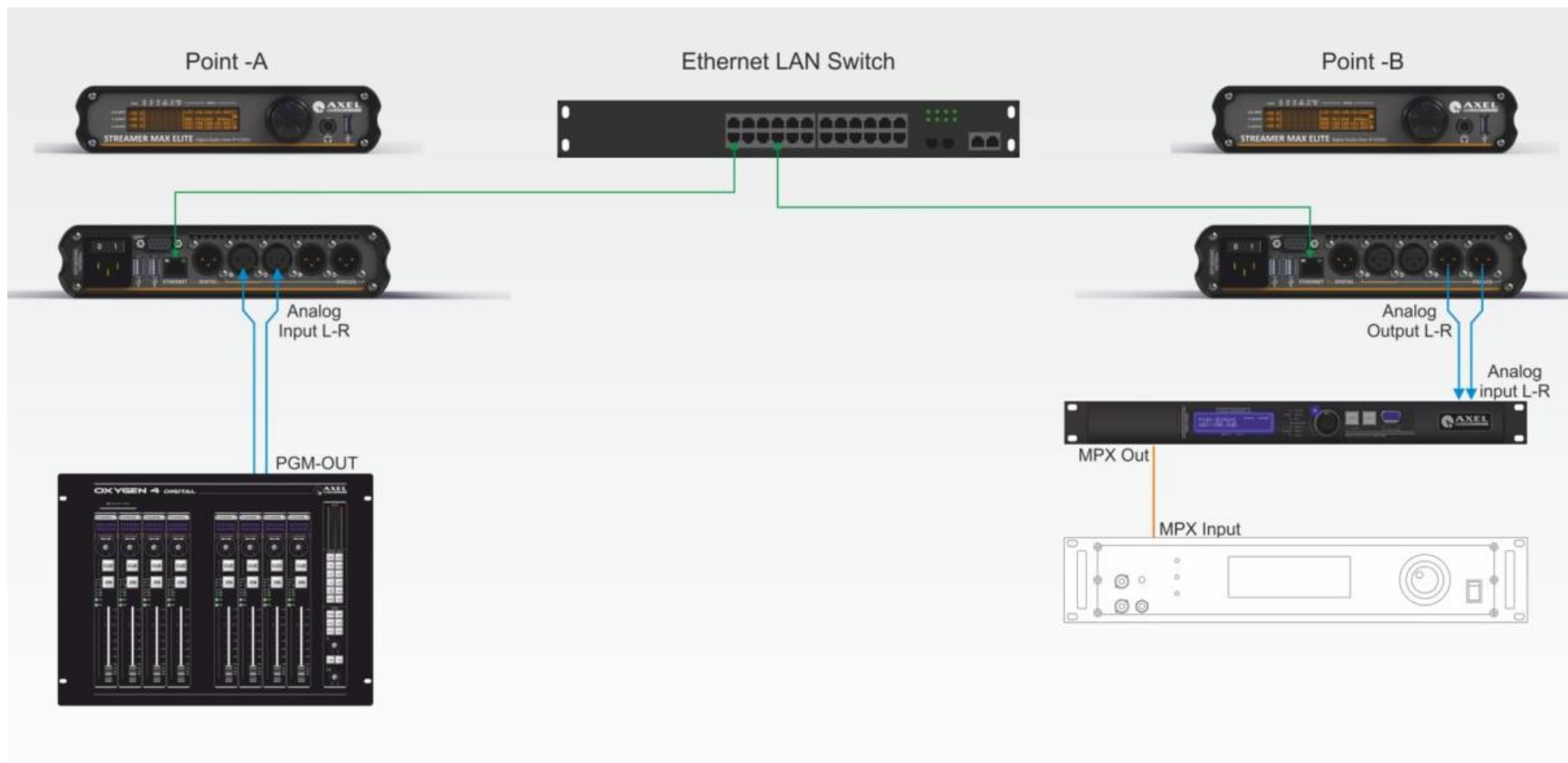
Multicast Data Tunneling

0.0.0.0

Point To Point Data Host

0.0.0.0

### Scenario 1: Point-to-point connection using RTP-UDP.



### Point-to-point connection using RTP-UDP.

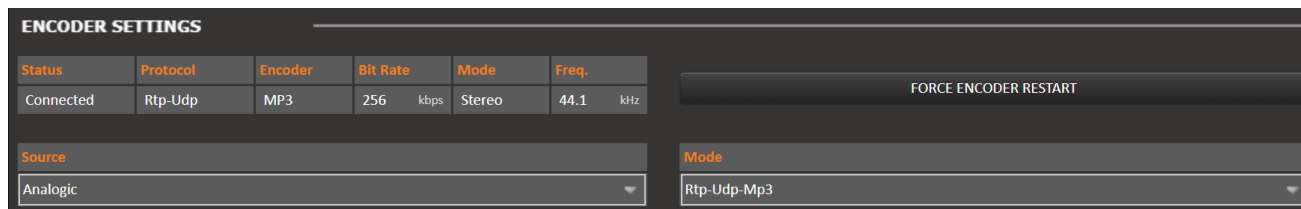
This is the simplest and fastest way to connect a couple of **Streamer Max MKII** to create a link between **point-A** to **Point-B** using a **RTP protocol** in **UDP** and **MP3** as audio encoder.

#### In **Point-A** as encoder:

In the **ENCODER SETTINGS** set it like:

**Source:** Analogic, Digital or Microphone.

**Mode:** **RTP-UDP-Mp3**, RTP-UDP-Opus or RTP-UDP-Vorbis



Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Rtp-Udp	MP3	256 kbps	Stereo	44.1 kHz

Source: Analogic

Mode: Rtp-Udp-Mp3

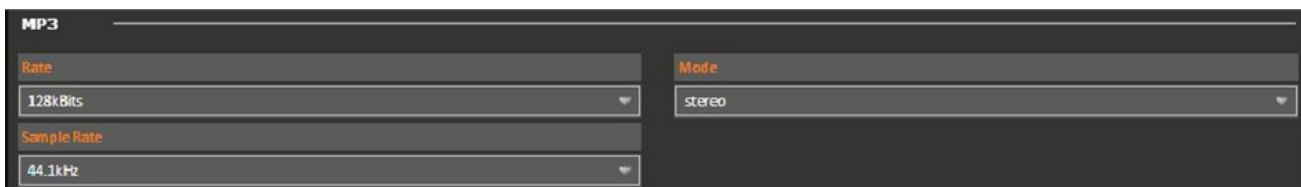
FORCE ENCODER RESTART

In section **MP3** set it for example as:

**Preferred Rate:** 128kBits

**Sample Rate:** 44.1kHz

**Mode:** Stereo



Rate: 128kBits

Sample Rate: 44.1kHz

Mode: stereo

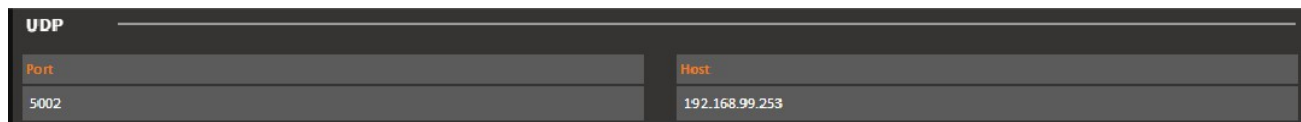
And in **UDP** section set the

**Port:** 5002 that is the default port existing

**Host:** this is the IP of the distention like

**Streamer Max MKII** in **Point-B**.

(ex: 192.168.99.253) without *http://*



Port: 5002

Host: 192.168.99.253

This scenario has been created to connect **Point-A** to **Point-B** using a LAN environment, and once **Streamer Max MKII** has been connected this is the screen that appears.

**Point-A**

**Point-B**

Name	Date
Streamer Max	24/10/18
Location	Time
-----	10:41:10

**ENCODER STATUS** CONNECTED

Audio Input	Gain	RMS-L	RMS-R	Peak-L	Peak-R
Analogic	0.0 + 0.4 dB	-19.5 dBu	-19.6 dBu	-19.5 dBu	-19.6 dBu
Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Rtp-Udp	MP3	256 kbps	Stereo	32 kHz

**Encoder Stream Info**  
To Host: 192.168.99.70 - Port: 5002

GPI	GPO	Selected Network	Data Mode	Rel. FW	Rel. Web
1 2	1 2	LAN	PointToPoint Server	1.1.2	1.1.0
DHCP Status		IP Address	Subnet Mask	Default Gateway	
Disabled		192.168.099.070	255.255.255.000	192.168.099.100	

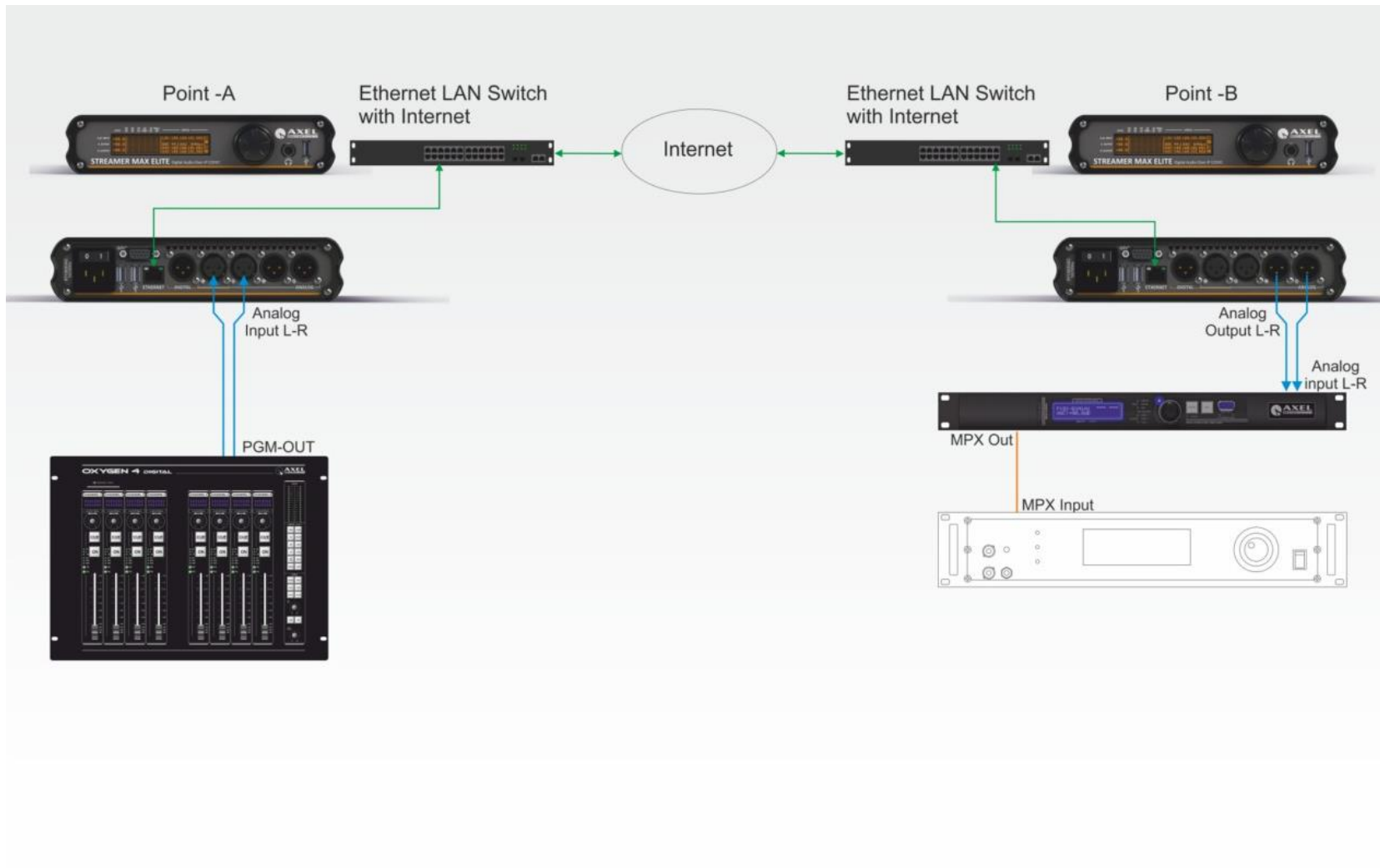
**DECODER STATUS** CONNECTED

DT: --- Rtcp: Ok Q: Ok Jitter: 1% Buffer: 1500msec

Dig Out	An Out Gain	RMS-L	RMS-R	Peak-L	Peak-R
Disabled	0.0 dB	-19.5 dBu	-19.6 dBu	-19.5 dBu	-19.6 dBu
Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Rtp-Udp	MP3	257 kbps	Stereo	44.1 kHz

**Decoder Stream Info**  
From 192.168.99.234:45833 to Port: 5002

**Scenario 2: Point-to-point connection using RTP-UDP with Internet.**



### In **Point-A** as encoder:

In the **ENCODER SETTINGS** set it like:

**Source:** Analogic, Digital or Microphone.

**Mode:** **RTP-UDP-Mp3**, RTP-UDP-Opus or RTP-UDP-Vorbis

In section **MP3** set it for example as:

**Preferred Rate:** 128kBits

**Sample Rate:** 44.1kHz

**Mode:** Stereo

And in **UDP** section set the

**Port:** 5002 that is the default port existing

**Host:** this is the IP of the destination like

**Streamer Max MKII** in **Point-B**.

in this case must be placed the PUBLIC IP

and PORT used by the **Streamer Max**

**MKII** in decoder side.

(ex: 89.79.244.19) without *http://*

Example:

#### Encoder

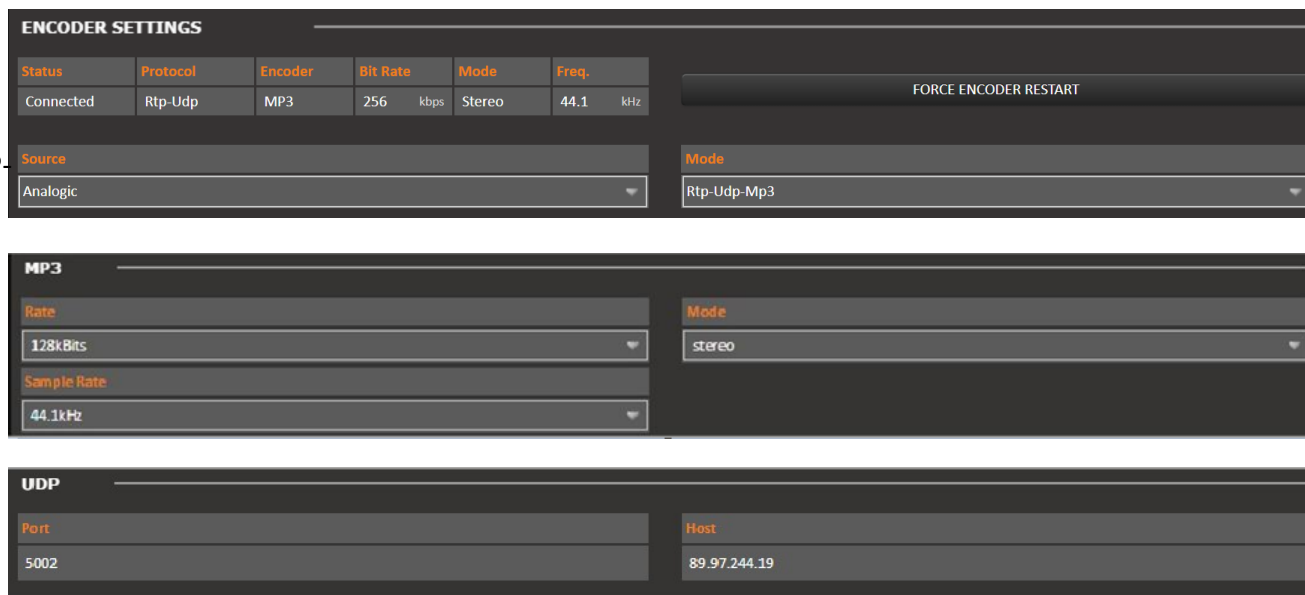
UDP PORT : 5002

HOST : PUBLIC IP destination (ex: 89.97.244.19)

In the **Point-B** must be created a rules on the Firewall or the Router that “route” all UDP packets received to the PUBLIC IP : PORT -> forwarded to the Streamer Max MKII LOCAL IP : PORT

The **IP** of the **Streamer Max MKII** in **Point-B** can be set In NETWORK Section (see overall section)

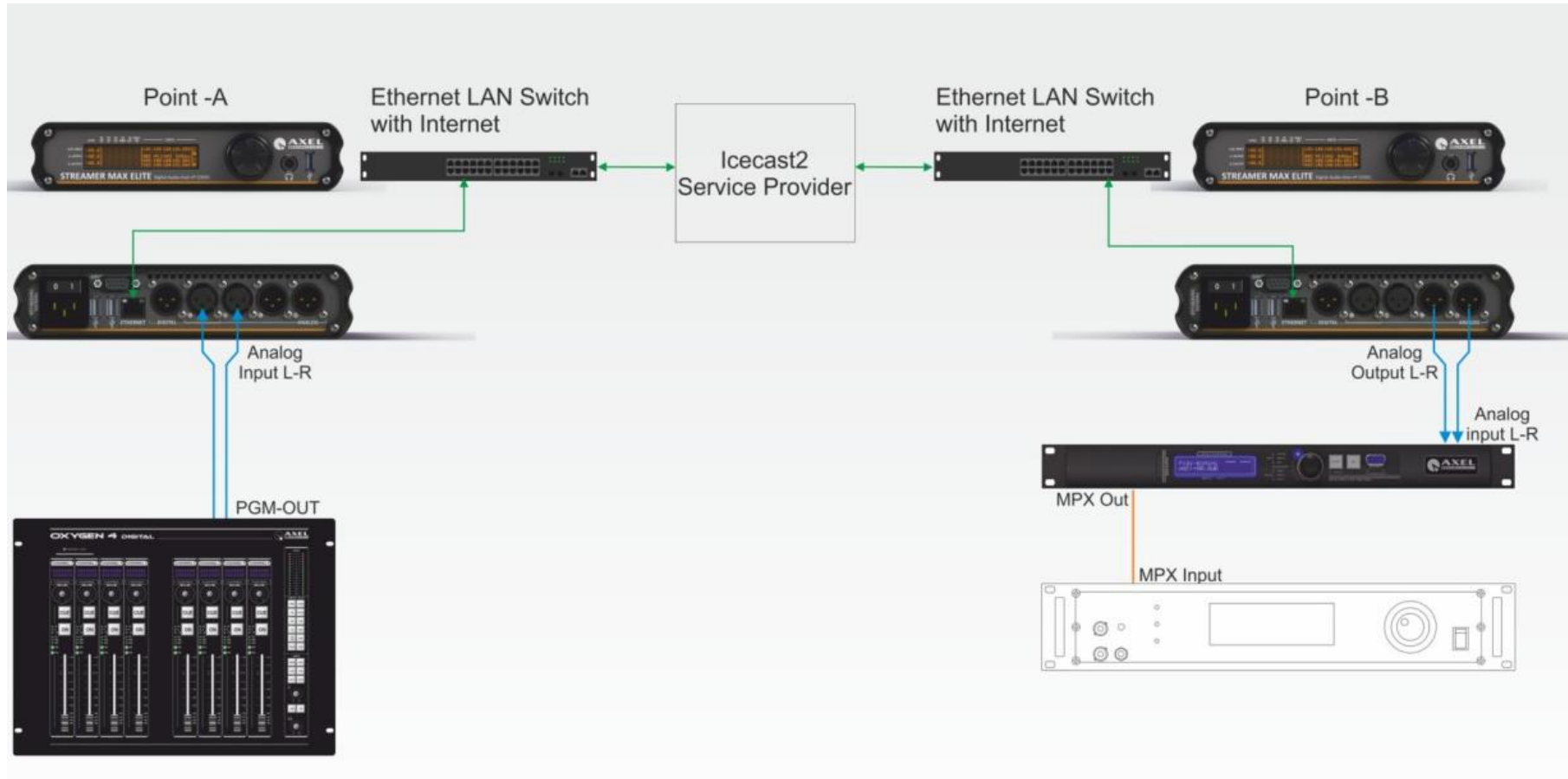
In case of issues, please contact your IT Manager to configure Router-Firewall-LAN.



The image shows three screenshots of the web interface configuration pages:

- ENCODER SETTINGS:** A table showing status (Connected), protocol (Rtp-Udp), encoder (MP3), bit rate (256 kbps), mode (Stereo), and frequency (44.1 kHz). Below the table are dropdown menus for Source (Analogic) and Mode (Rtp-Udp-Mp3), and a button for FORCE ENCODER RESTART.
- MP3:** Configuration for MP3 encoding with Rate (128kBits), Sample Rate (44.1kHz), and Mode (stereo) dropdown menus.
- UDP:** Configuration for UDP with Port (5002) and Host (89.97.244.19) input fields.

### Scenario 3: Point-to-point connection using Icecast2 server





### Point-to-point connection using IceCast2 Source

This is the Typical scenario when a Radio Station needs to feed an external **IceCast2 Service Provider** and deliver the audio for webcast. In this case no PUBLIC IP are needed, no PUBLIC IP in **Point-A** or in **Point-B**.

The audio is delivered to a **IceCast2 Server** that will manage all the incoming request, and due to a very large amount of bandwidth required, this is the preferred solution for internet radio broadcasting.

#### In **Point-A** as encoder:

In the **ENCODER SETTINGS** set it like:

**Source:** Analogic, Digital or Microphone.

**Mode:** IcecastSource-MP3, IcecastSource-Opus or IcecastSource-Vorbis

In section **MP3** set it for example as:

**Preferred Rate:** 128kBits

**Sample Rate:** 44.1kHz

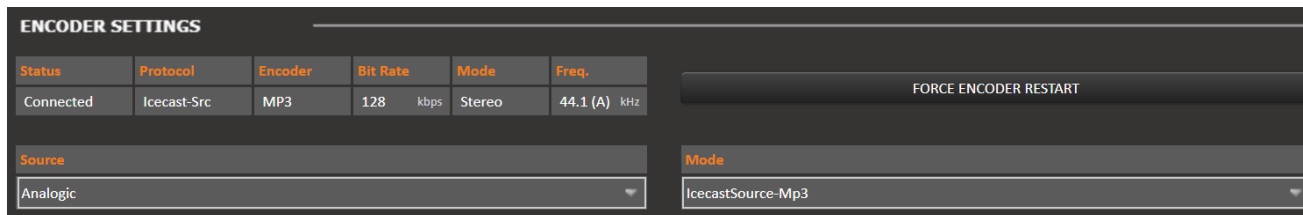
**Mode:** Stereo

And in **Icecast Source** set as showed here.

The **URL**, **USER NAME** And **Password** are provided by your IceCast2 Service Provider.

**Mount** is the name of the streaming, should be "Stream1" or other name

**PORT:** generally speaking **IceCast2** port is 8000 but should be changed according to IceCast2 Service Provider.



**ENCODER SETTINGS**

Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Icecast-Src	MP3	128 kbps	Stereo	44.1 (A) kHz

Buttons: FORCE ENCODER RESTART

Source: Analogic

Mode: IcecastSource-Mp3

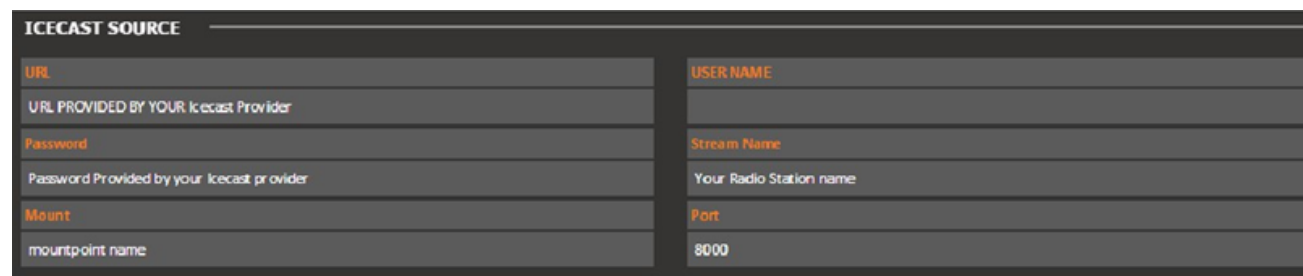


**MP3**

Rate: 128kBits

Sample Rate: 44.1kHz

Mode: stereo



**ICECAST SOURCE**

URL: URL PROVIDED BY YOUR Icecast Provider

Password: Password Provided by your Icecast provider

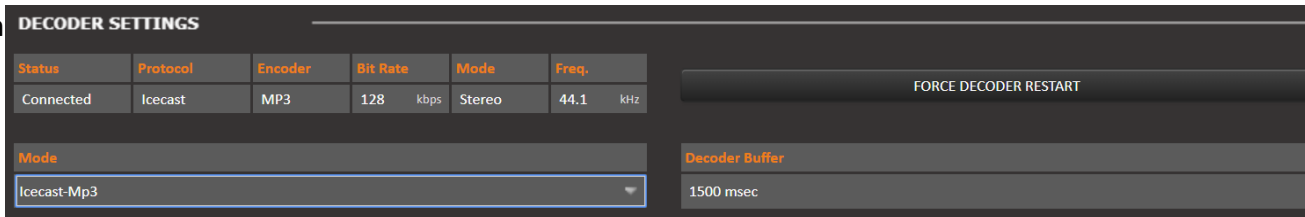
Mount: mountpoint name

USER NAME: Stream Name

Your Radio Station name

Port: 8000

In the **DECODER SETTINGS** ([Point-B](#)) select in **Mode**: Icecast-MP3, Icecast-Opus or Icecast-Vorbis



Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Icecast	MP3	128 kbps	Stereo	44.1 kHz

Mode: Icecast-Mp3

Decoder Buffer: 1500 msec

FORCE DECODER RESTART

And in **ICECAST** section set as **URL** the URL provided by your IceCast2 Service Provider and compose the string with this syntax:  
<http://URL:PORT/Mount>

in this example

<http://www.rds.it:8000/stream>



ICECAST

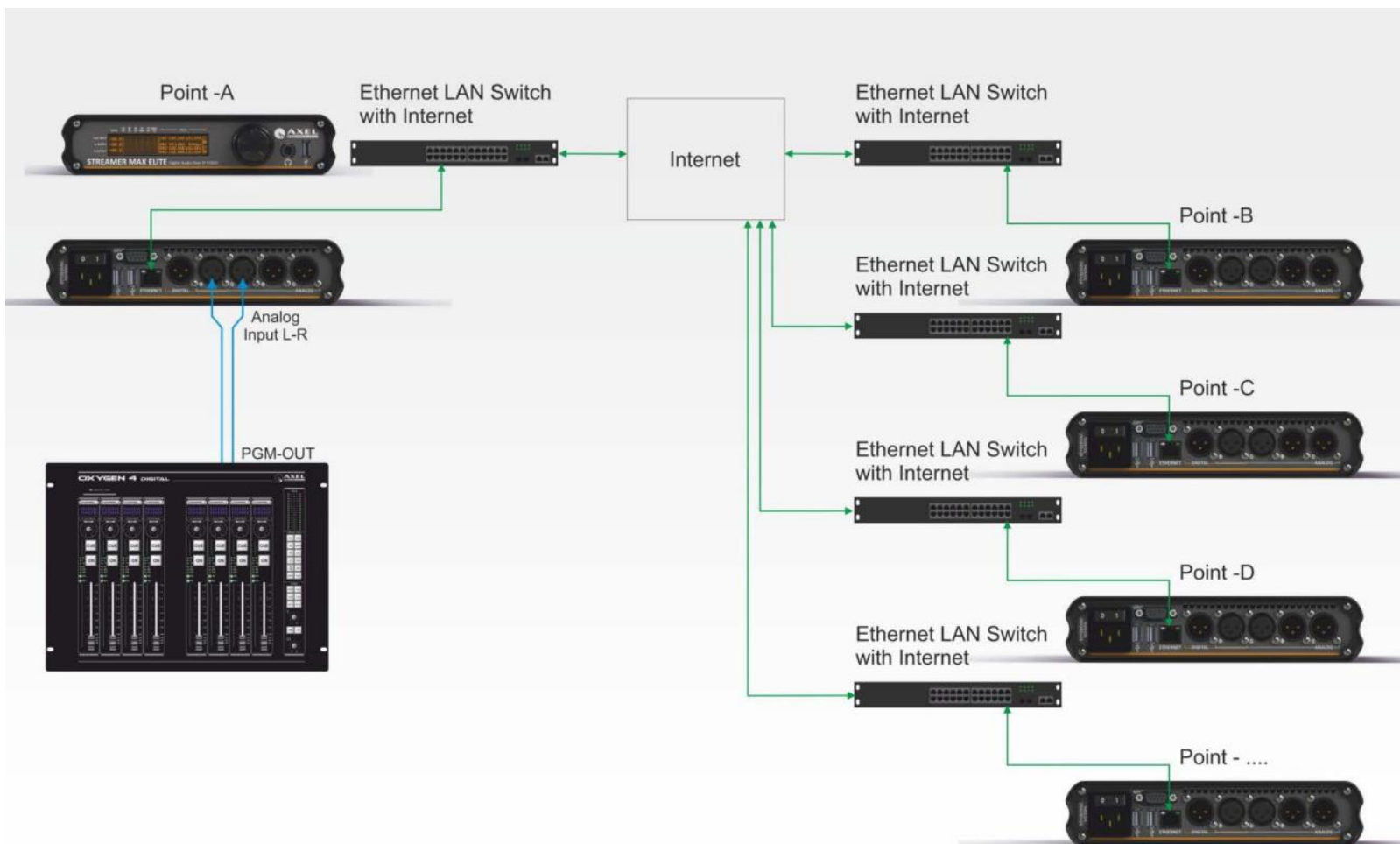
URL:

Password:

USER NAME:

No other settings are required to configure **Streamer MAX MKII** as decoder from a IceCast2 Server.

### Scenario 4: Multiple connection using IceCast2 Server with Internet



## Multiple connection using IceCast2 Server with Internet

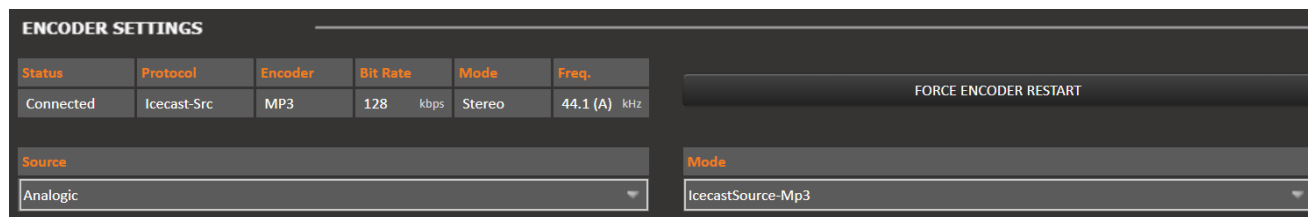
Streamer Max MKII allows to be at the same time an **IceCast2 Source** and **IceCast2 Server**. So, just in case the user own enough internet bandwidth and a **Public IP** it is possible to connected up to 20 Streamer Max MKII in Decoding from a single Streamer Max MKII encoder source.

### In **Point-A** as encoder:

In the **ENCODER SETTINGS** set it like:

**Source:** Analogic, Digital or Microphone.

**Mode:** IcecastServer-MP3, IcecastServer-Opus or IcecastServer-Vorbis



Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Icecast-Src	MP3	128 kbps	Stereo	44.1 (A) kHz

Source: Analogic

Mode: IcecastSource-Mp3

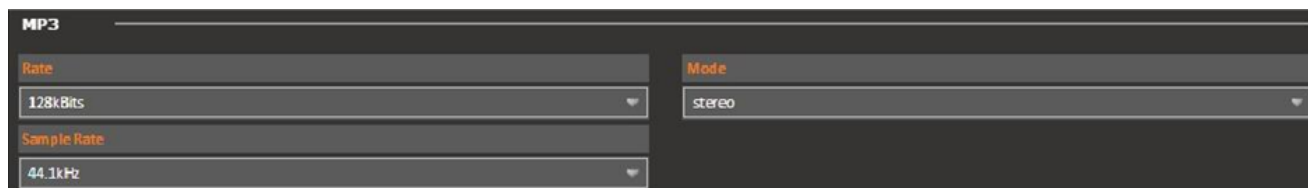
FORCE ENCODER RESTART

In section **MP3** set it for example as:

**Preferred Rate:** 128kBits

**Sample Rate:** 44.1kHz

**Mode:** Stereo



Rate: 128kBits

Sample Rate: 44.1kHz

Mode: stereo

And in **IceCast2 Server** set as showed here.

**USER NAME** no needed

**Password** as preferred (eg: test)

Mount is the name of the streaming, should be "Stream1" or other name



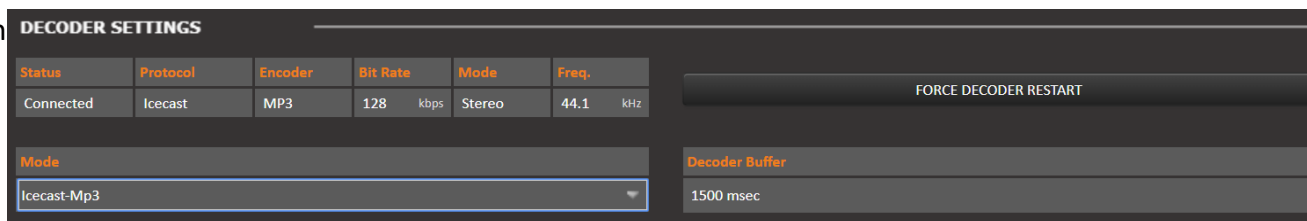
Password: test

Mount: stream1

USER NAME: \_\_\_\_\_

In this condition it is necessary to create by the IT department a rules in **Firewall/Router** that redirect all **TCP/IP** packet from the **PUBLIC IP** to the **Local IP**.

In the **DECODER SETTINGS (Point-B)** select in **Mode**: Icecast-MP3, Icecast-Opus or Icecast-Vorbis



Status	Protocol	Encoder	Bit Rate	Mode	Freq.
Connected	Icecast	MP3	128 kbps	Stereo	44.1 kHz

Mode: Icecast-Mp3

Decoder Buffer: 1500 msec

FORCE DECODER RESTART

And in **ICECAST** section set as **URL** the URL provided by your IceCast2 Service Provider and compose the string with this syntax:  
<http://URL:PORT/Mount>

in this example

<http://www.rds.it:8000/stream>



ICECAST

URL:

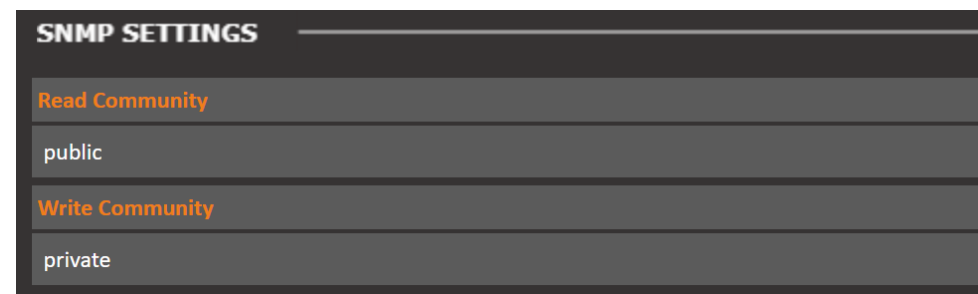
Password:

USER NAME:

No other settings are required to configure **Streamer MAX MKII** as decoder from a IceCast2 Server.

### SNMP SETTING

In this box it is possible to set the password for the **SNMP** protocol in read and write.



SNMP SETTINGS

Read Community: public

Write Community: private

## TIME AND NTP SETTING

### IP Address

Is the IP of the NTP server.

### Auto Request Time

minutes between each single Time Synch.

### Failure Trap

If Streamer **MAX MKII** is not able to set the time a trap is sent to **NSM**.

### Local time Set

It's possible to send a time synch command via PC.

### Time Zone definition

It's possible to set the **GMT** Time zone from this control.

## GP OUTPUT SETTING

It is possible from here to set two **General Purpose** Output on some alarms.

### TIME AND NTP SETTINGS

**IP Address**

193.204.114.232

**Auto Request Time**

30 min

**Failure Trap**

trapDisable

**Local Time Set**

----

[Sync to PC Time](#)

**Local Time Zone Definition**

Europe/Rome

### GP OUTPUT SETTINGS

**GP Output 1 Mode**

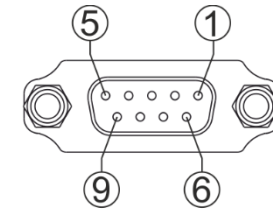
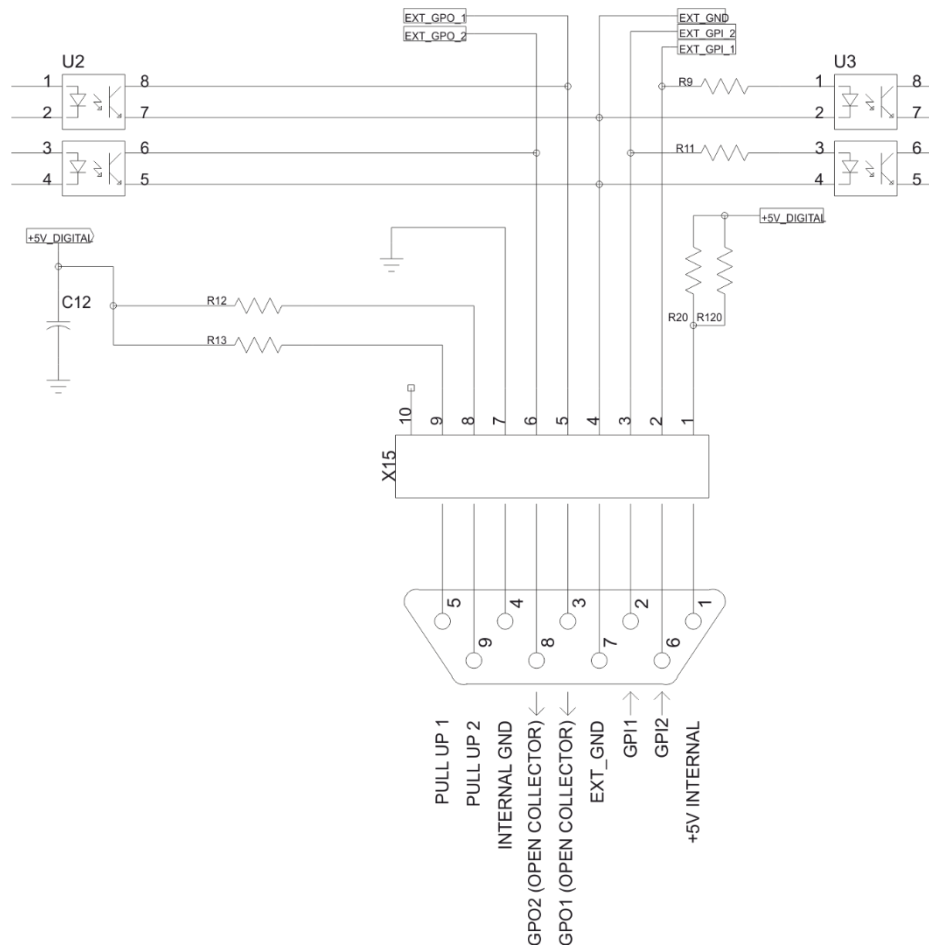
Disabled

**GP Output 2 Mode**

Disabled

The 9 pin SubD GPIO connector on the back of the **Streamer MAX** features two General Purpose inputs and two General Purpose binary outputs. The inputs are polarised Optocoupler inputs, while the outputs are Open Collector outputs. They can be used to send commands to the device and to carry out specific functions. The inputs feature polarized photo couplers on each input and a 150 Ohm protection resistor is always installed in series inside. The maximum current that can circulate on each photo coupler is 20mA.

### GPIO LOCAL CONNECTIONS



- ① Internal +5V
- ② GPI-1
- ③ GPO-1
- ④ Internal GND
- ⑤ PullUp x GPO-1
- ⑥ GPI-2
- ⑦ External GND
- ⑧ GPO-2
- ⑨ PullUp x GPO-2

## DATA LINK QUALITY

### Quality Trap:

In the trap, you can enable or disable the integration of the link quality information.

**DATA LINK QUALITY**

Quality Trap

trapDisable

In bottom of the page can finde the Serial Number of the device.

Serial Number
SMK2-0000000

### 3.6.2 NMS 1-2 & 3-4 PAGE

In this setup it is possible to set some parameter about the communication between the **Streamer MAX MKII** and the **Network Management System**. **SNMP** is the protocol to communicate between remote equipment and **NMS**.



## GENERAL SETUP

### NMS-(1, 2, 3, 4) SETTING

#### IP Address

In this box it is possible to set the **IP Address** to communicate with the **Network Management System**.

#### Trap Port

Set the Port to to communicate with the **Network Management System**.

#### Trap Community

This is the Trap Community string.

#### Trap Global Enable

**Enable** or **Disable** the trap notification to the **NMS**.

#### Trap Type

Configurates the Trap **SNMP** version.

**Trap Time-Out**: if the Trap Type is **InformSnmpV2**, this value sets the Time between each single retry, expressed in seconds.

#### Trap Retry

If the Trap Type is **InformSnmpV2**, this value sets the maximum number of retry.

<b>IP Address</b>	0.0.0.0
<b>Trap Port</b>	162
<b>Trap Community</b>	public
<b>Trap Global Enabled</b>	disable
<b>Trap Type</b>	trapSnmpV1
<b>Trap Time-Out</b>	10
<b>Trap Retry</b>	10

## 4. STREAMER MAX ELITE – CONFIGURATION FROM DEVICE PANEL



- A. LCD Display.
- B. Jog Shuttle.
- C. Headphone Jack 6.3mm Female Connector **FOR THE DECODED SIGNAL**
- D. USB Port - Type A.

In the following section we will analyze procedures to set **STREAMER MAX ELITE** parameters by using the Jog Shuttle Wheel on the device panel.

On the left you can see the led display, by using the Jog Shuttle Wheel on the right you can edit all the available parameters.

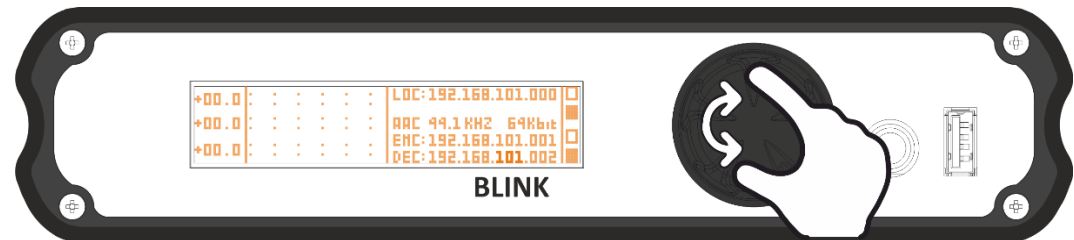
The next picture shows you the **STREAMER MAX ELITE** Home page:



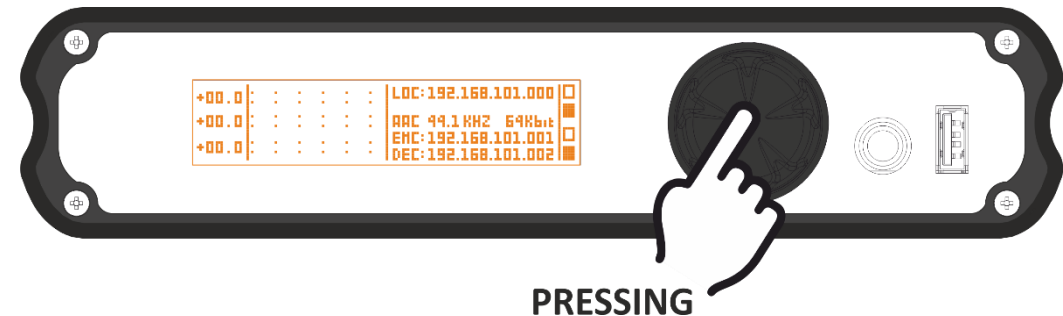
Here you can select between the following five sections: INF, ENC, DEC, SETUP, .....,



By rotating the **Jog Shuttle Wheel** you can select between one of the available displayed sections/items/parameters/values. The selected item starts to blink.



By pushing the **Jog Shuttle** you can enter in the selected section or in the parameter editing mode. Inside every section you can have different pages.



Every page has different parameters, reach the desired parameter with the Jog Shuttle rotation and press it to enter in the editing mode:

The parameters could be grouped in two general cases:

- 1) The first group is composed by parameters in which is possible to select between default parameters like DISABLED/ENABLED.
  - By rotating the Jog Shuttle select the desired choice.
  - Press the Jog Shuttle to confirm the edit.
- 2) The second group is composed by parameters in which is possible to write characters (In example: URL, Port, IPADD, NAME, USER, PASS...). In these parameters are possible to insert a number, a letter or a word. In these cases, you will see something like:





- by rotating the Jog Shuttle, you can select the character you want to edit. In the following example the second character is selected:





- by pressing the Jog Shuttle, it is possible to enable the character editing. In the following example the second character is editable:

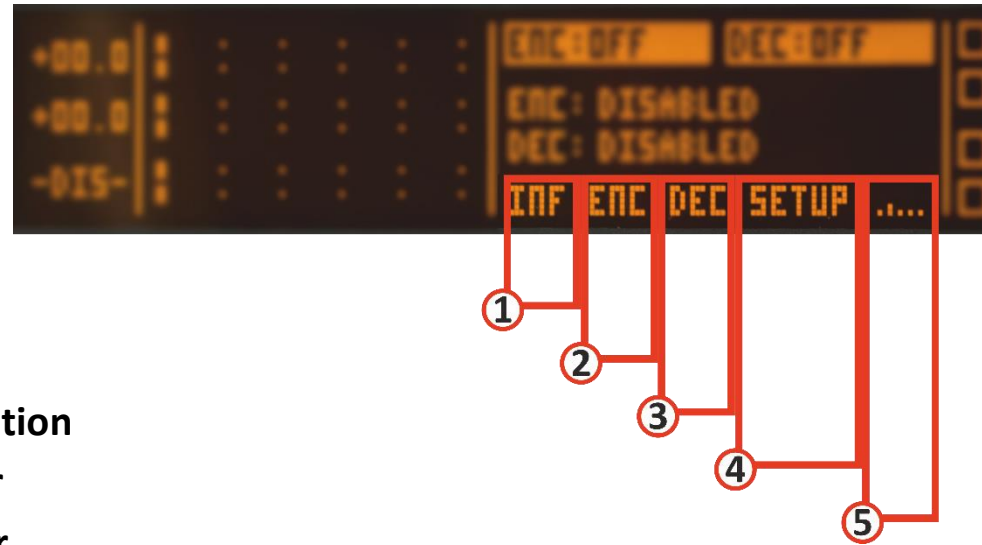


- by rotating the Jog Shuttle select between the available (punctuation and alphanumeric) characters.
- then press the Jog Shuttle again to confirm the edit.

Select and press  to go to the next page. Select and press  to go to the previous page

Press repeatedly  or  to save all edits you did. You will be back to the Home Page.

4.1.1 MENU



1. **Information**
2. **Encoder**
3. **Decoder**
4. **Setup**
5. **Headphone audio level**

SECTIONS	PAGES	PARAMETERS	SELECTABLE VALUES	NOTES
<b>INFO</b>				In the left part of the Home Page you have a fast summary of the Encoder/Decoder side audio parameters. Press again the Jog Shuttle to exit from this section


SECTIONS	PAGES	PARAMETERS	SELECTABLE VALUES	NOTES
<b>Encoder</b>	ENCODER MODE SETUP	MODE	DISABLED	
			RTP-UDP-PCM	
			RTP-UDP-MP3	
			RTP-UDP-OPUS	
			ICECAST-SOURCE-MP3	
			ICECAST-SOURCE-OPUS	
			ICECAST-SOURCE-VORBIS	
			SHOUTCAST-SOURCE-MP3	
			ICECAST-SERVER-VORBIS	
			ICECAST-SERVER-MP3	
			ICECAST-SERVER-OPUS	
			RTP-UDP-AAC	
			RTP-UDP-MPEG2	
	RTP-UDP-AAC			
	ENCODER SOURCE SETUP	SRC	DIGITAL	
			ANALOGIC	
			MICROPHONE	
	ENCODER AGC SETUP	THR	-20dBr < THR < -3dBr	
		SPD	0.0(disabled)dB/s< SPD <1.0 dB/s	
	ENCODER VORBIS SETUP	RATE	96/128/160 kBits	
	ENCODER MP3 SETUP	FREQ	32/44.1/48 kHz	
	ENCODER OPUS SETUP	MODE	Stereo/Mono	
	ENCODER PCM SETUP	MODE	Stereo/Mono	
		FREQ	32/44.1/48 kHz	
	ENCODER AAC SETUP	RATE	96/128/160 kBits	
	ENCODER MPEG2 SETUP	FREQ	32/44.1/48 kHz	
		MODE	Stereo/Mono	
ENCODER ICECAST SRC SETUP 1/3	USER:			
	PASS:			

ENCODER ICECAST SRC SETUP 2/3	NAME:		
	MNT:		
ENCODER ICECAST SRC SETUP 3/3	URL:		
	PORT:		
ENCODER SHOUTCAST SRC SETUP 1/2	MONE:		
	PASS:		
ENCODER SHOCAST SRC SETUP 2/2	URL:		
	PORT:		
ENCODER ICECAST SERV SETUP 1/2	USER:		
	PASS:		
ENCODER ICECAST SERV SETUP 2/2	MNT:		
ENCODER UDP SETUP	HOST:		
	PORT:5002		
ENCODER TAG SETUP 1/3	ORG:		
	GEN:		
ENCODER TAG SETUP 2/3	TITLE:		
	LOCN:		
ENCODER TAG SETUP 3/3	HOME:		
ENCODER TITLE MODE SETUP	MODE	Static/Dyn-Webservice	

SECTIONS	PAGES	PARAMETERS	SELECTABLE VALUES	NOTES
<b>Decoder</b>	DECODER MODE SETUP	MODE	DISABLED	
			RTP-UDP-PCM	
			RTP-UDP-MP3	
			RTP-UDP-OPUS	
			ICECAST-SOURCE-MP3	
			ICECAST-SOURCE-OPUS	
			ICECAST-SOURCE-VORBIS	
			SHOUTCAST-SOURCE-MP3	
			ICECAST-SERVER-VORBIS	
			ICECAST-SERVER-MP3	
			ICECAST-SERVER-OPUS	
			RTP-UDP-AAC	
			RTP-UDP-MPEG2	
	RTP-UDP-AAC			
	DECODER PCM SETUP	MODE	Stereo/Mono	
	DECODER AAC SETUP	FREQ	32/44.1/48 kHz	
	DECODER AGC SETUP	THR	-20dBr < THR < -3dBr	
		SPD	0.0(disabled)dB/s < SPD < 1.0 dB/s	
	DECODER ICECAST SETUP 1/2	USER:		
		PASS:		
DECODER ICECAST SETUP 2/2	URL:			
DECODER SHOUTCAST SETUP 1/2	USER:			
	PASS:			
DECODER SHOUTCAST SETUP 2/2	URL:			
DECODER UDP SETUP	PORT:			
DECODER BUFFER	BUFF (msec):			



SECTIONS	PAGES	PARAMETERS	SELECTABLE VALUES	NOTES
<b>SETUP</b>	LAN1 SETUP	IPADD:		
		SMASK:		
		GTWAY:		
	DEF SETUP	IPADD:		
		SMASK:		
	LAN DHCP MODE SETUP	MODE	DISABLE	
			ENABLE	
	LAN DNS SETUP	PRI (LAN PRIMARY DNS EDIT):	Auto	
			or type your desired DNS	
		SEC(LAN SECONDARY DNS EDIT):	Auto	
			or type your desired DNS	
	GENERAL PURPOSE OUTPUT MODE	GPO1:	DISABLED	
			ENCODER CONN. FAIL	
			ENCODER CLIPPING	
			ENCODER SILENCE	
			DECODER CONN. FAIL	
			DECODER CLIPPING	
			DECODER SILENCE	
			WEAK LINK WARNING	
			GPI1 ENC. MIRROR	
GPI2 ENC. MIRROR				
GPO2:		DISABLED		
		ENCODER CONN. FAIL		
		ENCODER CLIPPING		
		ENCODER SILENCE		
		DECODER CONN. FAIL		
		DECODER CLIPPING		
		DECODER SILENCE		
		WEAK LINK WARNING		
GPI1 ENC. MIRROR				

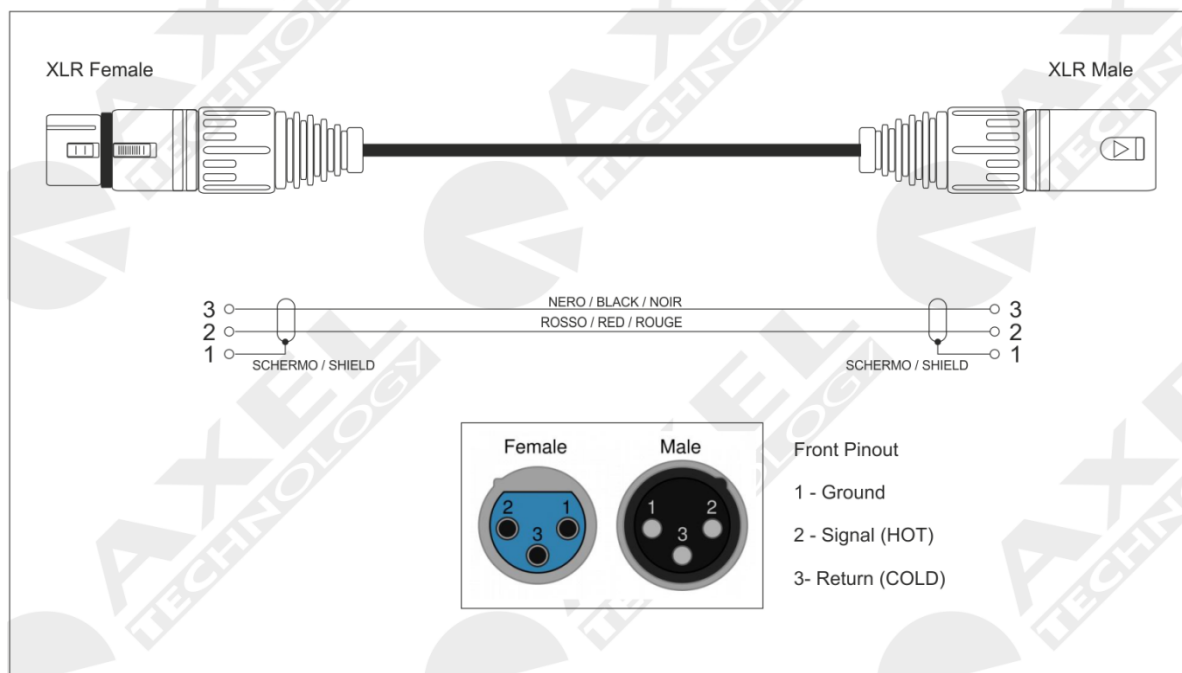
		GPI2 ENC. MIRROR	
GPIO PROPAGATION SETUP	PORT:		
	MODE:	OFF/ON	
SERIAL PROPAGATION SETUP	PORT:		
	MODE:	DISABLED	
		1200 Baud	
		2400 Baud	
		4800 Baud	
		9600 Baud	
19200 Baud			
COMMUNICATION MODE SETUP 1/2	Mc-U:	IP	
	MODE:	PtoP Server	
		PtoP Client	
		MCast Server	
MCast Client			
COMMUNICATION MODE SETUP 2/2	MA-U:		
	PP-H:		
DATA LINK QUALITY TRAP SETUP	TRAP	DISABLED	
		ENABLED	
ACTIVE AUDIO OUTPUT SETUP	AOUT:	ANALOGIC	
		DIGITAL	
IDENTIFICATION CODE	ID CODE (Serial Number)		This parameter is not editable
STREAMER MAX - GENERAL INFORMATIONS	Name:		These parameter Are not editable
	Loc:		
	FwRel:		
	WebRel:		
	Enter in this section and rotate the Jog Shuttle to adjust the Headphone volume. The signal is only the decoded one.		

## 5. TECHNICAL APPENDIX

This section provides all the technical explanations, and the connection pinouts to and from the **Streamer MAX** device. Always refer to this technical appendix for connections and connection procedures. In case of differences between the documentation below and the hardware device, please contact **Axel Technology** at the numbers and e-mail addresses shown at the end of this manual. Our technical and assistance department will be pleased to help you!

### BALANCED AUDIO CONNECTION AND PINOUT

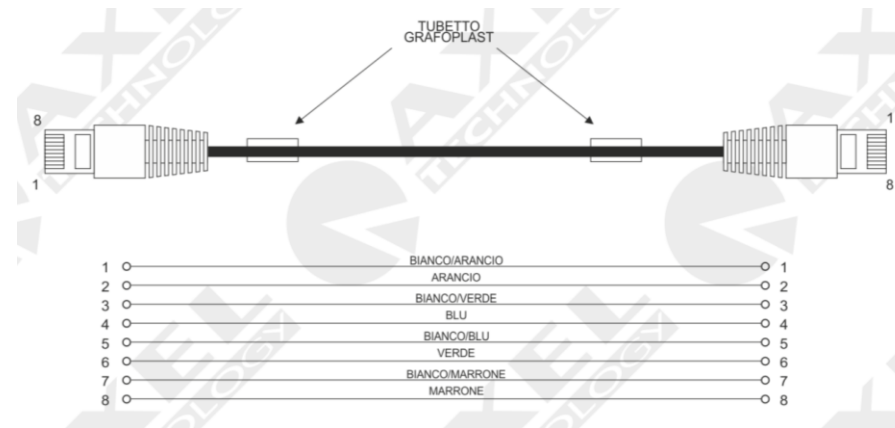
Balanced Audio connection diagram with balanced **XLR** for Analogue audio input and output (Left+Right) and AES/EBU digital audio input and output.



## SERIAL CONNECTION

if necessary Axel Technology s.r.l. can supply on request a USB-RS232 adapter to exchange data with STREAMER MAX MKII through rs232 serial communication.

## ETHERNET/LAN CONNECTIONS



## USB A/B CONNECTION



## 6. TECHNICAL SPECS

### STREAMER MAX TECHNICAL SPECIFICATIONS

MAIN FEATURES	
<b>Transport protocols:</b>	UDP raw, UDP/IP, TCP/IP, HTTP, RTP
<b>Sampling Rate:</b>	32 kHz/44.1 kHz/48 kHz (Full-Duplex Mode 48 kHz only)
<b>Transmission/Reception protocol and available bitrates:</b>	
<b>Linear WAV:</b>	16 Bits PCM linear
<b>OGG VORBIS:</b>	Bitrate in kbit/sec (64, 80, 96, 112, 128, 160, 192) – CBR Quality: 0(Best), 1, 2, 3, 4, 5(Default), 6, 7, 8, 9(Worst) – VBR
<b>MPEG1-L3 (MP3) (*Optional)</b>	Bitrate in kbit/sec (32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192) – CBR Mode: Stereo, Joint Stereo, Dual Channel, Mono, Auto
<b>MPEG1-L2 (MP2) (*Optional)</b>	Bitrate in kbit/sec (32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192) - CBR Mode: Stereo, Joint Stereo, Dual Channel, Mono, Auto
<b>AAC (*Optional)</b>	Bitrate in kbit/sec (32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192) – CBR
<b>OPUS</b>	Bitrate in kbit/sec (32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192) – Bandwith Mode: Narrow band, Medium band, Wide band, Super Wide band, Full band, Auto
I/O INTERFACES	AUDIO FEATURES
1x Universal power supply 100-240 Vac	<b>Analog input impedance:</b> 10kOhm
1x Slot SD Card or SDHC	<b>Analog input sensibility:</b> -12.0 dBu to +12.0 dBu
1 x RJ45 Full Duplex IEEE 802.3 10/100 Mb/s, WiFi*, 3G*	<b>Analog max input/output:</b> +20 dBu
2 x USB 2.0 FullSpeed	<b>Digital input impedance:</b> 110 Ω
2 x GPInputs via Optocoupler	<b>Digital Input Rates:</b> 32-96 kHz with sample rate conversion and jitter correction
2 x GPOut via Optocoupled open collector output	<b>Bandwidth:</b> 20 Hz – 24 kHz (Analogic Sampling Rate 48 KHz)
2 x XLR Input: Analog or Digital (AesEbu)	<b>Signal-to-noise (S/N):</b> 110 dB A-weighted (90dB nominal @ 0.0 dBu sensitivity)
2 x XLR Output: Analog or Digital (AesEbu)	<b>CrossTalk:</b> >80 dB @ 10 kHz
1 x Graphic Display LCD (Elite Version Only)	<b>THD</b> 0.005% @ 1 kHz
1 x Encoder with Enter button (Elite Version Only)	<b>Input Digital Sensitivity:</b> -30.0 dBFs, -5 dBFs
1 x Headphone jack Output (Elite Version Only)	<b>Digital Output Rates:</b> 48 kHz Internal or 32-48 kHz Synch to AesEbu input
1 x front USB 2.0 FullSpeed (Elite Version Only)	<b>Digital nominal input:</b> 0.0 dBFs –25.0 dBFs
	<b>Dimensions:</b> 217x200x44 mm (b x w x h)
	<b>Weight:</b> 2 kg (3 Kg with batteries)

## ORDERING INFO

CODE:	PRODUCT:	DESCRIPTION:
A116010000	<i>STREAMER MAX MKII</i>	Bidirectional Encoder/Decoder for streaming audio over IP. Analog and AES/EBU I/O. Formats: PCM, MP3, AAC, Vorbis, Shoutcast, Icecast. Distributes audio over standard TCP/IP, LAN/WAN and UMTS networks with external modem. GPIO. Audio backup on USB-HD. Unicast/Multicast
A116010001	<i>STREAMER MAX ELITE MKII</i>	Bidirectional Encoder/Decoder for streaming audio over IP. Graphic display and encoder. Analog and AES/EBU I/O. Formats: PCM, MP3, AAC, Vorbis, Shoutcast, Icecast. Streams audio over standard TCP/IP, LAN/WAN, and UMTS networks with external modem. GPIO. Audio backup on USB-HD. Unicast/Multicast

## 7. WEEE DIRECTIVE – INFORMATIVA RAEE



In line with EU Directive 2002/96/EC for waste electrical and electronic equipment (WEEE), this electrical product must not be disposed of as unsorted municipal waste. Please dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling.

In Übereinstimmung mit der Richtlinie 2002/96/EG des Europäischen Parlaments und des Rates über Elektro- und Elektronik-Altgeräte (WEEE) darf dieses Elektrogerät nicht im normalen Hausmüll oder dem Gelben Sack entsorgt werden. Wenn Sie dieses Produkt entsorgen möchten, bringen Sie es bitte zur Verkaufsstelle zurück oder zum Recycling-Sammelpunkt Ihrer Gemeinde.

Conformément à la Directive 2002/96/EC sur les déchets d'équipements électriques et électroniques (DEEE), ce produit électrique ne doit en aucun cas être mis au rebut sous forme de déchet municipal non trié. Veuillez vous débarrasser de ce produit en le renvoyant à son point de vente ou au point de ramassage local dans votre municipalité, à des fins de recyclage.

In navolging van richtlijn 2002/96/EG van het Europees Parlement en de Raad betreffende afgedankte elektrische en elektronische apparatuur (AEEA) mag dit elektrische product niet als ongescheiden huisvuil worden weggedaan. Breng dit product terug naar de plaats van aankoop of naar het gemeentelijke afvalinzamelingspunt voor recycling.

In ottemperanza alla Direttiva UE 2002/96/EC sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE), questo prodotto elettrico non deve essere smaltito come rifiuto municipale misto. Si prega di smaltire il prodotto riportandolo al punto vendita o al punto di raccolta municipale locale per un opportuno riciclaggio.

De conformidad con la Directiva 2002/96/CE de la UE sobre residuos de aparatos eléctricos y electrónicos (RAEE), este producto eléctrico no puede desecharse con el resto de residuos no clasificados. Deshágase de este producto devolviéndolo al punto de venta o a un punto de recogida municipal para su reciclaje.

I henhold til EU-direktiv 2002/96/EF om affald af elektrisk og elektronisk udstyr (WEEE) må dette udstyr ikke bortskaffes som usorteret husholdningsaffald. Bortskaf dette produkt ved at returnere det til salgsstedet eller til det lokale indsamlingssted, så det kan genbruges.

I linje med EU-direktiv 2002/96/EG om avfall som utgörs av eller innehåller elektriska eller elektroniska produkter (WEEE) får denna elektriska produkt inte bortskaffas som osorterat kommunalt avfall. Bortskaffa den i stället genom att lämna in den på försäljningsstället eller din lokala återvinningsstation.

EU:n sähkö- ja elektroniikkalaiteromudirektiivin (2002/96/EY) mukaisesti tätä elektroniikkalaitetta ei saa laittaa lajittelemattoman yhdyskuntajätteen sekaan. Hävitä laite palauttamalla se ostopaikkaan tai viemällä se elektroniikkaromun keräyspisteeseen.

De acordo com a Directiva Europeia 2002/96/EC sobre resíduos sólidos de equipamento eléctrico e electrónico (WEEE), este produto eléctrico não pode ser deixado fora juntamente com o lixo municipal indiferenciado. Por favor, no final da vida útil deste produto, devolva-o ao estabelecimento de aquisição, ou entregue no local de recolha apropriado para reciclagem designado pelo seu município.

V souladu se smrnici EU . 2002/96/ES o odpadních elektrických a elektronických zařizeních (OEEZ) se tento elektrický výrobek nesmí likvidovat jako neřídny komunální odpad. PŮi likvidaento výrobek vraťte prodejci nebo ho odevzdejte k recyklaci do komunálního sbŮrného zařizení.

Vastavalt EL direktiivile 2002/96/EÜ, mis käsitleb elektri- ja elektroonikaseadmete jäätmeid (WEEE), ei või antud toodet visata majapidamisjäätmete hulka. Palun tagastage antud toode taaskasutamise eesmärgil müügipunkti või kohaliku piirkonna jäätmekogumise punkti.

V súlade so smernicou 2002/96/ES o odpade z elektrických a elektronických zariadení (OEEZ) sa toto elektrické zariadenie nesmie odstraňovať ako netriedený komunálny odpad. Výrobok odstráňte jeho vrátením v mieste nákupu alebo odovzdaním v miestnom zbernom zariadení na recyklovanie.

V súlade so smernicou 2002/96/ES o odpade z elektrických a elektronických zariadení (OEEZ) sa toto elektrické zariadenie nesmie odstraňovať ako netriedený komunálny odpad. Výrobok odstráňte jeho vrátením v mieste nákupu alebo odovzdaním v miestnom zbernom zariadení na recyklovanie.


## 8. WARRANTY

The manufacturer offers a one-year warranty ex-works. Do not open the equipment. Any breaking of the seals will result in forfeiture of the same. The manufacturer is not liable for damages of any kind arising from, or in connection with, the use of the wrong product.






## Dichiarazione di conformità


Il sottoscritto Giuseppe Vaccari	
In qualità di legale rappresentante della ditta Axel Technology S.r.l.	
con sede in: Via Caduti di Sabbiuno, 6/F – 40011 – Anzola Emilia (BO)	
Partita IVA: IT01735031203	
<b>Dichiara</b>	
che il prodotto: <b>Encoder/Decoder simultaneo per streaming audio su IP. Display grafico ed encoder. I/O analog e AES/EBU. Formati: PCM, MP3, AAC (richiesta licenza separata), Vorbis, Shoutcast e Icecast2. Stream su reti standard TCP/IP, LAN, WAN, UMTS con modem esterno. GPIO. Unicast/Multicast.</b>	
Modello e/o codice: <b>Streamer Max MKII</b>	
Data Fabbricazione: vedi etichetta sul prodotto	Numero di serie: vedi etichetta sul prodotto
È stato costruito rispettando le seguenti direttive e norme:	
<ul style="list-style-type: none"> <li>• Direttiva 2014/35/UE nota come "Direttiva bassa tensione"</li> <li>• Direttiva 2014/30/UE nota come "Direttiva compatibilità elettromagnetica"</li> <li>• Direttiva 2011/65/CE nota come "RoHS"</li> <li>• Direttiva delegata (UE) 2015/863 della commissione del 31 marzo 2015 recante modifica dell'allegato II della direttiva 2011/65/UE</li> <li>• Direttiva 2012/19/UE nota come "RAEE"</li> <li>• Direttiva 2001/95/CE nota "Sicurezza generale dei prodotti"</li> <li>• UNI EN ISO 7010:2021 Titolo: Segni grafici - Colori e segnali di sicurezza - Segnali di sicurezza registrati</li> <li>• EN 62368-1:2018 - relativa alla sicurezza elettrica per le apparecchiature informatiche e i prodotti audio/video</li> <li>• IEC 62311:2019 - Valutazione degli apparecchi elettronici ed elettrici in relazione alle restrizioni per l'esposizione umana ai campi elettromagnetici (0 Hz – 300 GHz)</li> <li>• EN 55032:2015+A1:2020 - Compatibilità elettromagnetica delle apparecchiature multimediali. Requisiti di emissione</li> <li>• EN 55103-2:2010 Norme di famiglie di prodotto per apparecchi audio, video, audiovisivi e di comando di luci da intrattenimento per uso professionale - Parte 2: Immunità.</li> <li>• EN 60065:2019 Apparecchi audio, video e apparecchi elettronici similari Requisiti di sicurezza.</li> <li>• EN 61000-6-1:2016 – EMC – Immunità per ambienti residenziali, commerciali e industria leggera.</li> <li>• EN 61000-6-3:2020 – EMC – Emissione per ambienti residenziali, commerciali e industria leggera.</li> <li>• EN 60950-1:2014 – Sicurezza degli apparati ITE (Information Technology Equipment)</li> <li>• EN 55024:2017 Apparecchiature per la tecnologia dell'informazione - Caratteristiche di immunità Limiti e metodi di misura.</li> <li>• EN IEC 63000:2018 Nuovo standard armonizzato per dimostrare la conformità RoHS</li> <li>• EN 55032:2015+A11:2020 Compatibilità elettromagnetica delle apparecchiature multimediali - Requisiti di emissione</li> <li>• EN 55035:2017 - Compatibilità elettromagnetica delle apparecchiature multimediali - Requisiti di immunità</li> </ul>	
Ed è quindi conforme alle direttive e normative vigenti.	
La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.	
Data: 15/6/2023	Firma: 
Luogo: ANZOLA DELL'EMILIA (BO) - ITALIA	




## Dichiarazione di conformità

Il sottoscritto Giuseppe Vaccari	
In qualità di legale rappresentante della ditta Axel Technology S.r.l.	
con sede in: Via Caduti di Sabbiuno, 6/F – 40011 – Anzola Emilia (BO)	
Partita IVA: IT01735031203	
<b>Dichiara</b>	
che il prodotto: <b>Encoder/Decoder simultaneo per streaming audio su IP. Display grafico ed encoder. I/O analog e AES/EBU. Formati: PCM, MP3, AAC (richiesta licenza separata), Vorbis, Shoutcast e Icecast2. Stream su reti standard TCP/IP, LAN, WAN, UMTS con modem esterno. GPIO. Unicast/Multicast.</b>	
Modello e/o codice: <b>Streamer Max MKII Elite</b>	
Data Fabbricazione: vedi etichetta sul prodotto	Numero di serie: vedi etichetta sul prodotto
È stato costruito rispettando le seguenti direttive e norme:	
<ul style="list-style-type: none"><li>• Direttiva 2014/35/UE nota come "Direttiva bassa tensione"</li><li>• Direttiva 2014/30/UE nota come "Direttiva compatibilità elettromagnetica"</li><li>• Direttiva 2011/65/CE nota come "RoHS"</li><li>• Direttiva delegata (UE) 2015/863 della commissione del 31 marzo 2015 recante modifica dell'allegato II della direttiva 2011/65/UE</li><li>• Direttiva 2012/19/UE nota come "RAEE"</li><li>• Direttiva 2001/95/CE nota "Sicurezza generale dei prodotti"</li><li>• UNI EN ISO 7010:2021 Titolo: Segni grafici - Colori e segnali di sicurezza - Segnali di sicurezza registrati</li><li>• EN 62368-1:2018 - relativa alla sicurezza elettrica per le apparecchiature informatiche e i prodotti audio/video</li><li>• IEC 62311:2019 - Valutazione degli apparecchi elettronici ed elettrici in relazione alle restrizioni per l'esposizione umana ai campi elettromagnetici (0 Hz – 300 GHz)</li><li>• EN 55032:2015+A1:2020 - Compatibilità elettromagnetica delle apparecchiature multimediali. Requisiti di emissione</li><li>• EN 55103-2:2010 Norme di famiglie di prodotto per apparecchi audio, video, audiovisivi e di comando di luci da intrattenimento per uso professionale - Parte 2: Immunità.</li><li>• EN 60065:2019 Apparecchi audio, video e apparecchi elettronici similari Requisiti di sicurezza.</li><li>• EN 61000-6-1:2016 – EMC – Immunità per ambienti residenziali, commerciali e industria leggera.</li><li>• EN 61000-6-3:2020 – EMC – Emissione per ambienti residenziali, commerciali e industria leggera.</li><li>• EN 60950-1:2014 – Sicurezza degli apparati ITE (Information Technology Equipment)</li><li>• EN 55024:2017 Apparecchiature per la tecnologia dell'informazione - Caratteristiche di immunità Limiti e metodi di misura.</li><li>• EN IEC 63000:2018 Nuovo standard armonizzato per dimostrare la conformità RoHS</li><li>• EN 55032:2015+A11:2020 Compatibilità elettromagnetica delle apparecchiature multimediali - Requisiti di emissione</li><li>• EN 55035:2017 - Compatibilità elettromagnetica delle apparecchiature multimediali - Requisiti di immunità</li></ul>	
Ed è quindi conforme alle direttive e normative vigenti.	
La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.	
Data: 15/6/2023	Firma: 
Luogo: ANZOLA DELL'EMILIA (BO) - ITALIA	

# CE Declaration of Conformity

The undersigned Giuseppe Vaccari	
As legal representative of the company Axel Technology Srl	
based in: Via Caduti di Sabbiuno, 6/F – 40011 – Anzola Emilia (BO)	
VAT number: IT01735031203	
<i>declares</i>	
that the product: <b>Simultaneous encoder/decoder for audio streaming over IP. Graphic display and encoder. Analog I/O and AES/EBU. Formats: PCM, MP3, AAC (separate license required), Vorbis, Shoutcast and Icecast2. Stream over standard TCP/IP, LAN, WAN, UMTS networks with external modem. GPIO. Unicast/Multicast.</b>	
Model and/or code: Streamer <b>Max MKII</b>	
Date of manufacture: see label on the product	Serial number: see label on the product
It was built in compliance with the following directives and standards:	
<ul style="list-style-type: none"> <li>• Directive 2014/35/EU known as the "Low Voltage Directive"</li> <li>• Directive 2014/30/EU known as the "Electromagnetic Compatibility Directive"</li> <li>• Directive 2011/65/EC known as "RoHS"</li> <li>• Commission Delegated Directive (EU) 2015/863 of 31 March 2015 amending Annex II of Directive 2011/65/EU</li> <li>• Directive 2012/19/EU known as "WEEE"</li> <li>• Directive 2001/95/EC known as "General product safety"</li> <li>• UNI EN ISO 7010:2021 Title: Graphic signs - Colors and safety signs - Registered safety signs</li> <li>• EN 62368-1:2018 - relating to electrical safety for computer equipment and audio/video products</li> <li>• IEC 62311:2019 - Evaluation of electronic and electrical equipment with regard to restrictions on human exposure to electromagnetic fields (0 Hz – 300 GHz)</li> <li>• EN 55032:2015+A1:2020 - Electromagnetic compatibility of multimedia equipment. Issue requirements</li> <li>• EN 55103-2:2010 Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 2: Immunity.</li> <li>• EN 60065:2019 Audio, video and similar electronic equipment Safety requirements.</li> <li>• EN 61000-6-1:2016 – EMC – Immunity for residential, commercial and light industry environments.</li> <li>• EN 61000-6-3:2020 – EMC – Emission for residential, commercial and light industry environments.</li> <li>• EN 60950-1:2014 – Safety of ITE (Information Technology Equipment)</li> <li>• EN 55024:2017 Information technology equipment - Immunity characteristics Limits and methods of measurement.</li> <li>• EN IEC 63000:2018 New harmonized standard to demonstrate RoHS compliance</li> <li>• EN 55032:2015+A11:2020 Electromagnetic compatibility of multimedia equipment - Emission requirements</li> <li>• EN 55035:2017 - Electromagnetic compatibility of multimedia equipment - Immunity requirements</li> </ul>	
And it is therefore compliant with current directives and regulations.	
This declaration of conformity is issued under the sole responsibility of the manufacturer.	
Date: 15/6/2023	Signature: 
Place: ANZOLA DELL'EMILIA (BO) - ITALY	

# CE Declaration of Conformity

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Model and/or code: Streamer <b>Max MKII Elite</b>	
Date of manufacture: see label on the product	Serial number: see label on the product
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