# QUICK START GUIDE



# ISP ELITE MK3 ISP.16/24/32 Analog, ISP.32 Digital

# Immersive Sound Preamp/Processor

VERSION 3.0 Last updated: November 2023



## **IMPORTANT SAFETY INSTRUCTIONS**



The book with exclamation mark symbol is intended to alert user that it is recommended to read this owner manual before installing and powering up the product.



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage " within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.



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 product.

The wave symbol next to the voltage information (100V-240V 50/60Hz) is intended to alert the user that
the unit should be powered by an alternating current (AC) source, so called mains power outlet, of the electrical installation.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the 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 tipover.

- 13. The apparatus weight exceeds 13 kg, could drop and causes serious injuries. Move the apparatus with care.
- 14. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 16. Do not open. No user serviceable parts inside. Refer servicing to qualified service personnel.
- 17. To completely disconnect this equipment from the AC mains, disconnect the power supply cord plug from the AC receptacle.
- 18. The mains plug of the power supply cord shall remain readily operable.
- 19. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
- 20. For safety and electrical shock reasons, it is recommended to use this device in a non-tropical environment with temperature not exceeding 45°C and altitude not exceeding 2000m.
- 21. Do not expose batteries to excessive heat such as sunshine, fire or the like.

## Liability

The legal guarantees of conformity under no circumstances cover any damage arising from accidents, misuse or an assembly error, negligence or considerable modification of the appearance or functioning of the product. Immersive Audio Technologies reserves its right to refuse any return for a damaged product on account of misuse.

### Terms of warranty

All StormAudio products are covered by warranty drawn up by the official StormAudio distributor in your country. Your distributor can provide all details concerning the conditions of warranty. Warranty cover extends at least to that granted by the legal warranty in force in the country where the original purchase invoice was issued. Warranty is valid only in the country the product was originally sold. StormAudio reserves the right to refuse the free application of the warranty if a copy of the invoice stating purchase date, model and serial number is not presented.

To prevent any damage or loss/deletion of data stored on the device, you must have saved them prior to returning your device to the services responsible hereunder, using the Backup Configuration feature available in the System page.

Transport cost to mainland France or other official technical center is at the expense of the customer. The device is transported at the risk of the customer. We strongly recommend to store the original packaging for any transportation. In the event of any damage observed upon its return, all the reservations must be made by the recipient with the carriers.

## **TECHNICAL SUPPORT**

### Check resources on our website

In case you need support, please consult our website to check our Download, Tutorial and Webinar sections. You will find manuals, explanatory videos and more resources that could help you: <a href="https://www.stormaudio.com/technical-support">https://www.stormaudio.com/technical-support</a>

You can also check our interactive Knowledge Base Center: <u>https://www.stormaudio.com/knowledge-base</u>

## Ask your reseller

If you require technical support on your StormAudio products, or if you have any product related questions, please first contact your reseller.

### Open a ticket on our Help Desk

If your reseller cannot solve your issue or if you don't find the info you need in our various support contents, please open a ticket on our Help desk: https://www.stormaudio.com/help-desk

Provide as much information as possible about your product, your setup, the devices used as well as steps to reproduce the problem. Ideally, if possible, download the Configuration and Logs files from the System page and add them to the ticket.

## Audio

Audio Formats	up to 24ch (13.1.10), 192 kHz Dolby Atmos with Enabled Speakers, DTS:X Pro, IMAX Enhanced, Auro3D All Legacy codecs StormXT
Audio Inputs	16ch (AES/EBU) optional 32ch (AoIP) optional 4x RCA analog (7.1 or 2.0) 1x XLR analog (stereo) 3x Coaxial (SPDIF) 3x Optical (Toslink)
Streaming	ROON Ready
Post-Processed Outputs	up to 32ch, 48 kHz
Audio outputs	16ch analog (XLR) default 24ch or 32ch analog (XLR) optional 32ch digital (AES/EBU or AoIP) optional 1x Optical Toslink for Zone2 (Downmix)
Bass Management	Multiple subwoofers Per channel crossover Standard and Expert Up to 6 Bass Zones
Multi-way speaker XO	Up to 4-Way speakers 6, 12, 18, 24, 36, 48 dB/ Octave, Linkwitz-Riley and Butterworth
Equalization per Channel	up to 20 band PEQ REW plugin
Calibration	Dirac Live suite

## HDMI

Inputs / Outputs	7 / 2 (matrix is 4K only)
Input Specs	7 ea. HDCP2.3 / HDMI2.1
Output Specs	2 ea. HDCP2.3 / HDMI2.1 ARC/eARC On Screen Display
Max Resolution	Up to 8K120 4:2:2 10 bit / 8K60 RGB/4:4:4/4:2:2 in DSC 1.2 mode 40 Gpbs all ports
HDR	HDR10, Dynamic HDR, HDR10+, Dolby Vision & HLG
Deep Color Support	12bpc
CEC	One Touch Play (ISP -> TV), System Standby, System Audio Control and Audio Return Channel Control.

## Control

Control Modules	Crestron and Crestron Home Control4 RTI Savant ELAN URC
IR	Front panel sensor Rear panel I/O, jack 3.5mm
DC Trigger	x4, jack 3.5mm Software assignable to inputs, presets, on/standby or manual operation
Applications	WebUI: Setup & remote control iOS App: remote control Android App : remote control
Network	100 Mbps Ethernet

## **Power Supply**

Туре	Universal
Range	100 to 240V

## Weight and Dimensions

(net product)	
L x W x H (cm / inches)	
With rack ears, no foot	46.58 x 48.05 x 17.60
	18.11 × 18.89 × 6.70
No rack ears, with feet	46.58 x 44.2 x 19.35
	18.11 × 17.32 × 7.48
Weight	13,10 KG   28.80 LBS

## Options

UMIK-1 Microphone	USB microphone. Allows for Monitoring, Calibration and RTA function.
16 to 24ch XLR Output	Extra 8 channel XLR output module (24ch total)
24 to 32ch XLR Output	Extra 8 channel XLR output module (32ch total)
16 to 32ch XLR Output	Extra 16 channel XLR output module (32ch total)
32ch Digital AES Output	32 channel AES/EBU output module (4x RJ45)
32ch Digital AoIP Input/Output	32 channel AES67 I/O module (2x RJ45)
16ch Digital AES Input	16 channel AES/EBU input module (2x RJ45) DCI compatible

Our policy of continual product improvement means that StormAudio reserves the right to modify the technical specifications of its products without notice. Product may vary from images.

## Welcome

Thank you for choosing a StormAudio Immersive Sound Preamp/Processor. This guide provides stepby-step instructions for quickly setting up your ISP to meet a basic Theater configuration.

The ISP range shares the same backbone, but models differ by the options that are installed. This guide will describe a basic setup valid for any version of the Immersive Sound Processor.

We continuously strive to improve our products. Some features might have thus been added or improved recently. Please check our website: <u>https://</u><u>www.stormaudio.com</u> to get access to the Firmwares and documentation, and keep your ISP up to date by upgrading it to the latest available firmware package.

## What's in the box

Immersiv	ve Sound
Proce	essor
Quick Start Guide	IR Remote Control handset
with the Safety Instructions	and 2x AAA batteries
Rack Mount ears *	Power Cord

\* tools are required to mount/unmount the rack mount ears: Torx screwdriver (T20).

## What you need

Display / Projector	XLR cables RCA cables Optical Toslink wire
HDMI Cables	Amplifier units
Speakers with cables	LAN router with Cat5/6 RJ45 cable *

\* the ISP needs a DHCP server to be part of the Network and get an IP address allocated. Make sure to check your Internet Provider Box or LAN/Switch box for router function.

#### **Owner Manual access**

This document covers a basic setup. For a complete and exhaustive configuration of your product, we recommend you to consult the full Owner Manual :

https://www.stormaudio.com/en/ISP-ISR-owner-manual/



## **Installation Flow**

Prior to starting the configuration of your system, make sure to **upgrade your ISP to the latest firmware revision**.

Only few steps are required to configure your ISP for a basic setup, as summarized below:

1 Panels overview 2 Inputs and Outputs connection 3 Web User Interface access 4 Inputs definition 5 **Theater definition** 6 Output mapping 7 Presets definition 8 **Remote control** 

Explore the next pages of this Quick Guide to go through each steps of the configuration of your ISP.

## **1 - PANELS OVERVIEW**



2. Down button

Up button

- 2. Down button
- 8. AC Inlet
- 3. Home/Acces button
- 10. USB ports
- 5. Display

4.

10. 030 ports

9. Ethernet port

- 11. IR Input/Output
- 6. Volume/Left-Right 12. Trigger outputs Press: Mute / OK



- 13. Digital Inputs, Optical and Coaxial
- 14. Unbalanced Analog Inputs
- 15. Balanced Analog Input
- 16. Zone2 Digital Optical Output
- 17. Channels 1 to 16 Balanced Outputs
- Available slots for optional modules extending the I/O capabilities of the ISP MK3. Refer to Owner Manual for more details.

# 2 - INPUTS AND OUTPUTS CONNECTION



- 1. Connect your AC cable to a grounded outlet.
- 2. Connect your RJ45 LAN cable to your router.
- 3. Connect your digital sources either via the Toslink Optical or Coaxial interfaces.
- 4. Connect your analog stereo sources to the Unbalanced RCA inputs (for 7.1/5.1 Ch source, refer to Owner Manual) or Balanced XLR input.
- 5. Connect the Balanced Outputs 1 to 16 to your amplifiers.
- 6. Connect your HDMI sources on any input from 1 to 7, all supporting HDMI2.0/HDCP2.2, 18 Gbps.
- 7. Connect your screen or projector on Outputs 1 and 2, both supporting HDMI2.0/HDCP2.2. Note that ARC/eARC is only supported in Output 1.

Note: check Owner Manual for other connections.

# 3 - WEB USER INTERFACE ACCESS

## First time access



- 1. Turn the Main Switch to ON (I) on the back panel.
- 2. Display will show the StormAudio icon for few seconds and will enter Sleep Mode.
- 3. When in Sleep Mode, press the Power Button. Unit will start. Wait until the LED is stable green.

# 3 - WEB USER INTERFACE ACCESS

4. When the Home display screen is shown, press the Select button (rounded square) to access the Adjustment Menu.



5. Using the Arrow button, access the Settings and press the Volume knob to Validate.



6. Select the Network item and press the Volume knob to validate. This will give access to the Network info where you can take note of the IP address and also reset the network parameters. Select Back to exit.

## Web User Interface description

	$\bigcirc$ $\land$	SETTINGS display	>	
/	$\bigcirc$	NETWORK	>	/
	$\bigcirc$ $\Box$	SYSTEM	>	(
	○ <b>· 6</b>			\
/		NETWORK INFORMATIONS		
/	0 ^	HOSTNAME isp-host IP ADDRESS 192.168.10.209		
/	0	MAC ADDRESS b8:27:eb:61:a5:e5		/
	$\bigcirc$ $\Box$	NETMASK 255.255.255.0 GATEWAY 192.168.10.254		(
	$\circ$ ~	DNS SERVER <b>8.8.8</b> DHCP <b>Off</b>		\
		← BACK Ĉ RESET		

7. Open your Web Browser in a laptop and enter the IP address in the URL area. Select **Expert setup** to configure the product using this guide or **StormEasy** to follow the configuration wizard. In both cases use **installer** as password.





## **4 - INPUTS CONFIGURATION**



- 1. Unused inputs should be turned to N (No) to not appear in the Remote Control.
- 2. Default names are given to the inputs. You can use it unchanged or edit it to your preference.
- 3. Select which HDMI video input must be activated when the input is selected.
- 4. Select where the audio should come from for the defined input.
- 5. Select where the audio should come from for the defined input when selected as Zone2 input in the Remote Control.
- 6. Choose to force a Preferred Upmix mode when selecting the Input.
- 7. Choose to force a Preset when selecting the Input.

Note: check Owner Manual for more information about the other settings.

# 5 - THEATER DEFINITION (1/2)

In this part, we will cover the configuration of the speakers in the installation. As systems might easily get complicated, the Quick Guide will only focus on a basic use case where full bandwidth passive speakers are used. We will not cover specific multi-ways speakers here, but we will consider multiple rows of

## **Create your Theater and Audio Zones**



- 1. Firstly, select the Main Speakers page via the Burger Menu.
- 2. By default a 2.1 channels theater is defined. If it doesn't meet your need, use the trash can to delete the existing theater.
- Select the + next to Theaters to create a new Theater and launch the Speakers configurator and go to Configure your theater part below. Or, select the + next to Zones to create an Audio Zone and proceed to step 4.



When in the Theater Configurator, you will be able to define each layer of the speaker installation: base, height and top layers.

- 1. Use the left and right arrows to choose your desired layout for the current layer.
- 2. For each speaker, you can define whether full bandwidth or multiway, with up to 4 ways definable.
- 3. The Center channel can be turned to Phantom mode, the signal being played in Left and Right channels.
- 4. Top speakers can be defined as Dolby Atmos

surround speakers as well as multiple subwoofers.

If you need a different configuration to the one explained here, we invite you to refer to the Owner Manual providing details on all possible adjustments of the ISP.

zone vou wa	
zone you wa	nt to create
Cancel	Create
	Cancel

- 4. In the pop-up window, select the Audio Zone type you wish to create.
- 5. Then validate selecting Create. This will generate and edit the Audio Zone for adjustments. We will not cover the Audio Zone Edit mode in this guide, please refer to the Owner Manual.



Enabled if up-firing speakers are used. In such case, select the base speaker location. Keep «None» for normal down-firing speakers.

- 5. For each speaker, you can define whether replication is required. It is often used for multiple subwoofers use or multiple rows of surround speakers.
- 6. Press Next to reach the next layer and follow again steps 1 to 6 until all three layers are defined.
- 7. At the end, a summary of the Speakers Configuration is shown.
- 8. Click Save to exit and to go to Speakers editing page.

#### **Configure your Theater**

# 5 - THEATER DEFINITION (2/2)

## Dirac Live Calibration



1. Once configured, the Theater is presented in Edit mode. Although an important feature of the ISP, we will not cover the Dirac Live Calibration process in this Quick Guide as it is not required to get a basic setup working. Please refer to the

Owner Manual, should you need to run through the Automated Calibration process of your ISP using Dirac Live. Otherwise, please follow below steps to configure the ISP manually.

## Adjust the Bass Management

Souro	e: HDMI1	Preset : Theater 1	✓ Theate	r1: New Profile 1 V Preferred Upmix: > Native	✓ Audio Stream : No Audio		🗢 -75.0 dB 🕂 🛈
Speakers > Th	leater 1						
VOL. REF	Set Recall	GENERATOR Setup	Pink Noise	v Gain 0,1 ≎ Group - 1 Group +		RTA Mic R	tef Level 40 🔅 dB Linear 🗖 DIRAC Setup
Theater 1	Save	7.1.5.3 Delete	View Crea	e Child		Protile : New Profile 1 V R	tename New Duplicate Save Delete
			Channels			Bass Management Standard 🗸	Bass management Delay, level, limiter and polar
Ch.	Status	EQ	Signal	Channel Name	Size / Filter 🔮	Frequency	Slope With LFE
1	On	\$	n LF	Left Front	SMALL v	80 💭 Hz	LR 12 V None V dB
2	On	۰ م	On CF	Center Front	SMALL ~	80 💭 Hz	LR 12 V None V dB
	On	÷ 0	RF RF	Right Front	SMALL V	80 🔾 Hz	LR 12 V None V dB

In this Quick Guide we will only consider the Standard Bass Management setup:

- For each Theater, it is possible to define multiple audio profiles (all Theater settings). By default, a «New Profile 1» is created.
- 2. Define the Size of each of your Speaker between Small, Large and «Large and Sub». Small will filter the low frequencies and direct them to the Subwoofer. Large will maintain full bandwidth,

while «Large and Sub» will also direct the Bass to the subwoofer channel.

- 3. When in Small, adjust the filter crossover frequency between speaker and subwoofer.
- 4. When in Small, adjust the slope between 12dB, 24dB, 36dB and 48 dB/octave (Linkwitz-Riley, Bessel and Butterworth types).

## Adjust Levels and Delay

VOL. REF	OL REF Set Recall GENERATOR Setup Pink Noise v Gain 0.1 0 Group - 1 Group +									RTA Mic Ref Level 40 C dB Linear E				
Theater 1	Save 7.	1.5.3 Delete	Viev	Creat	e Child			Profile	New Profile 1 🗸	tename New E	luplicate Save	Delete		
										Bass management	Delay, level, lim	iter and polarit		
		(		Channels		0	elay/Distance	Level		Limiter	TiltEQ	Polarity		
Ch.	Status	EQ		Signal	Channel Name		<b>0</b> (m ∨	Level +0 dB 🗸 Gain 🌗	Enable	Value	Value	Invert		
1	On	\$	On	LF	Left Front		4 m	0 🗘 dB	011	0 🗘 dBFS	0 🗘 dB			
2	On		On	CF	Center Front		4 m	0 🗘 dB	OII	0 C dBFS	0 🗘 dB			
3	On		On	RF	Right Front		4 m	0 🔅 dB	OH	0 C dBFS	0 🗘 dB			
4	On		On	SUB	Main Sub / LFE channel		4 m	0 🔾 dB	Oil	0 C dBFS	0 🗘 dB			
5	On	•	On	LS	Left Surround		4 m	0 🗘 dB	OH	0 C dBFS	0 🗘 dB			
6	0.5		0.0	De	Right Surround		4 m	a la la	A114	A ADES	a a de			

- 1. Select the Delay and Level tab.
- 2. Set the Distance/Delay of each of the installed speakers (meter is the default unit, you can select feet or ms).

Before proceeding to level adjustment, ensure the Output Mapping matches your connections (see section 6).

3. Select the Narrow Band pink noise signal and activate the Noise Generator, having first made sure the Master Volume is not at a too high level, such as < -30dB. Using the Group +/- button,

navigate through each Speaker. Use the normal pink noise for the subwoofer adjustment.

- 4. Adjust the Level for each Speaker using a SPL Meter. We recommend to adjust the Levels with 75 to 85dB(C) average sound pressure as reference.
- 5. There are up to 20 Parametric EQs available for each Speaker. Consult the Owner Manual for more details.
- 6. Once adjusted, you can Save your Audio Profile.
- 7. Save the Theater to leave the Edit mode.

## 6 - OUTPUT MAPPING



- 1. If the physical connections are different from the default proposed mapping defined in the configuration (section 5), you can access the Output Mapping feature in the Main Speakers tab selecting the Output Mapping button.
- 2. Change the channel assignment by inputting the correct channel in New Output.
- 3. When completed save the changes to exit and go back to Speakers page.

Cutput mapping			
Zone/Theater	Speaker Name	Current Output	New Output
	Lek Front	1	1 v
	Center Front	2	2 v
	Right Front	3	3 v
	Main Sub / LFE channel	4	4 v
	Laft Surround	5	5 🗸
	Right Surround	6	6 - •
	Laft Back	7	7 •
Theater 1	Right Back	8	<b>2</b>
Theater 1	Left Front Height	9	9 4
	Right Front Height	10	10 v
	Center Front Height	11	11 v
	Left Back Height	12	12 v
	Right Back Height	13	13 v
	Left Middle Top	14	14 v
	Right Middle Top	15	15 v
	TOP	16	16 🗸
	Inactive channel	17	17

## 7 - PRESETS DEFINITION



Definition of Presets is required for playback by linking a Theater and an Audio Profile and making it accessible in the Remote Controls.

- 1. Select the Presets tab in the Burger Menu.
- 2. Some Presets have been created by default while configuring your Theater. You can create more Presets using the Create button or delete some.
- 3. A Preset is visible and accessible in the Remote Controls only if Active (Y) in the Presets page.
- 4. Change the Preset Name here.

- 5. Select which Theater should be activated when the Preset is selected.
- 6. Choose which Audio Profile for the selected Theater needs to be playing. This will call up all the related audio adjustments.
- 7. For each Preset, select whether the Audio Zones should be activated (recommended all active by default).
- 8. For each Preset, you can define which Preferred Upmix mode you wish to activate.

## StormRemote control applications

Access the Web User Interface Remote Control (check section 3, Home Page and select Remote Control) to control the ISP from your Web Browser.

HDMI 6 HD Coaxial 4 Coa:	MI 2 HDMI 3 MI 7 Optical 1 xial 5 Coaxial 6 reo 4 ARC/eARC	Optical 2 Opt	MI 5 ical 3 reo 2	
Power volume 75.0" + Mute Ott vol dim Ott LFE dim Ott	PRESET Move AUDIO STREAM PREFERED UPHX STORMAT OFF DRC OF TRIGGER 1 OT	CENTER ENHANCE URIANCE	- 0°° + - 0°° +	ZONE     Optic Zum3     Image: Contract cont

## **Independent Remote Control**

The IR control unit operates effectively within a distance of 23 feet (7 meters) and an angle of 30° from the processor. Using the control near fluorescent lights may shorten this range, as will any dust or dirt that accumulates on the front of the remote control or the remote-sensor area of the processor. Also, avoid blocking the line of sight between processor and remote.

Install the two supplied AAA batteries in the remote as shown. Be certain to follow the (+) and (-) polarity indicators that are on the top of the battery compartment.



Use the StormRemote Control Application available on the app stores:





## Instructions for disposal of used Batteries.



These symbols shown on the product, the packaging or in the manual or separate information sheet mean that the product itself, as well as the batteries included or built into the product, should never be thrown away with general household waste. Take them to applicable collection points, where proper treatment, recycling and recovery takes place, in accordance with national or local legislation, or European Directives

#### 2002/96/EC and 2006/66/EC.

Correct handling of the product and batteries to be disposed helps save resources and prevents possible negative effects on the environment or human health.

The batteries included with your equipment may be alkaline or carbon zinc/manganese. All types should be disposed of according to the above instructions.

To remove the batteries from your remote control, reverse the procedure described above for inserting batteries.

## FCC and IC compliance notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **CE declaration**

Immersive Audio Technologies hereby declares that this equipment is in compliance with the EMC 2014/30/UE Directive, LVD 2014/35/UE Directive, ErP 2009/125/CE Directive and RoHS 2011/65/CE Directive.

### **WEEE Notice**

The Directive on Waste Electrical and Electronic Equipment (WEEE, DEEE 2012/19/UE) resulted in a major change in the treatment of electrical equipment at end-of-life.

The purpose of this Directive is, as a first priority, the prevention of WEEE, and in addition, to promote the reuse, recycling and other forms of recovery of such wastes so as to reduce disposal.

The WEEE logo on the product or on its box indicating collection for electrical and electronic equipment consists of the crossed-out wheeled bin, as shown here.



This product must not be disposed of or dumped with your other household waste. You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Isolated collection and proper recovery of your electronic and electrical waste equipment at the time of disposal will allow us to help conserving natural resources. Moreover, proper recycling of the electronic and electrical waste equipment will ensure safety of human health and environment. For more information about electronic and electrical waste equipment disposal, recovery, and collection points, please contact your local city center, household waste disposal service, shop from where you purchased the equipment, or manufacturer of the equipment.

## **RoHS Compliance**

This product is in compliance with Directive 2011/65/EU of the European Parliament on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

## XLR pin out

To connect the ISP to an amplifier, you must use male to female XLR cables. The connector in the ISP is a Male XLR. We recommend up to 3m cables.



## XLR to RCA unbalancing cable

In some cases, it might be required to connect to ampliers with unbalanced inputs. In such case, the wiring should be done as shown.



## AES/EBU RJ45 connector pin out

The Multichannel Digital Inputs and Outputs options use RJ45 cables to carry the AES/EBU signals. The pinout of the RJ45 connectors on the ISP is described herewith with the corresponding XLR connector wiring.



### **USB ports**

There are two USB ports available used for StormMonitoring microphone connection and USB upgrade when no network access is available. The 2x ports can be used to provide 5V power supply in the limit of 500mA maximum total consumption for the two ports.

## ACKNOWLEDGEMENTS

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# **DESIGN NOTES**





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