

# ALI20MK2

## User Manual



[www.audac.eu](http://www.audac.eu)



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# Introduction

## Audio line isolator

The ALI20MK2 is an audio line isolator designed to isolate audio devices from each other. This way hum and buzz noises caused by ground loops or RF in audio systems can be easily eliminated.

The ALI20MK2 offers a completely passive solution to isolate audio devices from each other. It is especially usefull for PA systems where source, amplifiers and speakers are located distant from each other, a slight humm may cause hours of troubleshooting and can be easily avoided by connecting the ALI20MK2 at the input of your amplifier, quickly eliminating ground loop humm and buzz.

We fitted two male and two female balanced XLR connectors on the ALI20MK2, both pairs are connected to a separate symetrically designed audio isolation circuit, allowing signal passing in both directions. This circuit with an impedance of 600 Ohm and a turn ratio of 1 : 1, eliminates ground loops and minimizes RF noise without distorting, or phase shifting the audio signal.

# Precautions

## **READ FOLLOWING INSTRUCTIONS FOR YOUR OWN SAFETY**

ALWAYS KEEP THESE INSTRUCTIONS. NEVER THROW THEM AWAY

ALWAYS HANDLE THIS UNIT WITH CARE

HEED ALL WARNINGS

FOLLOW ALL INSTRUCTIONS

NEVER EXPOSE THIS EQUIPMENT TO RAIN, MOISTURE, ANY DRIPPING OR SPLASHING LIQUID. AND NEVER PLACE AN OBJECT FILLED WITH LIQUID ON TOP OF THIS DEVICE

NO NAKED FLAME SOURCES, SUCH AS LIGHTED CANDLES, SHOULD BE PLACED ON THE APPARATUS

DO NOT PLACE THIS UNIT IN ENVIRONMENTS WHICH CONTAIN HIGH LEVELS OF DUST, HEAT, MOISTURE OR VIBRATION

THIS UNIT IS DEVELOPED FOR INDOOR USE ONLY. DO NOT USE IT OUTDOORS

ONLY USE ATTACHMENTS & ACCESSORIES SPECIFIED BY THE MANUFACTURER

USE THE APPARATUS ONLY IN MODERATE CLIMATES



### **CAUTION – SERVICING**

This product contains no user serviceable parts. Refer all servicing to qualified service personnel. Do not perform any servicing (unless you are qualified to)



### **EC DECLARATION OF CONFORMITY**

This product conforms to all the essential requirements and further relevant specifications described in following directives: 2014/30/EU (EMC) and 2014/35/EU (LVD)



### **WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**

The WEEE marking indicates that this product should not be disposed with regular household waste at the end of its life cycle. This regulation is created to prevent any possible harm to the environment or human health.

This product is developed and manufactured with high quality materials and components which can be recycled and/or reused. Please dispose this product at your local collection point or recycling centre for electrical and electronic waste. This will make sure that it will be recycled on an environmentally friendly manner, and will help to protect the environment in which we all live.

# Chapter 1

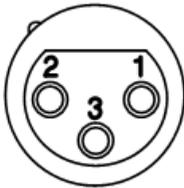
## Connections and connectors

### CONNECTION STANDARDS

The in- and output connections for AUDAC audio equipment are performed according to international wiring standards for professional audio equipment.

#### **XLR:**

For balanced microphone input connections. Image shows female port (receptacle).



**Pin 1:** Ground

**Pin 2:** Signal +

**Pin 3:** Signal –

# Chapter 2

## Overview ALI20MK2

### Front panel ALI20MK2



*ALI20MK2 Front panel*

#### **Balanced Female XLR connectors:**

Located on the front panel are both balanced Female XLR inputs, both are connected to an individual, isolated audio circuit. The symmetrical design allows you to pass the audio signal in both directions.

#### **Ground lift switch:**

The ground lift switch provides the option to eliminate unwanted humm and buzz by interrupting the ground, this prevents current from flowing through the cables shielding resulting in a clean audio signal.

# Rear panel ALI20MK2



*ALI20MK2 Rear panel*

## **Balanced Male XLR out connectors:**

Similar to the front panel, the back panel is equipped with two balanced Male XLR outputs, both accompanied by a ground lift switch. The symmetrical design allows you to pass the audio signal in both directions.

## **Ground lift switch:**

The ground lift switch provides the option to eliminate unwanted humm and buzz by interrupting the ground, this prevents current from flowing through the cables shielding resulting in a clean audio signal.

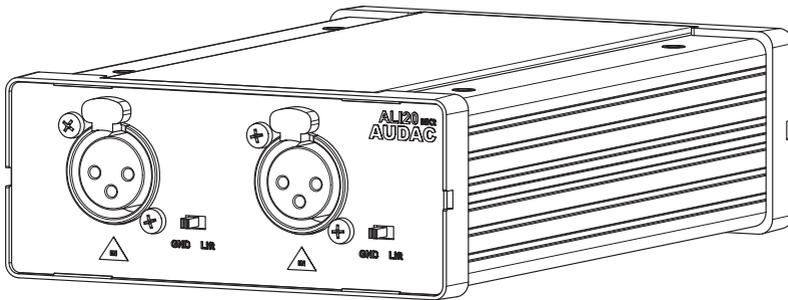
# Chapter 4

## Using the ALI20MK2

The ALI20MK2 can be used in both PA systems as well as Recording & Broadcasting studios.

To easily eliminate noise in a PA system, simply connect the ALI20MK2 at the input of your amplifier. This will save you hours of troubleshooting especially in systems where source, speakers and amplifiers are located far-off each other.

Noise free signal transfer is an essential part of every Broadcasting and Recording studio. Achieving the most accurate can be done with the ALI20MK2 by eliminating ground loops and minimizing RF noise without distorting or phase shifting the signal.



# Technical specifications

Turn ratio		1 : 1
Bandwith		0.8 Hz – 100 kHz
Typical distortion (@ 1 kHz)		0.001%
THD+N (@ 1 kHz)		0.035% (@ 20 Hz and –20dBu (typical)) < 0.001% (@ 1 kHz and –20dBu (typical))
Inputs	Impedance	600 $\Omega$
	Connector	2 x XLR female
Outputs	Impedance	600 $\Omega$
	Connector	2 x XLR male
Frequency	High	–3 dB Cutoff 105 kHz
	Low	–3 dB Cutoff 0.8 Hz
Response	20 Hz	–0.09 dB (reference 1 kHz)
	20 kHz	–0.10 dB (reference 1 kHz)
Max. Inputs Level (@ 1% THD+N)	20 Hz	+2 dBu (0.975V)
	50 Hz	+10 dBu (2.449V)
Dimensions (W x H x D)		108 x 44 x 165 mm
Weight		0.45 Kg
Packaging		Carton box
Shipping weight & Volume		0.77 Kg – 0.0078 Cbm
Optional accessories		MBS1xx Mounting brackets

