

LIM012

User Manual



www.audac.eu

Index

Introduction	5
Environment	7
Chapter 1: Safety requirements	9
Caution servicing	9
Chapter 2: Pin connections and connectors	10
Chapter 3: Overview LIM012	11
Front panel	11
Rear panel	12
Chapter 4: LIM012 Quick start guide	13
Chapter 5: Additional information	15
Technical specifications	15

Introduction

Balanced Stereo Limiter

The LIM012 balanced stereo limiter is a small size, easy to use, device that can be used for limiting the signal coming from an input device such as a mix-table, microphone, etc. . . that is then send to a (power)amplifier. Limiting this input signal will not only protect your PA system, but also enables you to comply to restrictions by law.

When the input signal of this input device exceeds the desired level, the LIM012 will attenuate the output signal sent to the output device in such a way that it will again reach the desired level. This level can be set by turning the Limit switch and can be limited at 6 different levels: 0 dBV, -6 dBV, -12 dBV, -18 dBV, -24 dBV and -30 dBV. At the bottom the green LED's indicate the limit level. When the output signal is exceeding the desired Level, attenuation will take place and the red LED will indicate the location of the Limitation (Left or Right).

The LIM012 balanced Stereo Limiter has 2 channels that work separately whereby it can be used as a stereo, or 2 x mono limiter. The LIM012 needs to be connected to a 24 DC power source. The PSD242 Power supply is included.

Environment

Do not place the unit in environments which contain high levels of dust, heat, moisture or vibration.

Do not use the unit near water or other liquids. Make sure no water or other liquids can be spilled, dripped or splashed on the unit.

The unit is developed for indoor use only. Do not use it outdoors.

Do not place objects (books, vases, ...) on top of the unit.

Place the unit on a stable base or mount it in a stable rack.

Chapter 1

Safety requirements

Always handle the unit with care.

Only use a grounded socket outlet and a power cord with grounding plug to plug in the unit.

This unit is not a toy. It should not be operated by children.

Do not open the unit. (risk for electrical shock)



CAUTION – SERVICING

This unit contains no user serviceable parts. Refer all servicing to qualified service personnel. Do not perform any servicing unless you are qualified to do so.

NOTE

This product conforms to the following European Standards:
EN 50081–1: 1992, EN 50082–1: 1992, EN 60065: 1994

Chapter 2

Pin connections and connectors

Connection standards:

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

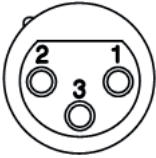
XLR:

1 = Ground / Shield

2 = Signal +

3 = Signal -

XLR Female:



XLR Male:



Chapter 3

Overview LIM012

Front panel



The front panel of the LIM012 contains all the controls and indicators.

1) Power switch:

By toggling this switch, the power for the LIM012 can be switched ON and OFF. The power LED will illuminate when the power is switched ON.

2) Limiting level adjustment switch:

By changing the position of this rotatable selection switch, the limiting level can be adjusted. The switch has 6 different positions whereby the limiting level can be set between -30 dBV and 0 dBV. A screwdriver should be used to change the position.

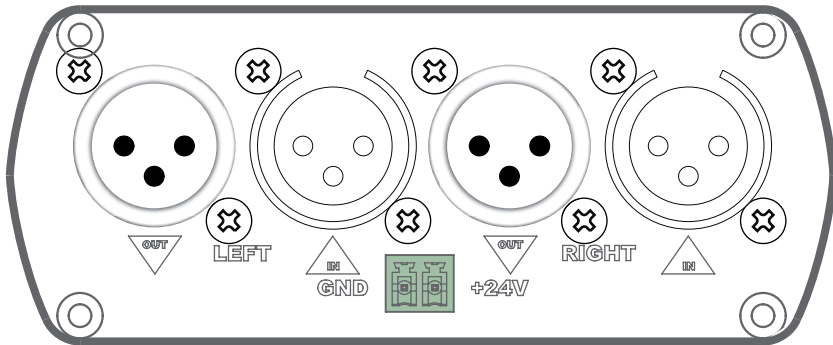
3) Limiting level indication LED's:

By means of these green LED's the selected limiting level will be indicated. The LED located next to the selected limiting level will illuminate when device is operating.

4) Limiting indication LED's:

These red LED's will illuminate when the signal of the corresponding channel is being overdriven compared to the selected limit level. The limit circuit will intervene bringing the output signal to the selected level.

Rear panel



At the rear panel of the LIM012 are all the connections provided.

1) 24 Volts power connector:

The included 24 volts power supply (PSD242) should be connected to this connector. Pay attention to the polarity when connecting the power supply.

2) XLR Input connectors:

The signal coming from the input device such as an audio source, mixing table, pre-amplifier should be connected to the 3-pin Female XLR inputs.

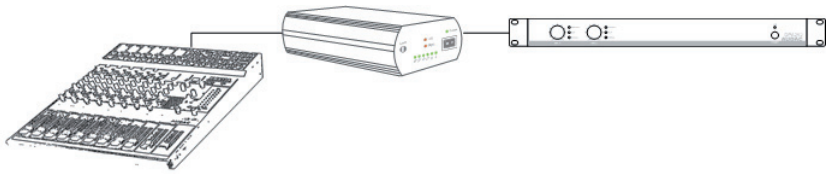
3) XLR Output connectors:

The output signal is available at these 3-pin Male XLR connectors. The output signal is the audio signal which is driven through the limiting circuit. The level of the output signal will always be lower or equal to the selected limiting level.

Chapter 4

LIM012 Quick start guide

This chapter guides you through the setup process of a basic project with one LIM012 Balanced Stereo Limiter, an audio source device (mixing table) and a power amplifier.



Overview of the LIM012 setup

1) Connecting the LIM012

Connect your audio source device to the Female XLR input connectors and connect your power amplifiers to the Male XLR output connectors on the rear side of the LIM012. Connect the included power supply (PSD242) to the Euro-Terminal Block connector. Watch the polarity when connecting the power supply.

2) Turn the device ON

Turn the device on by toggling the power switch to the “I” position.

3) Selecting the desired limiting level

Select the desired limiting level through rotating the “limiting level adjustment switch” by means of a screwdriver. The corresponding LED for the selected limiting level will illuminate.

4) Ready

Your system is now working properly and ready for use.

Chapter 5

Additional information

Technical specifications

Peripheral

Inputs	2 x Balanced Line audio input
Outputs	2 x Balanced Line audio output

Connectors

Audio input	3–Pin Female XLR
Audio output	3–Pin Male XLR
Power	2–pin Euro Terminal Block

Specifications

Level range	–30 dBV to 0 dBV
THD+N	< 0.15%
Signal / Noise	> 90 dB
Frequency response	20 Hz – 20 kHz

Other

Power supply	24V DC PSD242 switching power supply included 100 ~ 240V AC / 47~63 Hz
Weight	0.415 Kg
Dimensions	110 x 44 x 160 mm
Shipping weight & volume	1.20 Kg – 0.0078 Cbm