

# **SA-1073 EQ - USER MANUAL**

## IMPORTANT SAFETY INSTRUCTIONS



The lightning flash with the arrowhead symbol, within an equilateral triangle, is to alert the user to the presence of non insulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.

The exclamation point within an equilateral triangle is intended to alert the users to the presence of important operating and maintenance.

All the following safety and operating instructions should be read before operating the unit.

#### Caution to reduce the risk of electric shock

• Do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.

#### Caution to reduce the risk of fire or electric shock

- Do not expose the equipment to rain and moisture.
- The equipment shall not be exposed to dripping or splashing liquids and no objects filled with liquids shall be placed on the equipment.
- To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions.
- Repairs have to be performed by qualified service personnel.
- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this equipment near water.
- Clean only with dry cloth.
- Do not block any ventilation openings.
- Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources

#### STAM AUDIO ENGINEERING

- 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.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment.
- Use only attachments/accessories specified by the manufacturer.
- Unplug this equipment during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the
  equipment 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 equipment, the
  equipment has been exposed to rain or moisture, does not operate normally, or
  has been dropped.
- The equipment shall be connected to a MAINS socket outlet with a protective earthing connection.
- Correct disposal of this product: This product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.
- Do not install in a confined space.
- Do not place naked flame sources, such as lighted candles, on the equipment.
   20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposed-of at a battery collection point.
   21. Use this equipment in tropical and/or moderate climates.
- Stam Audio accepts no liability for any loss which may be suffered by any person
  who relies either wholly or in part upon any description, photograph, or statement
  contained herein. Technical specifications, appearances and other information
  are subject to change without notice.

## 1.0 INTRODUCTION

The Stam Audio 1073EQ is the finest replica of the legendary british channel strip available on the market today.

With several other brands attempting to clone this vintage design, we decided to go the extra mile. We pride ourselves in delivering the most authentic replica and numerous endeavours have been made to achieve the original character making us confident in saying that you will not find this level of component quality and craftsmanship in any other offering at this price range. When it comes to components, almost correct or similar will not do. We use the right components, and the result is the right sound.

The first step was to obtain a replica of the original Marinair LO1166 output transformer found on the original units. In a joint effort with Brian Sowter from Sowter transformers in the UK, the Sowter B1540 was born, an exact replica respecting the original laminations, ratio and frequency response of the Marinair, exclusive to Stam Audio.

Secondly, we decided to add what others were missing: the Carnhill line input transformer to connect your line level signals directly into the unit. Bypassing this transformer or using a padded mic input will not yield the same result and tone.

Feature-wise The Stam Audio 1073 EQ features a high pass filter, a switchable low shelf, a switchable mid band, a fixed high frequency band, DI, POL, 48V and impedance switch.

Due to the unique coloration of this unit, your recordings will benefit from the recognisable warmth of the original, which is described by many as deep and incredibly detailed. There is a reason these units have been the most popular choice in studios for the past 50 years. They create the sonic footprint we associate with professional recordings.

#### 1.1 COMPONENTS OVERVIEW

- Carnhill VTB9045 Mic input transformer
- Carnhill VTB9046 line input transformer.
- A proper Marinair LO1166 output transformer replica custom made for us by Sowter transformers in the UK (Carnhill output transformer option available)
- 2N3055 output transistor
- IC film capacitors
- Carnhill inductors

The Stam Audio 1073 EQ is completely hand made in Chile. This is the only way we can manufacture it with these type of essential components.

#### 1.2 FEATURES

- High Frequency: +/-16dB fixed frequency shelving at 12kHz
- Low Frequency: +/-16dB shelving with selectable frequencies of 35Hz, 60Hz, 110Hz &
   220Hz
- Mid Range: +/-18dB peaking, fixed 'Q' with, selectable frequencies of 360Hz, 700Hz,
   1.6kHz, 3.2kHz, 4.8kHz, 7.2kHz
- High Pass Filter: 18dB/oct, selectable frequencies of 50Hz, 80Hz, 160Hz, 300Hz

## 2.0 CONTROLS



#### 2.1 48V

Applies 48V phantom power to the XLR microphone input. The adjacent LED lights when phantom power is active

#### 2.2 EQ

Activates EQ circuit in between Preamp section (GAIN KNOB) and output amplifier (TRIM).

### 2.3 HI-Z

The default input impedance on the microphone input is  $300\Omega$ . Pressing the HI-Z button switches the input for  $1200\Omega$  input impedance.

#### 2.4 POL

Pushing this button will reverse the polarity of your XLR Microphone Input.

#### 2.5 GAIN SWITCH

Adjust the preamplifier gain in 5 db increments. The right side is for line and the left side is for mic. There are 2 OFF steps, between Line and Mic and between the 2 gain stages of Mic operation.

#### 2.6 EQUALISER

High Frequency +/-16dB fixed frequency shelving at 12kHz.

Mid Frequency +/-18dB peaking, fixed 'Q' with 6 selectable centre frequencies

Low Frequency +/-16dB shelving with 4 selectable frequencies

High Pass Filter: 18dB/oct with 4 selectable frequencies

## 3.0 CONNECTIONS

#### 3.1 MIC IN

Standard Microphone input connection. Input signal enters towards the Mic Input transformer (Carnhill VTB 9045)

#### 2.2 LINE IN

Standard Line Level input connection. Input signal enters towards the Line Input transformer (Carnhill VTB 9046)

#### 2.3 D.I.

Standard Instrument Level input connection. Input signal bypasses the input transformers

#### 2.4 LINE OUT

Standard Line Level output connection. Signal flows towards output transformer

#### 2.5 INSERT

TRS insert point (Tip = Send , Ring = Return)

# 4.0 SPECIFICATIONS

Power Requirements 115/230 VAC, 30W

Frequency Response 10Hz to -3dB at 40kHz

Mic Input Impedance ≈1200/300 Ω

Line Input Impedance 10k  $\Omega$ 

DI Input Impedance ≈150k Ω

Output Impedance 65  $\Omega$ 

Maximum Output Level +27.4 dBu @  $600\Omega$ 

Preamp Gain 0-80 dB