



PASSIVE MONITOR CONTROLLER

Operating Manual V1.1



## CONTENTS

1	SA	SAFETY INSTRUCTIONS		
2	FO	REWARD		
	2.1	Important Notes: 4		
3	ΙΝΤ	RODUCTION		
	3.1	Unboxing		
4	со	NNECTIONS (rear panel) 6		
	4.1	Mains Power		
	4.2	Sources (Inputs)		
	4.3	Outputs7		
	4.4	Footswitch (Talkback Control)7		
5 FRONT PANEL				
	5.1	Input Selector		
	5.2	Headphone Amplifiers8		
	5.3	Dim9		
	5.4	Mute9		
	5.5	Mono9		
	5.6	Volume9		
	5.7	Talkback		
	5.8	Monitor Select 10		
6	ΑΡ	PLICATION11		
7	SP	SPECIFICATIONS		
8	8 WARRANTY			
	8.1	Warranty Registration		
	8.2	Warranty13		
	8.3	Return Authorization Number13		
	8.4	Warranty Regulations13		
	8.5	Claim for Damages		
	8.6	Other Warranty Rights 14		
9 FCC and CE Regulation 15				
1(	10 CORRESPONDENCE			

# 1 SAFETY INSTRUCTIONS

**CAUTION:** To reduce the risk of electrical shock, do not remove the cover or rear panel of this unit. No user serviceable parts inside. Please refer servicing to qualified personnel only.

**WARNING:** To reduce the risk of fire or electrical shock, do not expose this appliance to rain or moisture.

### DETAILED SAFETY INSTRUCTIONS:

All safety and operation instructions of this manual should be read and adhered to before operation.

### **Retain Instructions:**

Please retain all safety and operating instructions for future reference.

#### Follow instructions:

All operation and user instructions should be followed.

### Water, liquid and Moisture:

The appliance should not be used near water, rain or other liquids. Make sure that no liquid can leak, spill or otherwise seep into the appliance.

### Ventilation:

Please place the appliance so no obstacles interfere or impede the flow of air through the ventilation openings.

#### Heat:

The appliance should be situated away from other heat sources such as heaters, radiators, ovens, or other appliances that produce heat.

#### **Power Source:**

Make sure your appliance is set to the correct voltage for the country in which it will be use before switching the device ON.

#### Grounding and Polarization:

Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

### **Power-Cord Protection:**

Power supply cords should be routed so that they are not likely to be walked on, pinched, damaged, worn, or rubbed by any other device or obstacle.

### **Cleaning:**

The appliance should be cleaned only with a light soft cloth. Do not use any damaging or corrosive products on the unit.

### Periods of inactivity:

The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time or in case a lightning storm occurs.

### Damage Requiring Service:

The appliance should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped, or the enclosure damaged.

#### Servicing:

The user should not attempt to service the appliance beyond that is described in the Operating Instructions.

### All other servicing should be referred to qualified service personnel.

## 2 FOREWARD

Dear Customer,

Thank you for purchasing this SM Pro Audio product. The PASSIVE-1 is designed to be a comprehensive studio monitor controller for home, project and professional studios, sound equipment rental companies, repair centers, schools and fixed installations — in short, virtually any and all venues where audio products are used.

Drawing on years of hands-on experience in the audio industry and valuable suggestions from our customers, our engineers have developed a product that we are certain will more than meet your expectations. As with all SM Pro Audio equipment, the PASSIVE-1 was designed to provide you with superb performance, excellent technical specifications, and uncompromising audio quality at an extremely affordable price.

We hope you enjoy making music with SM Pro Audio!

## 2.1 IMPORTANT NOTES:

Every effort has been made to ensure all information provided in this manual is accurate at the time of writing.

SM Pro Audio is not liable for any incorrect information contained in this manual and extends no liabilities in regard to this manual other than those required by local law.

SM Pro Audio may update the contents of this manual at any time without prior notice. The latest version of this manual is available from the SM Pro Audio website at all times.

http://www.smproaudio.com

## **3** INTRODUCTION

The PASSIVE-1 expands on the core audio control capabilities of the venerable M-Patch 2, with four selectable signal sources, USB I/O, talkback with built-in condenser microphone, ducking, mute, mono summing and dual independent headphone amplifiers. Featuring entirely passive operation from signal input to output, the PASSIVE-1 delivers the purest signal path possible, giving you clean, transparent sound with no added audio artifacts or coloration.

PASSIVE-1 allows you to connect multiple input signals, route them to various destinations, and control their levels via rotary volume attenuators. The PASSIVE-1 an ideal centerpiece for monitor control in home, professional, and project studio applications. As it is a passive attenuator, we recommend you set the volume knob in the maximum position, and attenuate the volume down to the desired listening level.

### 3.1 UNBOXING

Your SM Pro Audio PASSIVE-1 was carefully packed in the factory and the packaging was designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage, which may have occurred in transit.

If the unit is damaged, please do not return it to us, but notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be granted. Shipping claims must be made by the consignee.

## 4 CONNECTIONS (REAR PANEL)

### 4.1 MAINS POWER

The PASSIVE-1 includes a 9V mains power supply. Power to the PASSIVE-1 is only required if you wish to use the headphone amplifiers or talkback features. The power LED on the front panel (to the left of the volume knob) will illuminate when the external power supply is connected and mains power is present.

Note: Mains power is not required for the audio signal path. All passive attenuation functions operate fully without the connection of the power supply. This enables full portable use of the PASSIVE-1 without restriction.



Please make sure your mains voltage is compatible with the provided adaptor.

## 4.2 SOURCES (INPUTS)

Sources is the description of the 4 input connectors.

- Source A is the stereo RCA inputs
- Sources B and C are the 6.5mm or 1/4 inch stereo input jacks
- Source D is the USB input. The USB input has a built in Legacy compatible driver for simple plug & play operation. The USB input does not need mains power to operate. An ASIO driver is also available for download from our website.



### 4.3 OUTPUTS

**Outputs** is the description of the 4 output connectors. They are line level signal for plugging in your active studio monitors or to the inputs of a power amplifier that is driving your passive monitors.

- Outputs A and B are the stereo 6.5mm or 1/4 inch jacks
- Output 2T (2 Track) is the 6.5mm stereo output that includes the talkback signal
- Source D is the USB output with Legacy driver built in. USB does not need mains power to operate. USB output always records what is selected on the MAIN SOURCE input.



## 4.4 FOOTSWITCH (TALKBACK CONTROL)

Plug a 6.5mm or <sup>1</sup>/<sub>4</sub> inch jack footswitch into this socket. Pressing the footswitch initiates handsfree activation of the **talkback** feature.



## **5 FRONT PANEL**

## 5.1 INPUT SELECTOR

The PASSIVE1's input selector chooses the input signal you wish to monitor.



## 5.2 HEADPHONE AMPLIFIERS

There are two independent headphone amplifiers provided on the PASSIVE-1. Each with their own volume control. Note that mains power must be connected for the headphone amp to operate.



## 5.3 DIM

Activate this switch to decrease the listening level of the outputs by 20db. This is helpful to allow discussion without having to change the position of the volume knob.

### 5.4 MUTE

Activate this switch to mute the signal from the outputs.

### 5.5 MONO

Activate this switch to listen to the audio outputs in monophonic mode. This combines the stereo audio signal into a monophonic signal, which helps to check for any phase cancellation issues in the stereo signal.

### 5.6 VOLUME

As it is a passive attenuator, start with the volume knob in the MAX position, and attenuate the volume down to the desired listening level.



## 5.7 TALKBACK

A built-in talkback microphone, automatically ducks the Control Room outputs by -20dB when engaged. The talkback mic can be sent to the headphones or to the 2TRACK output. Note that power must be connected for the TALKBACK microphone to operate.



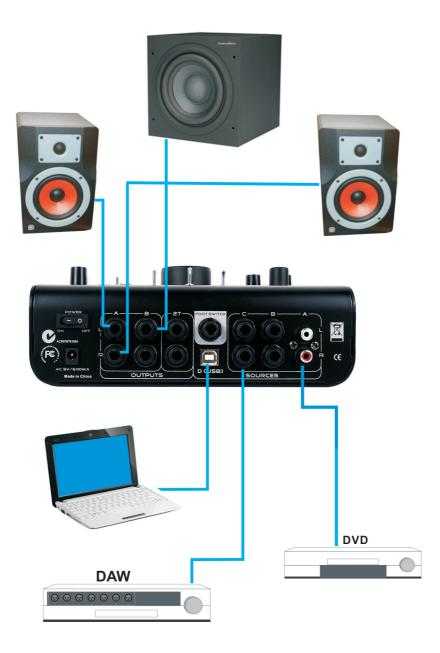
### 5.8 MONITOR SELECT

The monitor select switches activate the audio to the A & B outputs respectively. Both can be selected simultaneously.



## 6 APPLICATION

Connecting Active speakers directly to the output of the PASSIVE-1 Monitor Controller.



When connecting PASSIVE speakers, you must first connect the output of the PASSIVE-1 to your amplifier and then connect the amplifier to the speakers.

### Do not connect the OUTPUT of an amplifier to the PASSIVE-1 controllers INPUT!

# 7 SPECIFICATIONS

Frequency Response: Line Level Inputs and Outputs	+0.20.2dB 10hz to 30kHz
<b>Noise:</b> Monitor A B, Studio Outputs 2-Track	-120dBu Typical (passive signal) -92dBu Typical
Outputs: Line Level outputs	-10dBu/+30dBu (NOM/MAX)
<b>Dynamic Range:</b> Line Inputs to outputs (monitor A B)	120dB minimum (passive signal)
Crosstalk: Mute/Level OFF	120dB @1kHz (passive signal)
Volume Control range: Dim Switch	-20dB
Master Volume studio attenuation	65dB max
<b>USB:</b> Channels Drivers Compatibility	2 Legacy type and ASIO All current USB Audio systems

## 8 WARRANTY

## 8.1 WARRANTY REGISTRATION

To be protected by this warranty, please register your purchase using our online registration form at <a href="http://www.smproaudio.com/index.php/en/service/register">http://www.smproaudio.com/index.php/en/service/register</a>

### 8.2 WARRANTY

SM ProAudio warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of **three (3) years** from the original date of purchase, in accordance with the warranty regulations described below. If any defects occur within the specified warranty period that are not caused by normal wear or inappropriate use, SM Pro Audio shall, at its sole discretion, either repair or replace the product through its local distributor.

Warranty claims other than those indicated above are expressly excluded.

### 8.3 RETURN AUTHORIZATION NUMBER

To obtain warranty service, the buyer must: a. return the product to its place of purchase, or b. contact your local distributor, or c. email <u>service@smproaudio.com</u> BEFORE returning the product. All warranty requests must be accompanied by a description of the problem and an original purchase receipt. If you have previously registered your purchase (via the SM Pro Audio web site), you will then be issued with a return authorization number. If you have not previously registered your purchase, then you must forward a proof of purchase document (retail dealers invoice) before a return authorisation can be provided.

The product must then be returned in its original shipping carton, together with the return authorization number.

### 8.4 WARRANTY REGULATIONS

Any product deemed eligible for repair or replacement by SM Pro Audio under the terms of this warranty will be repaired or replaced in the best possible manner.

If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship.

The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, SM Pro Audio shall not be held responsible for any cost resulting from such a modification/adaptation.

Free inspections, maintenance/repair work and replacement of parts are expressly excluded from this warranty, in particular if caused by inappropriate use. Likewise, the warranty does not cover defects of expendable parts caused by normal wear of the product. Expendable parts are typically pots, potentiometers, switches and similar components.

Damages/defects caused by the following conditions are not covered by this warranty:

Misuse, neglect or failure to operate the unit in compliance with the instructions given in the user or service manuals.

Connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.

Damages/defects that are caused by any other condition beyond the control of SM Pro Audio.

Any repair carried out by unauthorized personnel will void the warranty.

Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. SM Pro Audio will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 4 weeks after notification, SM Pro Audio will return the unit C.O.D. with a separate invoice for freight and packing. Such cost will also be invoiced separately when the buyer has sent in a written repair order.

### 8.5 CLAIM FOR DAMAGES

Failure of SM Pro Audio to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of SM Pro Audio exceed the invoiced value of the product.

### 8.6 OTHER WARRANTY RIGHTS

This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

## 9 FCC AND CE REGULATION

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.

Caution: Any changes or modifications in construction of this device with are not expressly approved by the party responsible for compliance, could void the user's authority to operate equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense. If necessary, consult an experienced radio/television technician for additional suggestions.

## 10 CORRESPONDENCE

For technical support, warranty claims, and all other enquiries, please contact your local SM Pro Audio distributor.

Contact details of all SM Pro Audio distributors can be found online at <u>http://www.smproaudio.com</u>

The information contained in this manual is subject to change without notice. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of SM Pro Audio.

ALL RIGHTS RESERVED © 2014 SM Pro Audio