

SM PRO AUDIO MPATCH 5.1

MPATCH 5.1

SURROUND-SOUND MONITOR CONTROLLER



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. Refer servicing to qualified personnel only.

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

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

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

Ventilation: Please place the equipment so that no obstacles interfere with or impede the flow of air through the ventilation openings.

Heat: The equipment should be situated away from heat sources such as heaters, radiators, ovens, and other appliances that produce heat.

Power Source: Make sure your equipment is set to the correct voltage for the country in which it will be used.

Grounding and Polarization: Precautions should be taken so that the equipment's electrical grounding or polarization 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 equipment should be cleaned only with a light soft cloth. Do not use harsh 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.

Damage Requiring Service: The equipment should be serviced by qualified service personnel when:

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

Servicing:

The user should not attempt to service the equipment beyond what is described in the Operating Instructions.

All other servicing should be referred to qualified service personnel.

FOREWORD

Dear Customer,

Thank you very much for expressing your confidence in SM Pro Audio products by purchasing this unit. The MPatch 5.1 was designed to be a comprehensive surround-sound monitor controller for home, project and professional studios, live sound 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 MPatch 5.1 was designed to provide you with superb performance, excellent technical specifications, and uncompromising audio quality at an extremely affordable price.

Regards,
SM Pro Audio

IMPORTANT: High output volumes may damage your ears, your monitors, and/or your headphones. Turn down the LEVEL controls before you switch on the MPatch 5.1.

INSTALLATION

Your SM Pro Audio MPatch 5.1 was carefully packed at 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 that 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.

PLACEMENT

The SM Pro Audio MPatch 5.1 utilizes an electronic circuit. Be sure that there is enough air space around the unit for cooling. To avoid overheating, please do not place the unit on high temperature devices, such as power amplifiers, or near other units, such as wireless devices, that may transmit high frequencies.

MAINS VOLTAGE

The MPatch 5.1 can be used with voltages ranging from 100V AC to 240V AC. Please make sure that you have selected the correct voltage range on the back of the unit, and that the required fuse setting is correct, before switching the unit ON. Any damage occurring as a result of incorrect voltage selection may not be covered under warranty.

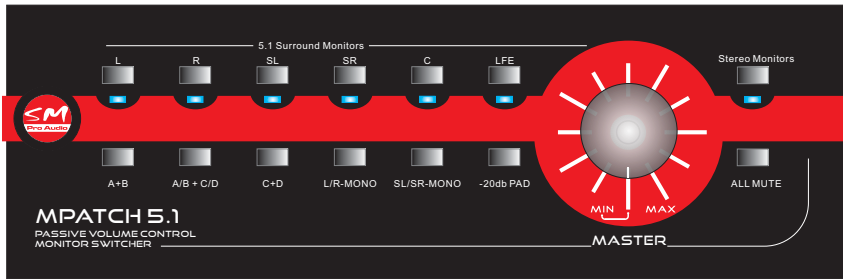
MPATCH 5.1 OVERVIEW

The MPatch 5.1 is a multi-channel passive analog attenuator designed to provide sonically transparent level control over surround-sound signals.

Housed in a desktop/rack-mountable chassis, the unit features a main rotary volume controller utilizing discrete 0.5% resistors with a switched mechanism—a design that offers superior accuracy over standard variable resistor designs, especially at critical low levels.

An assortment of dedicated front-panel switches provide control over audio sources and destinations as well as -20dB Pad and Mute, while the rear panel sports a variety of I/O including 1/4", XLR, RCA, and D-Sub.

The MPatch 5.1 supports control over both stereo and 5.1 multi-channel surround-sound audio signals.



INSTALLATION

The MPatch 5.1 can sit comfortably on your desktop. Two metal ears are included for adapting the unit for rackmount use.

Power for the LEDs is supplied via the AC cable. All circuitry in the MPatch 5.1 is passive; AC is not required for audio operation.



MPATCH 5.1 REAR PANEL

Inputs

A: Balanced 5.1 input via 25-pin D-Sub connector

B: Unbalanced 5.1 input via RCA connectors

C: Balanced L/R input via 25-pin D-Sub connector

D: Balanced and unbalanced L/R input via RCA and 1/4" TRS

Outputs

L/R balanced XLR stereo outputs

6 x 1/4" TRS for surround 5.1 output

Switches

Individual MUTE switches for each stream of the 5.1 signal

Stereo output MUTE

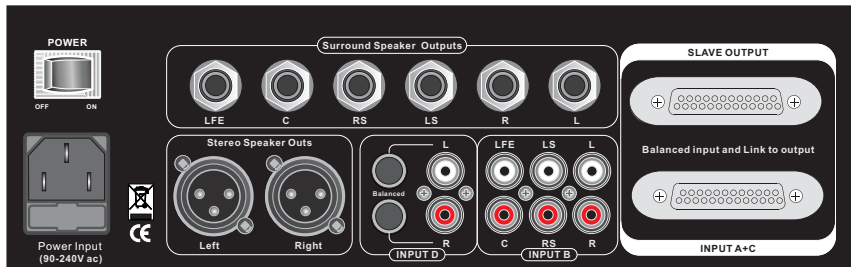
All Mute

-20dB Pad

Simultaneous selection of multiple audio streams

Rotary Control

Custom-designed passive 5.1 volume controller with stepped 0.5% operation



MPATCH 5.1 AUDIO INPUT CONNECTIONS

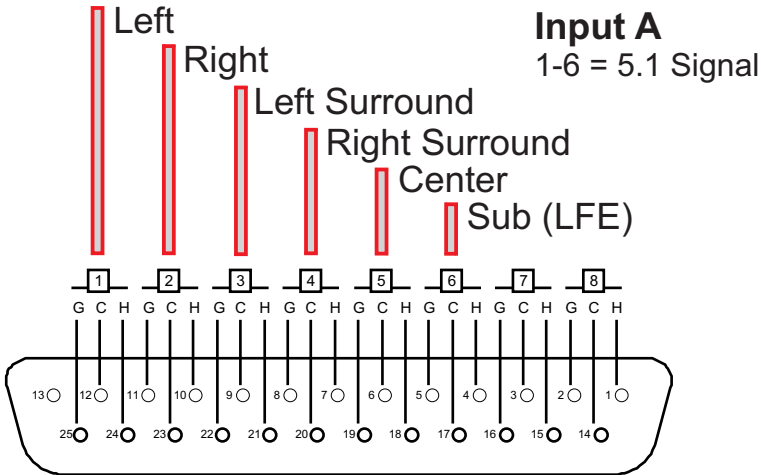
The MPatch 5.1 features four (4) separate inputs labeled A, B, C, and D (Input section on rear panel of MPatch 5.1).

IMPORTANT

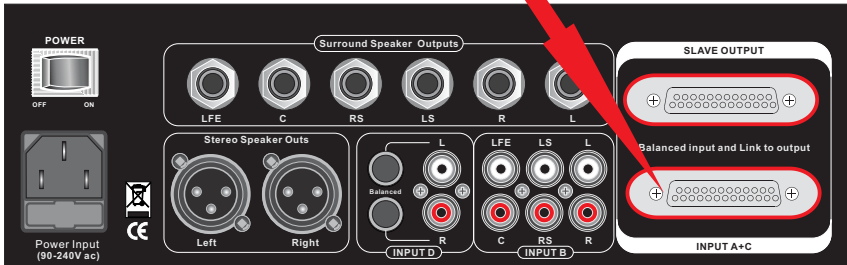
The MPatch 5.1 accepts mic or line level input signals *only*. Do not connect your power amplifier outputs to the MPatch 5.1 inputs!

Balanced Inputs A and C

Balanced main 5.1 input A and balanced stereo input C are routed to the MPatch 5.1 via the 25-pin DSub connector. The wiring scheme follows the TASCAM format, a widely-used protocol for connecting assorted audio equipment via 25-pin D-Sub connectors.



H = HOT
C = COLD
G = GROUND



MPATCH 5.1 AUDIO INPUT CONNECTIONS

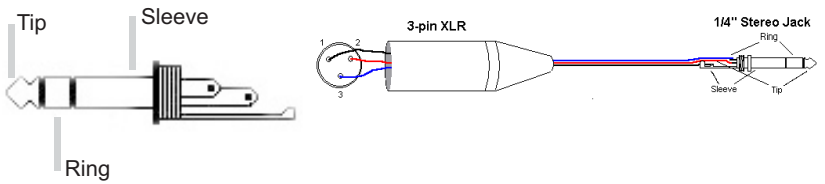
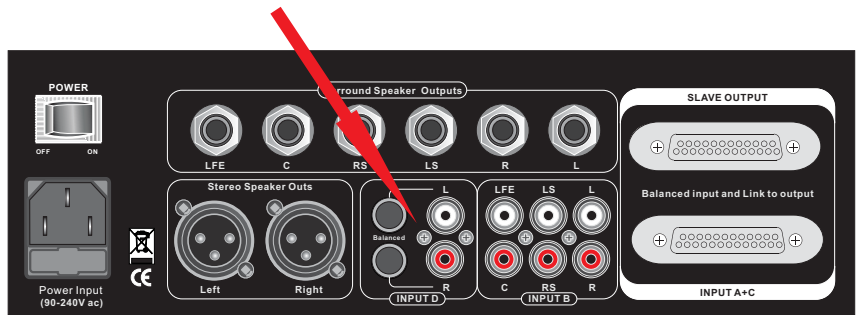
Unbalanced Input B

Unbalanced 5.1 RCA inputs, ideal for direct output from unbalanced sources such as DVD players, Blue Ray players, and media servers.



Balanced/Unbalanced Input D

L/R balanced 1/4" TRS and unbalanced RCA inputs



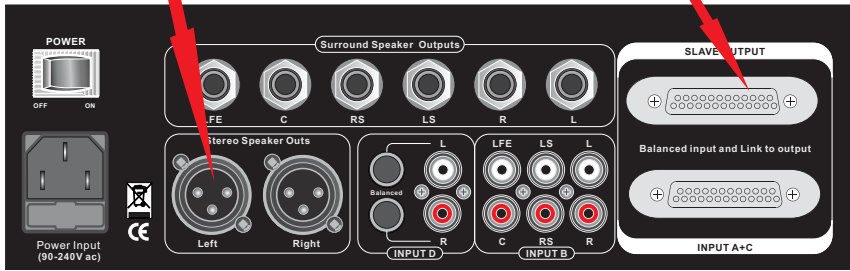
MPATCH 5.1 AUDIO OUTPUT CONNECTIONS

STEREO OPERATION

The MPatch 5.1 features three sets of outputs.

For monitoring the L/R stereo signal, you would normally use the Stereo Balanced XLR outputs. If your speakers are unbalanced, you can use this output with an adaptor that connects to Pin 1 (hot) and Pin 3 of the XLR connector.

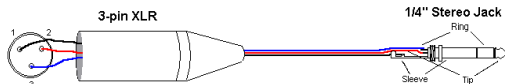
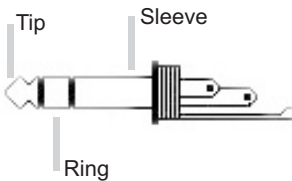
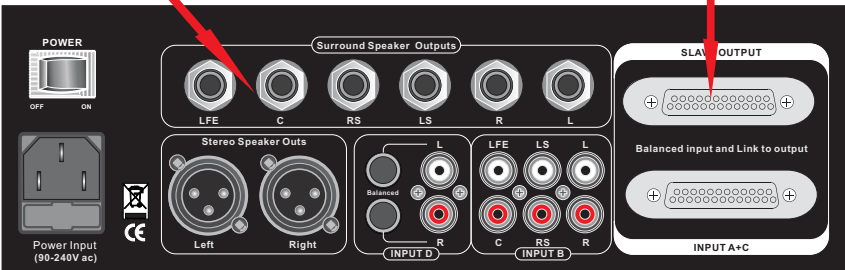
The L/R stereo signal also appears at outputs 7 and 8, respectively, of the D-Sub Slave Output.



5.1 SURROUND OUTPUT

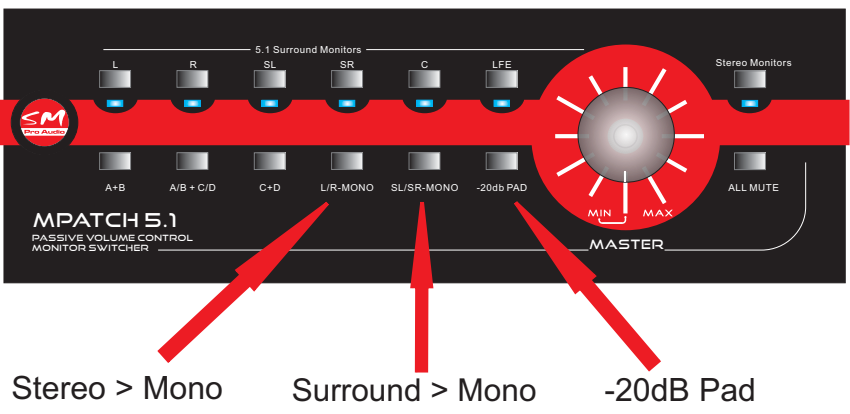
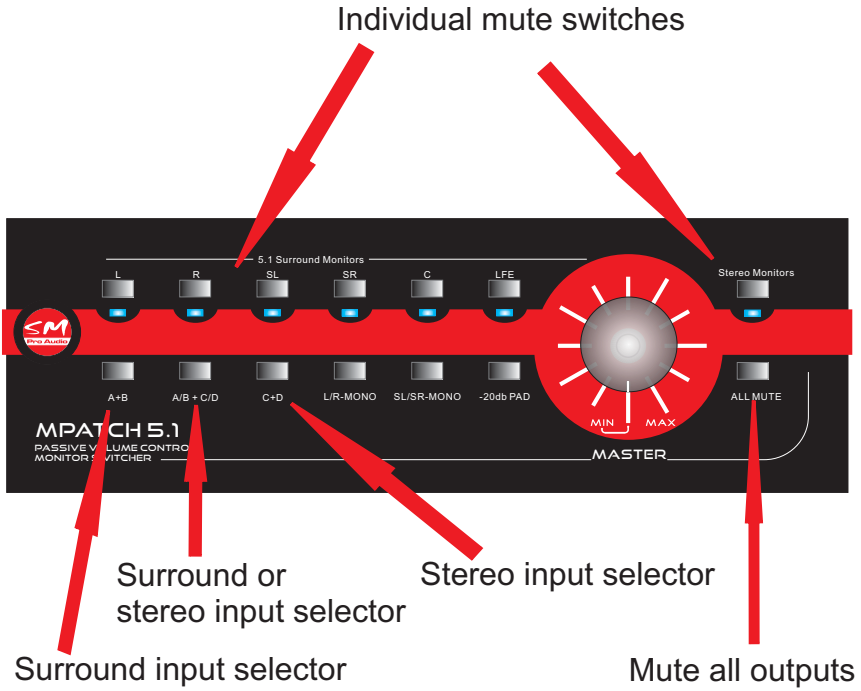
These balanced 1/4" TRS outputs carry the individual 5.1 audio streams.

D-Sub surround outputs 1-6 mirror D-Sub inputs 1-6 (pg. 6).



SMP PRO AUDIO MPATCH 5.1

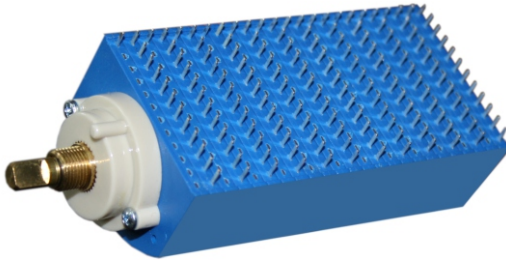
OUTPUT SELECTOR SWITCHES



USING THE M-PATCH 5.1

VOLUME CONTROL

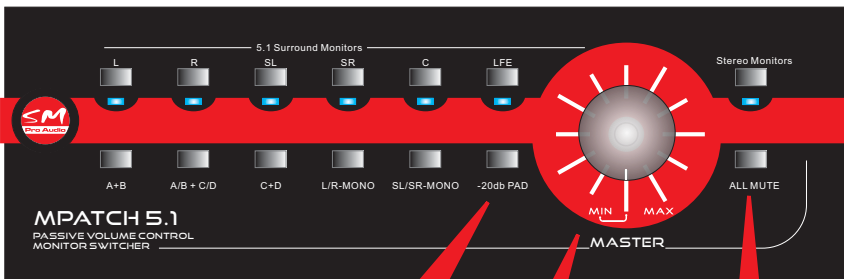
The MPatch 5.1 main volume control features a specially designed attenuator that provides exceptional accuracy in 12 steps.



When used in conjunction with the -20dB Pad, the attenuator offers 24 different volume levels that can be instantly and accurately recalled.

MUTE

The MPatch 5.1 outputs are muted when the ALL MUTE button is pressed.



-20dB Pad

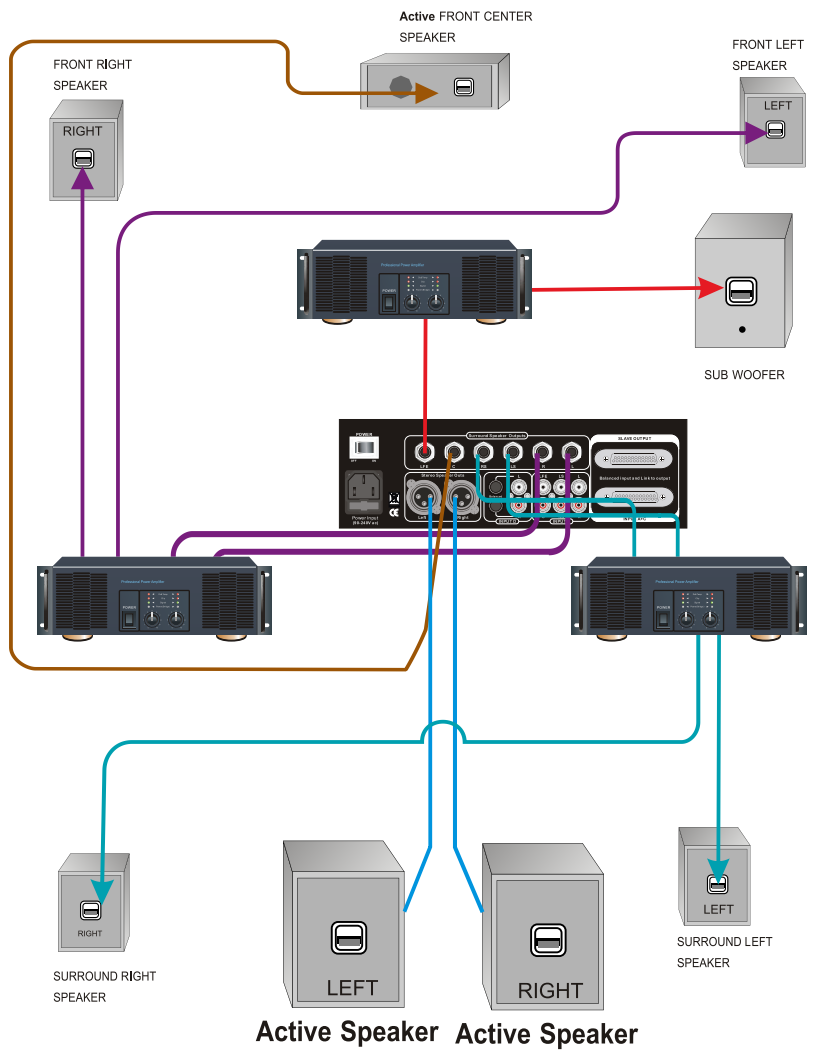
12-position stepped attenuator

All Mute switch

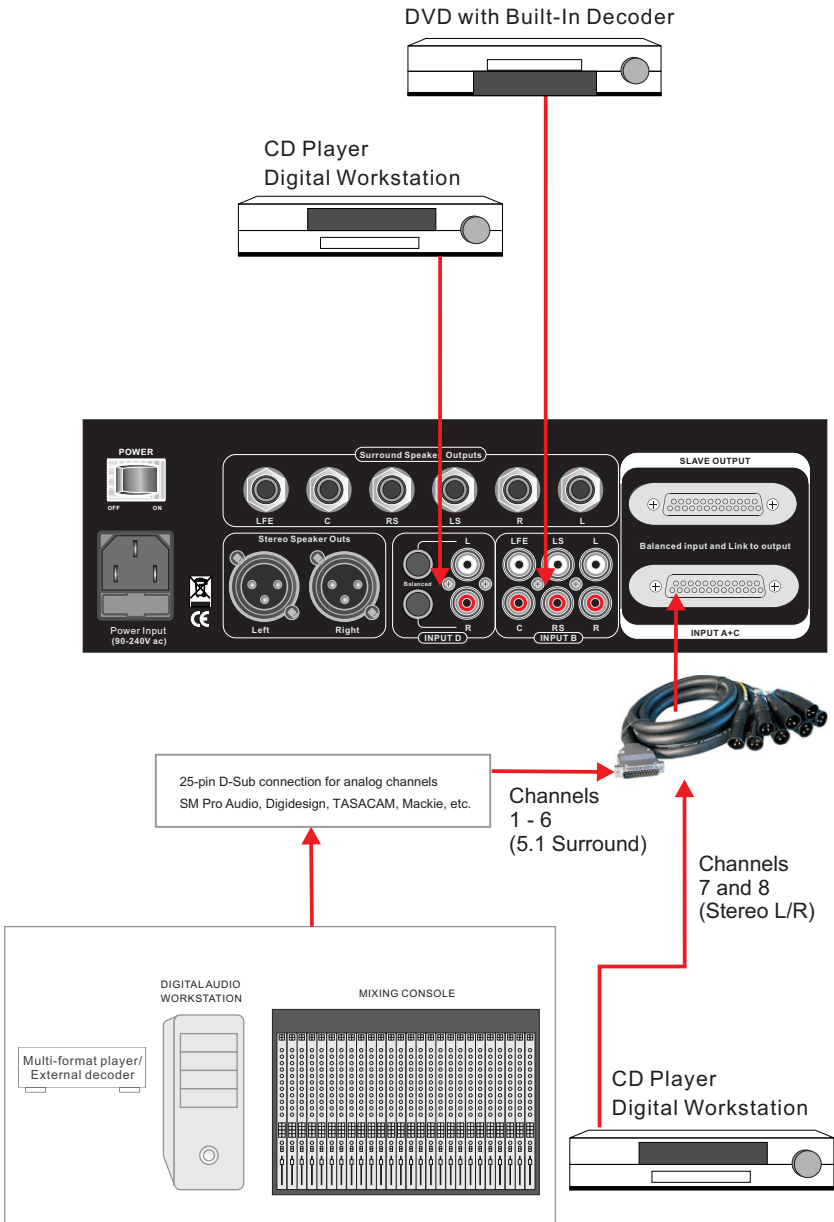
SPEAKER CONNECTIONS

You can use both active and passive speakers with the MPatch 5.1, connecting the MPatch 5.1's outputs directly to active speakers or to power amplifiers driving passive speakers. Passive and active speakers may be freely mixed.

WARNING: Never connect the output of a power amp to an MPatch 5.1 input. This will damage the unit and void your warranty.



AUDIO INPUT CONNECTIONS



WARRANTY

SM Pro Audio warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year from the original date of retail purchase, in accordance with the warranty regulations. 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.

WARRANTY REGULATIONS

- Warranty is enforceable only by the original retail purchaser.
- Warranty services will be furnished only if the product is accompanied by an original retail dealer's invoice. Any product deemed eligible for repair or replacement by SM Pro Audio under the terms of this warranty will be repaired or replaced at SM Pro Audio's sole discretion.
- 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 that 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 and/or abuse; 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.
- Repairs and modifications performed by unauthorized personnel will void the warranty.
- Products that do not meet the terms of this warranty will be repaired solely 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.

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.

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.

RETURN AUTHORIZATION NUMBER

To obtain warranty service, you must contact SM Pro Audio for a Return Authorization number **before** returning the product (Tel.: +61 3 9555 8081; service@smproaudio.com). All inquiries must be accompanied by a description of the problem. **No products will be accepted for warranty service without a Return Authorization number.**

The product must be returned in its original shipping carton, together with the Return Authorization number, to:

SM Pro Audio Service Department, W25 26-28 Roberna St., Moorabbin, Melbourne, Victoria, Australia 31892.

If the warranty claim proves to be justified, the product will be returned freight prepaid by SM Pro Audio within Australia.

Outside of Australia, please contact your local distributor for a Return Authorization number and shipping instructions.

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.

SPECIFICATIONS

Audio Inputs

- 1 x D-Sub 25-pin (surround + L/R)
- 6 x Unbalanced RCA (surround)
- 2 x Unbalanced RCA (L/R)
- 2 x Balanced 1/4" TRS

Audio Outputs

- 2 x Balanced XLR (L/R)
- 6 x Balanced 1/4" TRS (surround)

Link Output

- 1 x D-Sub 25-pin (surround + L/R)

Power

AC Mains; Internal Switching, 100V-240VAC

(Note: AC power required only to illuminate the unit's LEDs. All other functions of the MPatch 5.1 operate fully without the use of AC power.)

Dimensions

37cm x 15.5cm x 8.5 cm (w/o rack ears)

Weight

2kg

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