

AB8

OPERATING MANUAL
ENGLISH



clever audio solutions.



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 used 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.

FOREWORD

Dear Customer,

Thank you very much for expressing your confidence in SM Pro Audio products by purchasing this unit. The AB8 has been designed to be used as a standard tool for home/pro studios, P.A. rental companies, Schools and in many other situations where audio products would be used. With much experience in the audio industry over a long period of time, and along with valuable suggestions from our customers, our engineers have developed a product we know you will be satisfied with. We guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely affordable price.

Regards,
SM Pro Audio

INSTALLATION

Your SM Pro Audio AB8 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.

PLACEMENT

The SM Pro Audio AB8 has an electronic circuit inside as well as isolation transformers. Be sure that there is enough air space around the unit for cooling. As to avoid overheating, please do not place the units on high temperature devices such as power amplifiers or near other units which may have high frequency transmittance such as wireless devices.

MAINS VOLTAGE

The AB8 can be used with voltages ranging from 100V AC to 250V 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 as well before switching the unit ON. Any damage occurring as a result of incorrect voltage selection may not be granted a warranty repair.

1. SM AB8 MAIN FEATURES

- 8 Balanced and unbalanced inputs:
 - +4dBu, 0dBFS equals +22dBu (XLR) -10dBv
 - 0dBFS equals +8dBv (Jack)
- Transformer Isolated inputs
- Attenuation per channel
- 19" rack mount unit
- Optical ADAT output
- Word Clock I/O
- Internal/external synchronisation 44,1kHz & 48kHz
- Delta-sigma 24-bit / 96 kHz A/D converter (Cirrus Logic)
- Rugged metal construction

2. INTRODUCTION

Using our popular and proven ADAT interface we have created the AB8. Being used by the majority of audio card and mixing console manufacturers, the ADAT interface presents a simple way of expanding audio inputs into most pieces of audio equipment made today including, digital desks, digital snakes, broadcast audio gear and standard desktop audio interfaces.

The AB8 represents a great way of converting 8 line level inputs to the ADAT format. Balanced or unbalanced the audio signal travels thru our own high quality transformer isolated inputs and then via a passive attenuation circuit. The signal is then digitally converted to the ADAT format. A word clock interface is also provided for easily syncing to external devices.

A great tool for increasing your audio inputs where ADAT enabled products are used.

3. THE DESIGN CONCEPT

3.1 High quality components and design

The philosophy behind SM Pro Audio products guarantees a no-compromise circuit design and employs the best choice of components.

3.2 Inputs and outputs

All inputs and outputs are secured firmly to the exterior chassis housing. This ensures robust quality and confidence in performance under all conditions.

4. AB8 FRONT PANEL

The panel has 8 attenuation controls, 1 power switch and 8 combo connectors.

4.1 Power Switch

Use this switch to switch the AB8 ON or OFF

4.2 Level control

The AB8 uses attenuation to control the level which is being sent first to the Analog to Digital converter and then to the ADAT output. It is NOT a gain control, it can only reduce the level of the input signal.

4.3 Combo input XLR

The XLR part of the COMBO input connector is a balanced input and as such is set at a maximum of +4dB 0dBFS equals +22dBu. Connect any balanced equipment to this input. Note, this is not a preamp, a microphone will probably not yield enough output level to work with this device.

4.4 Front Panel Combo line input (1/4" 6.5mm Jack)

Use this connector for devices which are not balanced such as standard line level equipment. -10dBv, 0dBFS equals +8dBv (Jack)



4.4 Front Panel Combo line input 4.3 Combo input XLR

4.2 Level control 4.1 Power Switch

5. AB8 BACK PANEL

The back panel has the ADAT optical output, BNC connectors for word clock as well as the selector switches and power cord connector.

5.1 Word Clock Input

Use this BNC connector when running the AB8 from an external clock source (make sure you select EXT sync)

5.2 44.1 / 48kHz selector switch

Use this switch to select which sample rate the unit will be running at. Please make sure the equipment connected to the ADAT output of the AB8 matches this sample rate as well.

5.3 Optical ADAT OUTPUT connector

Connect your optical cable (ADAT FORMAT) to this output connector, the ADAT OPTICAL cable will transfer all 8 channels on this one cable.

5.4 External / Internal selector switch

Use this switch to select INTernal or EXTernal Word Clock sync, when the unit is being used as a master, use the INT setting. When you want the unit to be a slave device select EXT. You can easily see if the unit is working properly by looking into the optical output connector. If you see a RED LIGHT you know the unit is sending out DATA in the selected mode.

5.5 Word Clock Output

Use this connector if you want to sync other devices using the AB8's own internal clock.

5.1 Word Clock Input 5.2 44.1 / 48kHz selector switch 5.3 Optical ADAT OUTPUT connector



5.4 External / Internal selector switch 5.5 Word Clock Output

6. APPLICATION

6.1 Using the AB8 to convert line level signals to ADAT

Make sure the AB8 is powered and that the ADAT signal is running (red light in the optical output). Connect several devices (Kb's, mixer, Mp3 players etc) to the AB8.

If you are using a recording interface, make sure you select EXTERNAL ADAT SYNC in your master clock selection and connect the AB8 to the ADAT input of your interface. For digital desks you would also select EXTERNAL ADAT CLOCK as your master.

If you have an external recording device which has WORD CLOCK output you could use the recording device as the master and then connect both a BNC coaxial cable as well as the optical cable to the AB8. Make sure you select external WORD CLOCK source on the AB8. Connect the cable from the WORD CLOCK output of the device to the WORD CLOCK input of the AB8

Adjust the attenuator on each of the inputs so that you do not overload the signal and cause distortion.

7. WARRANTY CARD

To be protected by this warranty, the buyer must complete and return the enclosed warranty card (signed/stamped by retail dealer) within 14 days of the date of purchase to SM Pro Audio (see address below 3). Failure to return the card in due time (date as per post-mark) will void any extended warranty claims.

7.1 WARRANTY

1. 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 (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.

2. If the warranty claim proves to be justified, the product will be returned freight prepaid by SM Pro Audio within Australia. Outside of Australia, the product will be returned at the buyer's expense.

3. Warranty claims other than those indicated above are expressly excluded.

7.2 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer must call SM Pro Audio during normal business hours BEFORE returning the product. Please use the following telephone numbers:

Australia and Asia: Tel.: +61 3 9555 8081

North America: Tel.: 1 800 343 0353

Europe: Tel.: +49 2504 888 878 0

All inquiries must be accompanied by a description of the problem. SM Pro Audio will then issue a return authorization number or by email to service@smproaudio.com

2. The product must be returned in its original shipping carton, together with the return authorization number, to the following addresses:

Australia and Asia:

SM Pro Audio
Service Department
W25, 26-28 Roberna St
Moorabbin
Australia

North America:

Kaysound
5 Coton Lane, Champlain,
New York, 12919
USA

Europe:

SM Pro Audio Europe / tt audio GmbH
Alfred-Krupp-Str. 5
48291 Telgte
Germany

7.3 WARRANTY REGULATIONS

1. 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 in the best possible manner.

2. 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.

3. 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.

4. 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.

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

6. 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.

7.4 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.

7.5 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.

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