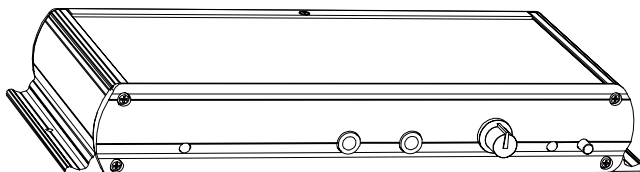


SONIFEX SE-DAW DIGITAL AUDIO WORKSTATION USER HANDBOOK



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- pro audio with a smile

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The DAW products were designed by Sonifex Ltd under contract to the Oxford Sound Company, for IBM contracted to the BBC Go Digital project.

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WARRANTY & SAFETY **INFORMATION**

Warranty and Liability

Important: the purchaser is advised to read this clause

(a) The Company agrees to repair or (at its discretion) replace Goods which are found to be defective (fair wear and tear excepted) and which are returned to the Company within 12 months of the date of despatch provided that each of the following are satisfied:

(i) notification of any defect is given to the Company immediately upon its becoming apparent to the Purchaser;

(ii) the Goods have only been operated under normal operating conditions and have only been subject to normal use (and in particular the Goods must have been correctly connected and must not have been subject to high voltage or to ionising radiation and must not have been used contrary to the Company's technical recommendations);

(iii) the Goods are returned to the Company's premises at the Purchaser's expense;

(iv) any Goods or parts of Goods replaced shall become the property of the Company;

(v) no work whatsoever (other than normal and proper maintenance) has been carried out to the Goods or any part of the Goods without the Company's prior written consent;

(vi) the defect has not arisen from a design made, furnished or specified by the Purchaser;

(vii) the Goods have been assembled or incorporated into other goods only in accordance with any instructions issued by the Company;

(viii) the defect has not arisen from a design modified by the Purchaser;

(ix) the defect has not arisen from an item manufactured by a person other than the Company. In respect of any item manufactured by a person other than the Company, the Purchaser shall only be entitled to the benefit of any warranty or guarantee provided by such manufacturer to the Company.

(b) In respect of computer software supplied by the Company the Company does not warrant that the use of the software will be uninterrupted or error free.

(c) The Company accepts liability:

Warranty & Safety Information

- (i) for death or personal injury to the extent that it results from the negligence of the Company, its employees (whilst in the course of their employment) or its agents (in the course of the agency);
 - (ii) for any breach by the Company of any statutory undertaking as to title, quiet possession and freedom from encumbrance.
- (d) Subject to conditions (a) and (c) from the time of despatch of the Goods from the Company's premises the Purchaser shall be responsible for any defect in the Goods or loss, damage, nuisance or interference whatsoever consequential economic or otherwise or wastage of material resulting from or caused by or to the Goods. In particular the Company shall not be liable for any loss of profits or other economic losses. The Company accordingly excludes all liability for the same.
- (e) At the request and expense of the Purchaser the Company will test the Goods to ascertain performance levels and provide a report of the results of that test. The report will be accurate at the time of the test, to the best of the belief and knowledge of the Company, and the Company accepts no liability in respect of its accuracy beyond that set out in Condition (a).
- (f) Subject to Condition (e) no representation, condition, warranty or other term, express or implied (by statute or otherwise) is given by the Company that the Goods are of any particular quality or standard or will enable the Purchaser to attain any particular performance or result, or will be suitable for any particular purpose or use under specific conditions or will provide any particular capacity, notwithstanding that the requirement for such performance, result or capacity or that such particular purpose or conditions may have been known (or ought to have been known) to the Company, its employees or agents.
- (g) (i) To the extent that the Company is held legally liable to the Purchaser for any single breach of contract, tort, representation or other act or default, the Company's liability for the same shall not exceed the Price of the Goods.
- (ii) The restriction of liability in Condition (g)(i) shall not apply to any liability accepted by the Seller in Condition (c).
- (h) Where the Goods are sold under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) the statutory rights of the Purchaser are not affected by these Conditions of Sale.

Returning the Warranty Card

In order to register the date of purchase so that we can keep you informed of any design improvements or modifications, it is important to complete the warranty registration document that is enclosed with you and return it to Sonifex Ltd in the UK.

For your own records you should write down the serial number (which can be found on the rear of the DAW).

DAW Serial Number
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Unpacking the DAW

Each DAW is shipped in protective packaging and should be inspected for damage before use. Where an item is found to have transit damage, notify your supplier immediately with all the relevant details of the shipment. Packing materials should be kept for inspection and also for if the product needs to be returned.

Safety of Mains Operated Equipment



This equipment has been designed to meet the safety regulations currently advised in the country of purchase and it conforms to the safety regulations specified by use of the CE Mark.

The power supply is rated to 220-240V AC, 47-53Hz, fused 100mA, max 9W.

Warning : There are no user serviceably parts inside the machine. If you should ever need to look inside the unit, always disconnect the mains supply before removing the equipment covers.

Fuse Rating

The DAW is supplied with a single fuse in the live conducting path of the power infeed at the power supply. For reasons of safety it is important that the correct rating and type of fuse is used. Incorrectly rated fuses could present a possible fire hazard, under equipment fault conditions.

Power Cable and Connection

An IEC power connector is supplied with the DAW which has a moulded plug attached – this is a legal requirement. If no moulded plug has been supplied with your DAW, please contact your supplier, because an IEC connector is always supplied from the Sonifex factory.

If for any reason, you need to use the DAW with a different power cable, you should use the following wiring guidelines

Wire Colour	Connection
Green, or green and yellow	Earth (E)
Blue, or Black	Neutral (N)
Brown, or Red	Live (L)

Warranty & Safety Information

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OPERATION & CONTROLS

1

Introduction

The SE-DAW is a digital audio workstation for use with a PC audio recorder/player. It is used to take analogue and digital audio inputs to and from the PC and to monitor either the analogue audio input to the PC, or the analogue audio output from the PC. The unit has 2 headphone sockets, a headphone level control and a monitor select push-button switch.

Block Diagram

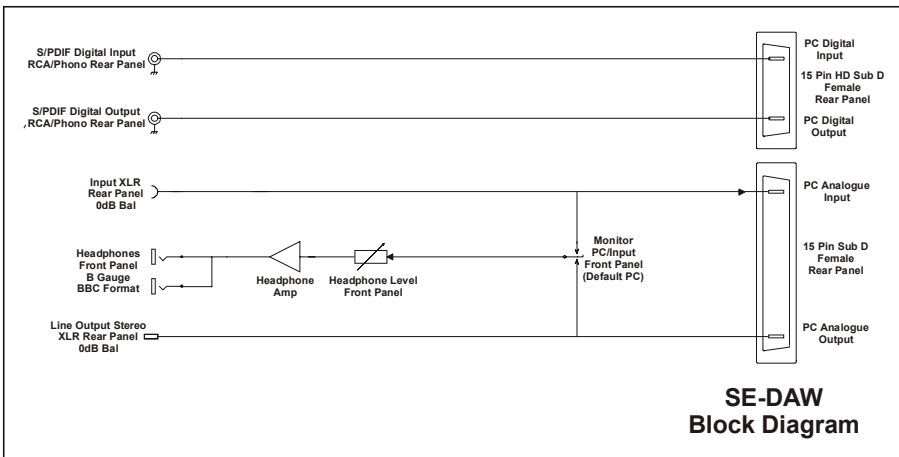


Figure 1-1 Block Diagram of the SE-DAW Circuitry

Connecting Power to the DAW

Plug the IEC mains lead into the rear of the unit and check that the blue **POWER** LED on the front is illuminated. On power up, the unit is set to monitor audio from the PC (i.e. the PC's output).

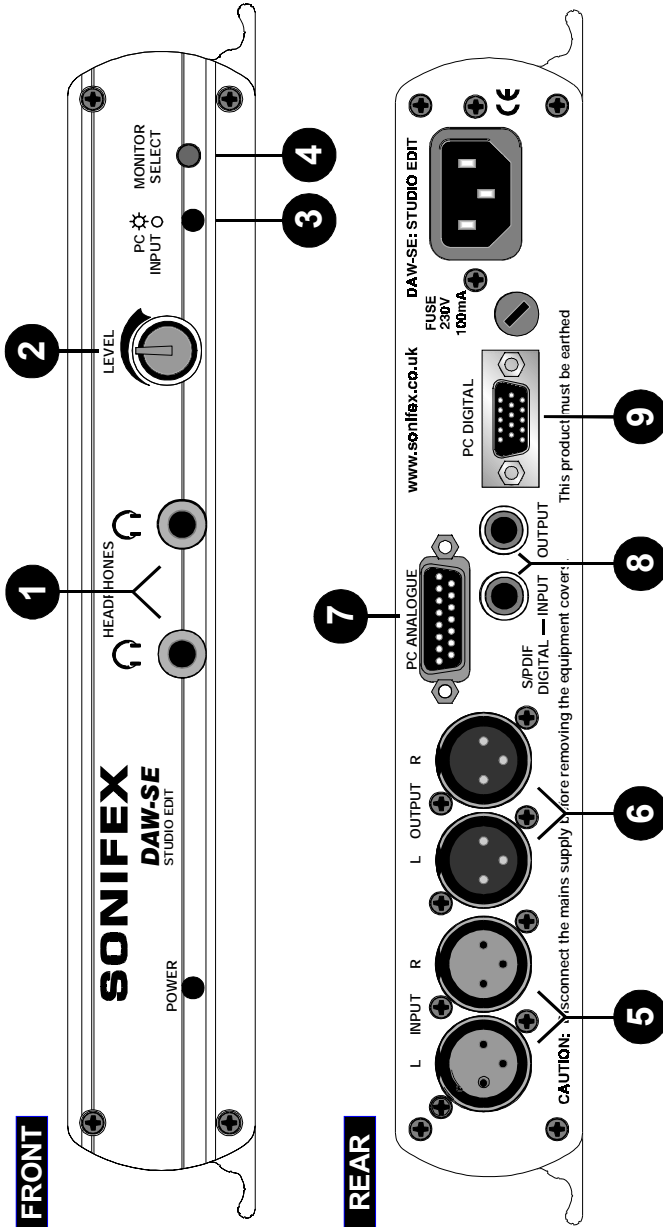


Figure 1-2 Front & Rear of SE-DAW

Monitoring

- 1 The 2 **HEADPHONES** sockets are ¼" stereo jack sockets and have a paralleled (i.e. the same) output. The outputs are suitable for headphones with impedances from 80ohm to 1.5kohm.
Note : It is advised that level limited headphones should be used with this product.
- 2 The headphone **LEVEL** control is a rotary knob used for altering the volume of audio to the paralleled headphones. The headphone level operates from cut (∞) to a maximum level which depends on the impedance and type of headphones being used.
- 3 The Monitor Indicator is a LED showing the status of the MONITOR SELECT button. Illuminated indicates PC mode, extinguished indicates input monitoring.
- 4 The **MONITOR SELECT** button has two modes :
 - **PC** mode, with the button raised, allows you to monitor audio from the PC, i.e. for monitoring playback from the PC.
 - **INPUT SELECT** mode, with the button depressed, allows you to monitor the stereo analogue audio input.

Audio Inputs & Outputs

- 5 The **INPUT** consists of 2 (stereo) balanced XLR sockets which could take an output from a professional DAT machine, flash-card recorder, or professional cassette machine.
- 6 The stereo **OUTPUT** provides an output feed from the PC, regardless of the status of the MONITOR SELECT button.

Connections to & from the PC

- 7 The **PC ANALOGUE** input/output connector is a 15 way D-type socket which should be connected to the analogue input of the soundcard in the connected PC (usually a Digigram PCX924 card).
- 8 The **S/PDIF DIGITAL INPUT & OUTPUT** consists of two phono sockets which allow you to connect domestic digital equipment to the DAW, for example, a CD player. The digital audio is routed directly to the digital input of the PC card and is not affected by the DAW. Similarly the digital output from the PC card is routed directly to the S/PDIF output on the DAW.
- 9 The **PC DIGITAL** input/output connector is a 15 way high density D-type socket which should be connected to the digital input of the soundcard in the connected PC (usually a Digigram PCX924 card).

Internal Jumper Settings & Controls

Set the Right Headphone Output Anti-Phase

Fitting JP3 allows the right leg of the stereo output to be set as anti-phase. This is set by default.

CONNECTION **DETAILS &** **TECHNICAL** **SPECIFICATION**

2

Connection Details

Input

The INPUT consists of 2 (stereo) balanced XLR sockets which could take an output from a professional DAT machine, flash-card recorder, or professional cassette machine:

Pin 1: Screen
Pin 2: Phase
Pin 3: Non-phase

Output

The STEREO OUTPUT on the rear of the unit consists of 2 balanced XLR plugs which can be wired unbalanced by grounding the non-phase signal, allowing you to feed balanced and unbalanced equipment. They have the following connections :

Pin 1: Screen
Pin 2: Phase
Pin 3: Non-phase

The connector provides a line level output with an impedance and a maximum output level as per the connected audio card.

Headphones Sockets

The 2 HEADPHONES sockets are ¼" stereo push-pull jack sockets and have a paralleled (i.e. the same) output. The outputs are suitable for headphones with impedances from 80Ω to 1.5kΩ.

Ring: Right Hot
Tip: Left Hot
Sleeve: Cold

2. Connection Details & Technical Specification

S/PDIF Digital Input

The digital source stereo RCA phono inputs both have an impedance of 75Ω. The digital audio is routed directly to the digital input of the PC card and is not affected by the DAW.

S/PDIF Digital Output

The digital source stereo RCA phono outputs both have an impedance of 75Ω. The digital audio is routed directly from the digital output of the PC card and is not affected by the DAW.

PC Analogue

The PC Analogue connector is a 15 way D-type socket which should be connected to the analogue input of the soundcard in the connected PC (usually a Digigram PCX924 card). The connection details make a pin to pin connection with the sound-card:

Pin 1: Right Input Phase from PC Right Output Phase
Pin 2: GRND
Pin 3: Left Input Non-phase from PC Left Output Non-phase
Pin 4: GRND
Pin 5: GRND
Pin 6: Right Output Non-phase to PC Right Input Non-phase
Pin 7: Left Output Phase to PC Left Input Phase
Pin 8: GRND
Pin 9: Right Input Non-phase from PC Right Output Non-phase
Pin 10: Left Input Phase from PC Left Output Phase
Pin 11: GRND
Pin 12: GRND
Pin 13: Right Output Phase to PC Right Input Phase
Pin 14: GRND
Pin 15: Left Output Non-phase to PC Left Input Non-Phase

PC Digital

The PC Digital connector is a 15 way high density D-type socket which should be connected to the digital input of the soundcard in the connected PC (usually a Digigram PCX924 card). The connection details make a pin to pin connection with the sound-card:

Pin 1: N/C
Pin 2: N/C
Pin 3: N/C
Pin 4: From DAW S/PDIF IN- to PC S/PDIF IN1-
Pin 5: From DAW S/PDIF IN+ to PC S/PDIF IN1+
Pin 6: N/C
Pin 7: N/C
Pin 8: N/C
Pin 9: GRND
Pin 10: N/C
Pin 11: N/C
Pin 12: N/C

2. Connection Details & Technical Specification

Pin 13: N/C

Pin 14: From PC S/PDIF OUT+ to DAW S/PDIF OUT+

Pin 15: From PC S/PDIF OUT- to DAW S/PDIF OUT-

Technical Specification

Audio Specifications

Line Input Impedance	As per the connected audio card
Output Impedance	As per the connected audio card
Max Input Level	As per the connected audio card
Max Output Level	As per the connected audio card
H/phone Output Level	Drives 80Ω to 1.5kΩ headphones
Frequency Response	20Hz to 20kHz ±0.1dB (600Ω load, ref 1kHz)
H/phone Volume Control	-60dB to +6dB gain
Line Common Mode Rej	>60dB typically
Noise	-97dB unity gain ref +8dB
Distortion	THD @ 1kHz +8dB 0.01%

Connections

Analogue Input	2 x XLR 3 pin socket (Balanced)
Output	2 x XLR 3 pin plug (Balanced)
Headphone Outputs	2 x ¼" stereo jack sockets (Balanced)
S/PDIF Digital Input	1 x S/PDIF RCA phono socket
S/PDIF Digital Output	1 x S/PDIF RCA phono socket
PC Analogue	1 x 15 way D-type socket
PC Digital	1 x 15 way high density D-type socket
Mains Input	Filtered IEC, 220-240V AC, 47-53Hz, fused 100mA, max 9W

Equipment Type

SE-DAW	Studio Edit Digital Audio Workstation, 230V (UK 3 pin to IEC)
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Physical Specifications

Dimensions (Raw)	28cm (W) x 10.8cm (D) x 4.2cm (H)
Dimensions (Boxed)	36cm (W) x 20.5cm (D) x 6cm (H)
Weight	1.35kg (Gross) 0.9kg (Net)

