# **SUGDEN AUDIO**

DAP 800 Digital analogue pre-AmplifierFBA 800 Floating bridge pure class A power amplifier

**INSTRUCTION MANUAL** 



Designed and manufactured in England by

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# **DAP-800 Pre-amplifier**

## **Installation**

The DAP800 pre-amplifier is suitable for freestanding on a shelf or in a cabinet. Do not stand the unit in direct sunlight or near a heat source. It is not recommended that the pre-amp sits directly on top of a power amplifier.

# Accessories Supplied in the Carton

- IEC straight connector with moulded mains plug. This should be suitable for your country. To check that the pre-amplifier is the correct voltage please examine the carton, the assembly ticket attached to rear of the unit and the legend on the rear of the unit.
- Remote control handset supplied with two AAA batteries.
- Guarantee card (please complete and return or email us with the same details)

# Connecting your Pre-amplifier to the Mains Supply

Use the IEC power chord supplied, as this has been properly tested and CE approved to be used with your pre-amplifier. The mains input socket is located at the rear of the unit and is clearly marked 'Mains power inlet & fuse'.

### Connecting your Pre-amplifier to a Power Amplifier

All output sockets are clearly marked on the back panel of the pre-amplifier and are as follows:-

Two pairs of phono RCA pre-amplifier signal out Tape out (fixed level) One pair of Balanced XLR signal out

The DAP800 pre-amplifier has two pairs of phono sockets and one pair of XLR sockets for connecting to a power amplifier. The phono sockets are standard type RCA connectors of high quality with Teflon inserts and gold plated contacts. It is advisable to make sure your interconnect leads have similar quality plugs that fit securely. The two sets of phono sockets are clearly marked right (red) and left (black or white) for identical connection to your power amplifier. If you are using two power amplifiers the second set of phono sockets can be used to connect the second power amplifier, or these can be connected to an active sub-woofer. The XLR output sockets are for connection to an amplifier with a balanced input like the Sugden range of Sapphire or Masterclass power amplifiers. The pin configuration is:

- 1 Ground
- 2 Positive
- **3 Negative**

If using long cable runs between your power amplifier or source component, balanced XLR cables can offer better performance than line level phono cables.



**DAP 800 Rear View** 

### Connecting Source Components to the Pre-amplifier (Back Panel)

All input sockets are clearly marked on the back panel of the pre-amplifier and colour coded, these are as follows:-One balanced input One Bypass Four phono RCA line inputs Three SPDIF phono RCA coax inputs Two SPDIF optical inputs One USB type B input

# Analogue Inputs

The inputs are clearly marked left and right for identical connection to your source component. All inputs are for equipment with a line level output except the balanced input and that is for equipment with a balanced XLR output. If you wish to play vinyl then an external phono amplifier will be required like our Masterclass PA-4.

#### **Digital Inputs**

There are a total of five digital inputs on your pre-amplifier so you will be able to connect a variety of digital sources with SPDIF coaxial and optical outputs. The USB input can be used to play music stored on your computer or music being streamed on a compatible hard drive or media player. The USB input has a standard Class B type socket. When a digital input signal has been detected the DIGITAL LOCK lamp on the front panel will be lit. The digital circuit has its own mains switch on the rear panel next to the mains power inlet.

#### Connecting a computer to the USB input

The USB input on your DAP-800 is a 'plug and play' way to stream music from a computer or media player. When connecting your computer to the DAP-800 pre-amplifier we suggest that both the pre-amplifier and computer are switched on. It may take a short time for your computer to confirm that a new USB device has been detected and installed. On completion of the installation you may need to alter the audio settings in your control panel or media player. You may also require an internet connection. If your computer does not initially detect the USB input of the DAP 800 you may need to try the connection again. This is usually dependent on your computer software. When the DAP 800 is receiving a signal from your computer the DIGITAL LOCK on the front panel will be lit.

#### **Bypass Input**

When the pre-amp is switched off it is possible to operate a true signal bypass. Connecting a source to the bypass input will allow a signal through to the pre-amplifier phono RCA outputs at its original level. This feature is useful for home theatre systems allowing a direct connection from a processor to your stereo power amplifier. When the pre-amp is switched on the bypass input is muted.

#### **Operating your DAP800 Pre-amplifier**

Front Panel Controls The front panel consists of the following features:-Volume control Power on LED Remote control receiver Analogue input selector Power on/off Digital input selector Switch Digital lock LED

#### **Power Switch**

This turns the pre-amplifier on and off. The pre-amplifier is on when the switch is depressed and the power led indicator is lit. There is a separate power switch for the DAC circuit on the rear of the pre-amplifier. When the front power switch is off the DAC will also be off.

### Volume Control

The volume control allows you to control the output from your pre-amplifier to your power amplifier. The volume level will be at zero when the control knob is turned fully anti-clockwise. Before you start playing music the volume control should be at zero or near zero to avoid a loud dynamic burst.

In addition to the front panel volume control a remote control handset is supplied with your pre-amplifier. This is a system controller and the only function programmed for the pre-amplifier is volume up and down. All other functions are for Sugden CD players and CD transports

# **Replacing Fuses**

There are four power supply fuses in the DAP800 Pre-amplifier; these are to protect the unit in case of a failure. If a fuse does require replacing, this is usually an indication that a fault exists. However, it is not always an indication that the pre-amplifier is at fault so it is important to determine the cause before replacing any fuses. Please consult your dealer for advice.

Always replace fuses with the same type and rating

# **FBA-800 Power Amplifier**

# **INSTALLATION**

The Sapphire FBA-800 power amplifier is a class A amplifier so it is important to situate the unit in an area where a free circulation of air is available. Never enclose the amplifier in a cupboard or stand that will prevent the airflow through the heatsinks or ventilation holes on the top or base plate. Never stand the amplifier near a heat source or in direct sunlight. Do not sit the amplifier on a soft surface such as a carpet. Sugden recommend that a dedicated piece of audio furniture or stand should be used for maximum ventilation and sonic support.

# **POWER SUPPLY SETTING**

• Check that the voltage rating on the rear of the amplifier indicated is the correct supply voltage for your country.

### **CONNECTIONS (rear panel layout)**

### **MAINS INPUT**

Connection to the mains is via the supplied AC cable and connects to the mains input socket at the back of the amplifier. Countries are supplied with a pre-moulded AC mains cable of the correct fuse and electrical rating. The supplied cable has been tested and approved for use with your amplifier and should not be replaced without making sure the new cable is suitable.



FBA 800 Rear View

# **LOUDSPEAKERS**

There are two pairs of loudspeaker binding posts on the back of the amplifier and these are marked left and right for identical connection to the loudspeakers. Each pair of loudspeaker binding posts are also marked + positive (red) and – negative (white of black). This is to make sure the polarity and phase are correct and are for identical connection to your loudspeakers. The binding posts will accept the following type of loudspeaker connections:

6mm plugs Spade connectors Bare wires

If using bare wires it is important not to let these come in to contact with the amplifier chassis as this might short circuit and damage your amplifier. At no time should the positive and negative outputs from your amplifier touch. It is always recommended that the amplifier is switched off before removing or re-connecting loudspeaker cables.

#### **INPUTS**

Before connecting any signal leads to your amplifier make sure it is switched off. Connection of a suitable single ended pre-amplifier is by the two RCA phono sockets located above the loudspeaker binding posts. These are marked right (red) and left (black or white). There is one pair of balanced input sockets for connection to a pre-amplifier with balanced XLR connectors these are located at the side of the phono sockets and selected by the input selector switch on the front panel labelled balanced input.

If using another brand of pre-amplifier with your FBA-800 you will need to make sure the XLR pin configuration is to the normal standard. The pin configuration for the balanced sockets are:

Pin One - Ground Pin Two - Positive Pin Three – Negative

# FRONT PANEL CONTROLS

#### POWER ON

The power switch is located in the centre of the front panel and will turn the mains power to the amplifier on and off. Indication of power on is shown by the illumination of the LED lamps either side of the switch. The amplifier contains a special delay circuit, which mutes the loudspeaker outputs for approximately 5 seconds after turning on the mains supply. Once this time period has elapsed, the amplifier will become fully operational and the two LED lights will come on. This delay circuit does not operate during switch off.

#### **BALANCED INPUT**

The FBA-800 has two pre-amplifier inputs, balanced and single ended. When the Balanced input switch is depressed then the balanced input is selected. When released the single ended input is selected.

#### **INPUT GAIN**

This is a useful feature that attenuates the input gain of the FBA-800 by 6dB. By making the input less sensitive it is possible to enjoy better control of the volume levels when using a variety of loudspeakers and pre-amplifiers. If using a pre-amplifier with a high output depressing the input gain switch will attenuate the output to the loudspeakers.

#### **FUSES**

The amplifier is fitted with mains power and internal AC fuse protection. Should a fuse blow this is usually an indication that a fault exists either with the amplifier, mains supply or with the loudspeaker system. It is essential that the fault be located and corrected before any new fuse is inserted. The fuse rating will depend on the mains voltage in your country.

# ALL FUSES MUST BE REPLACED WITH A FUSE OF THE CORRECT TYPE. ALWAYS SWITCH OF YOUR AMPLIFIER AND DISCONNECT FROM MAINS SUPPLY BEFORE ATTEMPTING TO REPLACE ANY FUSE.

### MAINS POWER FUSE

This is a slow blow (S.B.) 20mm x 5mm cartridge type fuse, which is located in the mains power inlet socket at the rear of the amplifier. To replace the fuse first disconnect the amplifier from the mains supply. Locate the fuse tray holder, which forms part of the mains inlet socket on the rear panel of the amplifier. Pull the tray out to its full extension and two fuses will become visible. The back fuse is normally in line with the mains power and the front fuse is a spare replacement. Simply swap the two fuses and close the tray. If a fault persists consult your agent.

#### **INTERNAL FUSES**

Each channel is protected by two pairs of PCB mount fuses. These are T rated AC fuses and should only be replaced with the same type and rating.

### **CONSTRUCTION AND FINISH**

Your amplifier is constructed from selected high quality materials and is designed to give a lifetime of trouble free performance. Careful attention is paid to ensuring that all steel case components are zinc plated and all aluminium components are anodised for maximum protection against corrosion. All steel case components are finished in a power-coated paint, which is both smooth and durable. It can be cleaned with a lightly damped cloth and a liquid soap solution, not an abrasive or chemical cleaner.

Designed & Manufactured By J. E. Sugden & Company Limited Valley Works Station Lane Heckmondwike West Yorkshire WF16 0NF ENGLAND

<u>www.sugdenaudio.com</u> The manufacturer reserves the right to alter specification without notice