

# The HeadMaster

Headphone pre-amplifier

Product description

Instruction Book

Specifications

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## Pure Class A Headphone Pre-amplifier

Designed and manufactured by J. E. Sugden & Co Ltd.  
Heckmondwike - West Yorkshire - England

## **CLASS A Headphone Amplifier - Pre-amplifier**

SUGDEN HeadMaster is a dedicated Headphone Amplifier with exceptional qualities of musical performance. It has been specially developed to extend the boundaries of audio pleasure into the ultimate near-field listening conditions. It is suitable for use with most commercial headphones.

The unit is equipped with three stereo input facilities, a parallel tape output, and a switched pre amplifier output. These facilities create a very flexible piece of equipment, which can operate as a stand alone dedicated headphone system or be combined as a high quality pre-amp in a total Audio system. The special design features of the amplifier circuitry have been incorporated to enhance headphone performance but also facilitate a very high quality pre-amplifier performance.

The amplifier configuration is pure Class A constructed completely from discreet components. The application of the Class A circuit has been optimised to obtain its characteristic benefits of superb low level listening and low distortion. Particularly important to the use of headphones is the inherent avoidance with the Class A configuration of odd and high order harmonic distortion. The amplifier is wide bandwidth with a very neutral and transparent sound stage through the full musical spectrum and volume range.

The inputs of the amplifier are selected through a logic operated relay circuit to keep the input signal paths as short as possible. The relays used are twin gold contact bifurcated crossbar types [not solid state] with a contact resistance of less than 0.05 ohms. These relays, which are used in all Sugden Hi-End pre amps, are chosen for their non-invasive handling of the incoming signals. The single ended phono connectors are all high quality individual, gold plated connectors with Teflon inserts.

The housing for the electronics is creatively designed and precision engineered from high quality aluminium in our own manufacturing facility. The sculptured presentation as well as advancing pride of possession includes full practical and ergonomic considerations. Its mass is particularly relevant to headphone use and superb Audio performance.

Together with all Sugden products the acoustic qualities are enhanced by many hours of listening and component testing with the most sonically compatible selected for use. By not compromising on quality and continuity of production by our own skilled workforce we guarantee years of musical pleasure.

## **Installation**

The HeadMaster Headphone pre-amplifier is suitable for freestanding on a shelf or in a cabinet. Do not stand the unit in direct sunlight, near a radiator or anywhere humid.

## **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 examine the carton, the assembly ticket attached to rear of the unit and the legend on the base of the unit.
- Guarantee card (please complete and return)

## **Connecting your Pre-amplifier to the Mains Supply**

Use the IEC power chord supplied, as this has been properly tested and EC approved to be used with your pre-amplifier. The mains input socket is located at the rear of the unit and is clearly marked 'Power on/off mains input & fuse'. Next to the mains socket is the power on/off switch. It is normal to leave the Pre-amplifier mains power on unless being left unattended for a long period of time.

## **Connecting your Pre-amplifier to headphones.**

The HeadMaster pre-amplifier has one 1/4" Jack socket located on the front fascia, this is capable of driving any type of headphone except electrostatic or AMT type that require loudspeaker connection. Once headphones are connected to the Jack Socket the pre-amp out is switched off.

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

The HeadMaster pre-amplifier has one pair of phono sockets. 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. We recommend WBT type connectors preferably the locking type. These offer the best possible connection. The two sets of phono sockets are clearly marked right (red) and left (black) for identical connection to your power amplifier.

## **Connecting your Source to the Pre-amplifier**

All input sockets are clearly marked on the back panel of the pre-amplifier. There are three stereo inputs in total.

- Three Phono line level inputs marked INPUT 1-3

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.

## **Operating your HeadMaster Pre-amplifier (see Diagram1.)**


There are two rotary controls on the Masterclass front Panel and these operate all the pre-amplifier functions:

### **Input Selector Switch**

The Input selector switch is located at the far right of the front panel and controls which input is to be selected. The large knob has an indicator that corresponds with the input legend printed on the top plate. The input selector switch is a precision component and requires the minimum of effort to rotate. Never force the switch as this could result in damage or loosening of the control knob. The pre-amplifier circuit uses gold contact relays which cause

the signal to cut off when moving between inputs. This is normal and avoids any possibility of noise such as clicks or pops.

### **Volume Control**

The volume control is positioned in the centre of the front panel. At fully anti-clockwise or six o'clock the volume control is at minimum. If you ordered your Headmaster with the optional remote control feature, a handset is also supplied. To operate the remote control feature select CD on the handsets and then use the up/down Functions: 

By coding the volume control as CD, this allows the HeadMaster to operate under the same instructions as the matching CDMaster Compact disc Player without having to switch back to pre-amp.

### **Replacing Fuses**

There are two power supply fuses in the HeadMaster Pre-amplifier one internal and one contained in the mains inlet socket. 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 and fuses. Please consult your dealer for advice.

- Always replace fuses with the same type and rating
- Fuse type 500mA Slow Blow.

### **Looking After Your HeadMaster**

The case construction of your HeadMaster is made from durable traditional materials carefully chosen for their none intrusive electrical properties. The front, back, top and plates are solid machined aluminium that has been carefully anodised to a very high finish. The legend is ink based and as with the rear panel, this should not be cleaned with any type of solvent only with a soft slightly damp cloth.

### **Specifications:**

Inputs:	Three stereo pairs.
Input Impedance:	50K
Input sensitivity:	150mv in for 1 volt output
Outputs:	Switched headphone socket / Attenuated Pre Amp out Tape-out
Output Impedance:	4Ohms to 56kOhms
Power output:	5.5volts at onset of clipping
Bandwidth:	-3dB points 10Hz & 270kHz
Frequency response:	relative to 1kHz 0dB, 20Hz -0.6dB, 30Hz -0.1dB 50Hz to 20kHz 0dB
Signal to noise:	> 90dB
Dimensions:	230mm x 265mm x 82mm [wdh]      weight 3.5kg