Instruction Book and Installation Guide

# SUGDEN AUDIO CLASS A POWER AMPLIFIER

## The MusicMaster

- Pure class A
- Single ended
- Wide bandwith

Designed and manufactured by

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## INSTALLATION

## SITUATION

The MusicMaster is a pure class A amplifier and produces a lot of heat. This is normal and should not be of concern. The original Sugden class A Amplifier was introduced in 1965 and has proved to be a very reliable product with an indefinite life span. The heat produced is not excessive but good ventilation is essential for the best sound quality and product longevity. A free circulation of air should be provided. This means that the MusicMaster must **not** be stacked with other equipment. It should be either used with the Sugden Bijou stand or situated in a cabinet or on a shelf with a free circulation of air. The amplifier should not be sat directly on a carpet, as this will obstruct the bottom of the heatsinks.

When the MusicMaster is not in use it should be turned off. Warm up time is approx. 10 mins.

## 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 AND FUSE

Connection to the mains is via the supplied AC cable and connects to the mains input socket at the back of the c.d. player.

Most countries are supplied with a pre-moulded AC mains cable. If not supplied with a pre-moulded cable the three-core cable is colour coded as follows:-

## BROWN ~ LIVE BLUE ~ NEUTRAL GREEN/YELLOW ~ EARTH

Some countries are supplied with two core mains cables, the two-core cable is colour coded as follows:-BROWN OR BLACK ~ LIVE BLUE ~ NEUTRAL

## LOUDSPEAKERS

Loudspeaker connections are made via the four binding posts provided on the rear of the panel. These are clearly marked L(left) R(right) for identical connection to your loudspeaker. The binding posts are also colour-coded black or red for ease of correct phasing.

#### INPUTS

Connection of a suitable pre-amplifier to the MusicMaster is via the two phono sockets located above and to the side of the loudspeaker binding posts. These are marked right (red) and left (black or white)).

## POWER ON

Operating this switch will turn the mains power to the amplifier on and off, indication of power on is shown by the red lamp above the switch. This will remain lit after the amplifier has been switched off until the power supply drains down.

## TURN ON DELAY

Unlike most amplifiers and all other Sugden amplifiers the MusicMaster does not have a relay or time delay circuit. Once the power switch has been depressed the amplifier will start working. A very quiet 'thump' may be heard through the loudspeakers on switch on but this is normal and cannot cause any damage. We have been able to adopt this system due to the amplifiers high stability.

## FUSES

The amplifier is fitted with mains power and L.T. (low tension) fuse protection. Should a fuse blow this is usually an indication that a fault exists either with the amplifier or with the loudspeaker system. It is essential that the fault be located and corrected before any new fuse is inserted.

## 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.

## L.T. FUSES (240-220V)

There are four L.T. Fuses, which are 2 amp fast blow 20mm x 5mm cartridge types. The most common cause of blowing a L.T. fuse is by a short circuit between the loudspeaker connections. IMPORTANT : It is therefore recommended that the amplifier should be switched off during the connection or disconnection of a loudspeaker to the amplifier. If bare cables are used instead of plugs in the loudspeaker input sockets, all loose braid should be removed or kept neat to avoid a short circuit. It is also possible for these fuses to blow under high music conditions into a low loudspeaker impedance of 40hms or less. If, after the correction of the fault a new fuse blows immediately after switch on, do not attempt further replacements. Please seek advice from your supplying agent.

## MAINS POWER FUSE (240-220V)

This is a 1 amp slow blow 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.

## **CONSTRUCTION AND FINISH**

Your amplifier is constructed from selected high quality materials and is designed to give long, 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 damp cloth and a liquid soap solution.

## PERFORMACE TIPS

Your MusicMaster is capable of producing a superb musical performance. A development period of seven years has resulted in a unique pure class A amplifier that is wide bandwidth and dc coupled, capable of reproducing all digital mastered materials as well as analogue.

With a power rating of 16 Watts, loudspeaker choice is essential. We strongly recommend you consider loudspeakers suggested by your retailer who has experience with the MusicMaster. Due to the high current delivery of the MusicMaster the impedance of a suitable loudspeaker is quite wide ranging from 16-4 Ohms. The important specification is loudspeaker sensitivity. This is usually measured in dB's and the higher the dB's the more efficient the loudspeaker. The MusicMaster should be thought of as a high quality, low power tube amp when considering loudspeakers.

A 16-Watt amplifier driving an efficient pair of loudspeakers will produce greater sound pressure levels than a 100-Watt amplifier driving inefficient loudspeakers. Another important factor is room size and you're sitting position to the loudspeakers. We find that in an average sitting room most loudspeakers will work satisfactory of 86dB sensitivity or above.

If you decide to use the power amplifier with another pre-amp other than Sugden, we recommend that it should be a wide bandwidth design otherwise it may compromise performance. Due to the input characteristics of the MusicMaster a pre-amplifier with high output capability and large voltage swing will offer the best dynamics.

Loudspeaker and interconnect cables are important ancillaries and should not be overlooked. Multi-strand cables offer the widest bandwidth and in a correctly balanced system offer the best performance. We do not recommend high capacitance cables or single strand solid core. There are numerous cables available and the MusicMaster deserves high quality ones. Once again your retailer should be able to advise or you.

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