

## SAFETY PRECAUTIONS

The manufacturer cannot be held responsible for damage which is caused by not using the Loop System in compliance with the safety precautions.

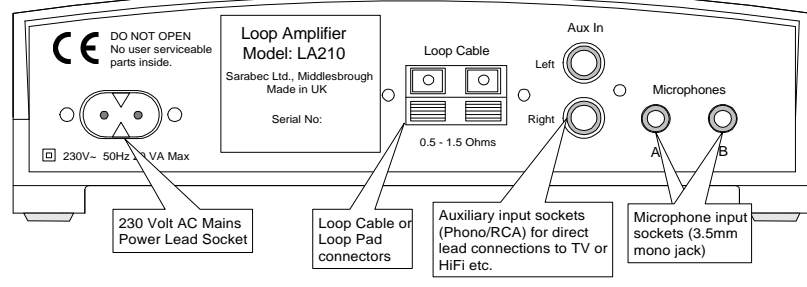
- Do not open casing of Loop Amplifier at any time; **NO** user serviceable parts can be found inside.
- Ensure mains power is disconnected **BEFORE** any connections are made to the Loop Amplifier.
- Do not expose the Loop Amplifier, cable and accessories to rain or any other source of moisture.
- Ensure that there is enough room around the Loop Amplifier for ventilation purposes.
- Do not place the Loop Amplifier close to sources of heat, such as radiators.

### United Kingdom connection to mains supply

- This apparatus must be protected by a 3amp fuse if a 13amp(BS1363) plug is used. Be sure to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.
- **IMPORTANT:** The wires in this mains lead are coloured in accordance with the following code  
Blue: Neutral Brown: Live.
- If you need to change the mains plug supplied, the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug. Proceed as follows: The wire which is coloured **BLUE** must be connected to the terminal marked with the letter **N** or coloured **BLACK**. The wire coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured **RED**. **DO NOT** make any connection to the terminal which is marked with the letter **E** or coloured **GREEN**.

**IF IN DOUBT - SEEK EXPERT ADVICE**

## SECTION 'A' - Installation/Connections



Place the amplifier in a convenient position near to your TV or Audio equipment.

### Loop Cable

- Run the loop cable around the room, leaving one end of the cable with the amplifier, return the other end of the cable to the amplifier (complete the circuit). The cable may be tucked under the edge of the carpet, or fixed to either a picture / dado rail, or skirting board (clips provided). Where the cable passes a door, either fix the cable around the frame or tuck under the carpet.
- Connect both ends of the loop cable to the loop cable connectors, one wire in each connector.
- If excess loop cable is coiled it may affect the frequency response of the system. Excess cable may be cut off as long as a **MINIMUM** of 11 metres (35 feet) is left connected to the amplifier.

### or Loop Pad

- Place the loop pad in a suitable position on the chair to be used for listening. Lay the connecting lead from the Pad to the back of the Amplifier. Make sure that the connecting lead is kept out of the way to prevent injury or obstruction.
- Attach the connecting lead to the loop cable connectors, one wire in each connector.

**Note:** When the loop cable connector buttons are pushed a hole will appear, push the bare wire into the hole. Ensure that only the wire and not the plastic insulation goes in, then release the button.

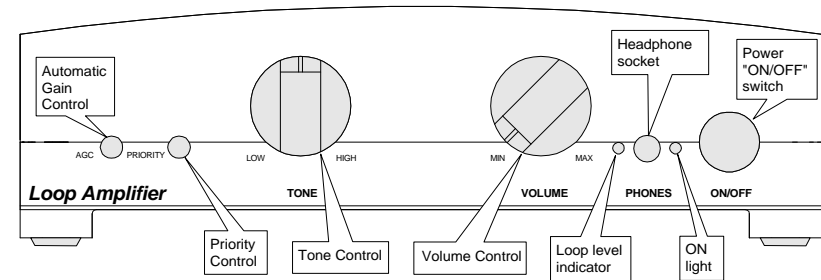
### Microphone

- Plug the microphone lead into one of the microphone sockets on the rear of the amplifier. Place the microphone on the TV speaker grille, or other sound source speaker, using one set of the Velcro™ pads supplied. Peel off the backing paper and press the pad firmly into place. The microphone will then fasten

to it if lightly pressed in place. To remove the microphone pull gently and it will come free allowing its use on other equipment.

### Audio direct connection lead

- As an alternative to a microphone input, the auxiliary input “**Aux In**” sockets may be used to connect to the audio outputs of a television, radio or other audio and video equipment.
- Using the “**Aux In**” sockets will result in a clearer sound from your system where a microphone may pick up unwanted sounds in noisy rooms or if the volume on the TV etc needs to be turned off or down.
- These connecting leads should be plugged in to the “**Aux In Left/Right**” Phono/RCA sockets on the rear of the amplifier. If the leads provided with your system are not suitable, other leads are available from your dealer.
- The SCART or EUROconnector on a TV/Video may be used but an adaptor may be required if it is already being used for connection to other equipment, consult your dealer for advice if necessary
- On some TVs using the headphone socket turns off the internal speaker, on others there is a switch that allows the speaker to be left on.
- In addition, to either the microphone or direct connection lead described above, a microphone may be used to monitor a doorbell or telephone or used by another person to talk to the person using the loop.
- Plug in the mains lead into the socket on the rear of the amplifier and then plug into the mains outlet.



## SECTION 'B' - Operating

- Before switching on ensure that the **VOLUME** control is set to **MIN** and the **TONE** control is set pointing upwards, halfway between **LOW** and **HIGH**. Ensure that the **ON/OFF**, **AGC** and **PRIORITY** buttons are ‘Off’. These switches are pushed once for ‘Off’ and again for ‘On’. When the button is fully out it is ‘Off’.
- Switch on the amplifier by pressing the **ON/OFF** button. The green power light will come on.
- Set the television or other audio equipment to the normal listening level for other members of your household, switch your hearing aid to the “**T**” or “**MT**” position.
- Adjust the loop amplifier **VOLUME** control for the best results in your normal viewing position.
- Adjust the **TONE** control to suit. In the “**HIGH**” position (fully clockwise), the higher frequencies will be emphasised. In the “**LOW**” position (fully anticlockwise) the lower frequencies will be emphasised.
- The **Loop level indicator** is a red light that flickers when the loop output is near maximum. If the light stays on, the maximum loop output is being exceeded and the volume control should be reduced if the sound becomes distorted. This light will only show if a signal is passing through the loop cable or pad.
- The **Headphone socket** may be used with headphones that have a stereo 3.5mm plug fitted. This may be used by a non hearing aid user to receive amplified sound. It can also be used to test that the loop system is set up correctly. Headphones used in this way will not affect the performance of the loop system for hearing aid users. The headphone socket may be used without a loop cable being connected.
- If **AGC** (Automatic Gain Control) is selected, by pushing the button in, the maximum loop output will not exceed a set level, according to the volume control position, despite variations in the sound level. This feature can save adjusting the volume control for different programmes to stop the sound level becoming unnecessarily loud.
- If a microphone is plugged into the microphone socket ‘**A**’ and the **PRIORITY** feature is ‘On’, the signal from microphone ‘**B**’ or the ‘**Aux In**’ will be automatically turned down by any signal received by microphone ‘**A**’.

This feature useful where a microphone is used to monitor a doorbell or telephone bell or with a second person speaking.

- The priority feature should be switched 'Off' if microphone 'A' if it is located in a noisy place, otherwise the priority feature will keep the wanted sound in channel 'B' reduced.

### SECTION 'C' - Problems and Cures

Symptom	Possible cause and remedy
No sound.	<ul style="list-style-type: none"> <li>• Re-check all connections. Check diagrams.</li> <li>• Amplifier not switched on. Switch on at mains socket. Press mains switch. Check green LED light is on.</li> <li>• Microphone not plugged in or other audio source not connected.</li> <li>• Hearing aid not on "T/MT" or "T" facility not working.</li> </ul>
Low sound.	<ul style="list-style-type: none"> <li>• Microphone too far from sound.</li> <li>• Loop cable wired incorrectly. Check diagrams.</li> <li>• Volume control set too low. Turn up volume on amplifier.</li> <li>• Radio or TV volume set too low. Turn up volume on Radio or TV.</li> </ul>
Distorted sound	<ul style="list-style-type: none"> <li>• Loop Volume control too high. (level indicator light on) Turn volume down.</li> <li>• Radio or TV volume set too high. Turn down volume on Radio or TV.</li> <li>• Move microphone away from loud speaker.</li> <li>• Microphone plug/lead damaged.</li> </ul>
Background noise (hum or buzz)	<ul style="list-style-type: none"> <li>• If noise remains when loop amplifier is turned off but hearing aid is still on "T", this is interference caused by other equipment such as TV, fluorescent lights or dimmer switches. With the loop amplifier turned off and the hearing aid still on "T" turn items off in turn until the noise goes away.</li> <li>• If noise stops when the loop amplifier is turned off there may be a fault in the system or microphone lead or noise is being picked up by the microphone.</li> </ul>

If in doubt please contact your dealer for assistance.

### SECTION 'D' - Specification

Power Supply	<ul style="list-style-type: none"> <li>• 230 V AC 20VA Max via Fig 8 mains lead.</li> </ul>
Controls	<ul style="list-style-type: none"> <li>• Rotary <b>VOLUME</b> control to vary the output level.</li> <li>• Rotary <b>TONE</b> control to vary the output tone.</li> <li>• <b>ON/OFF</b> power push button switch.</li> <li>• <b>AGC</b> and <b>PRIORITY</b> function push button switches.</li> </ul>
Input connections	<ul style="list-style-type: none"> <li>• 2 microphone inputs <b>A/B</b>. 3.5mm mono jack plug. DC powered for electret microphones.</li> <li>• <b>Aux In Left/Right</b> line input. Phono/RCA sockets. For direct connection to a TV sound output or other audio source via SCART or other suitable socket.</li> </ul>
Output connections	<ul style="list-style-type: none"> <li>• Push grip connectors for loop cable or loop pad (Labelled: <b>Loop Cable</b>). Loop will give full output with loop resistance between 0.5 and 1.5 Ohms.</li> </ul>
Headphone output	<ul style="list-style-type: none"> <li>• 3.5mm stereo jack for headphones (<b>Phones</b>) 8-60 Ohms.</li> </ul>
Loop output	<ul style="list-style-type: none"> <li>• 2.85A output current @ 100-5kHz. Sufficient to meet BS6083 p4 (IEC118-4) in a loop not exceeding 6.25m(20ft) in width for most domestic situations.</li> </ul>
Loop cable	<ul style="list-style-type: none"> <li>• Single turn loop cable. Standard system supplied with 37m(120ft) 24/0.2 (0.75mm<sup>2</sup>) single core PVC insulated cable and cable clips. Minimum cable length 11m = 0.5 Ohms.</li> </ul>
Indicators	<ul style="list-style-type: none"> <li>• Green Light Emitting Diode (LED) for <b>Power On</b> indication.</li> <li>• Red Light Emitting Diode (LED) <b>Loop Level Indicator</b></li> </ul>
	Product conforms to the provisions of the following European Union Directives : <ul style="list-style-type: none"> <li>• 73/23 Low Voltage Directive</li> <li>• 89/336 &amp; 92/31 Electro Magnetic Compatibility Directives</li> </ul>



# Home Loop System/Loop Pad System

## Model LA210

### Owner's Manual

#### Introduction

The Sarabec LA210 Home Loop System provides a practical solution for hearing aid users to listen more easily to their TV or Audio equipment via the "T" or "MT" facility of their aid.

With no direct connection between the user and the TV the user is able to move freely within the looped area and listen comfortably to the TV or other equipment.

The Home Loop System is used in conjunction with a hearing aid with a switch position marked "T" or "MT", this is found on most 'behind the ear' hearing aids. The system picks up the sound from the TV via a microphone and feeds it to the amplifier. The amplifier passes the sound to a loop of wire around the listening area, which in turn transmits the sound inductively, "magnetic sound waves", to the hearing aid. The user may then adjust the loop volume to suit their own hearing preference without affecting other people.

The Home Loop System is supplied with Loop Cable to be placed around a room that you want to listen in. The Loop Pad System is an alternative to the standard Home Loop System creating either a portable loop system or a localised system where adjacent loop systems could interfere with each other.

The Home Loop System is supplied ready for use with the following items.

1. LA210 Loop Amplifier.
2. Mains lead with fitted plug.
3. 2 Microphones with Velcro™ pads
4. SCART to Phono direct connection lead
5. 37m(120ft) Loop Cable and pack of 50 cable clips  
or  
Loop Pad with 5m(15ft) connecting cable
6. Guarantee Card
7. Owners manual