

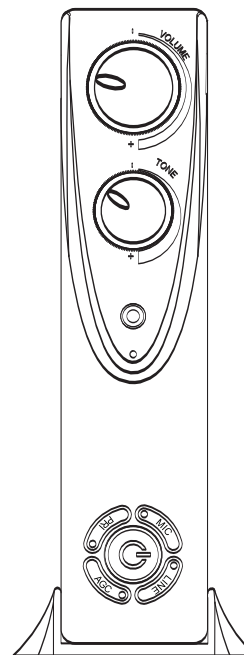
## SPECIFICATIONS

- Power Supply**
- 95-265v 50-60Hz AC 20VA Max via Fig 8 mains lead.
- Controls**
- Rotary VOLUME control to vary the output level.
  - Rotary TONE control to vary the output tone.
  - ON/OFF power push button switch.
  - AGC, PRIORITY, MIC and LINE functions
- Input connections**
- 2x microphone inputs A/B. 3.5mm mono jack plug. DC powered for electret microphones.
  - 2x Aux In Left/Right line inputs. Phono/RCA sockets. For direct connection to a TV sound output or other audio source via SCART or other suitable socket.
- Output connections**
- Push grip connectors for loop cable or loop pad (Labelled: Loop Cable). Loop will give full output with loop resistance between 0.5 and 1.5 Ohms.
- Headphone output**
- 3.5mm stereo jack for headphones (Phones) 8-60 Ohms.
- Loop output**
- 2.85A output current @ 100-5kHz. Sufficient to meet BS EN 60118-4:2006 in a loop not exceeding 6.25m(20ft) in width for most domestic situations (approx 50m<sup>2</sup>).
- Loop cable**
- 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.
- Indicators and**
- Blue Light Emitting Diode (LED) for Power On indication.
- Functions**
- Red Light Emitting Diode (LED) Loop Level Indicator

Sarabec Ltd declares that the LA215 complies with the relevant EU directives. The full declaration of conformance for the LA215 is available from Sarabec Ltd.

# Sarabec

## Loop System **LA215**



A C C E S S T O S O U N D

## OPERATING INSTRUCTIONS

### Quick Setup

1. **Check contents of package.**
2. **Place amplifier near TV or sound source with or without stand.**
3. **Connect audio leads between TV etc. and Loop Amplifier.**
4. **Run loop cable around room and connect both ends of wire to the loop cable connectors on the loop amplifier.**
5. **Plug the mains lead into the back of the amplifier and into a convenient mains socket**
6. **Switch hearing aid to "T"**
7. **Switch on TV and Loop Amplifier; adjust volume/tone to suit listening level.**

## INTRODUCTION

The Sarabec LA215 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 hearing 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 without the distractions of normal listening.

The 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 and some 'in the ear' hearing aids. The system picks up the sound from the TV via a microphone or direct connection 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 Loop System is supplied with Loop Cable to be placed around a room that you want to listen in. The sound can be heard anywhere inside the "looped" area and sometimes just outside the loop as well. A Loop Pad can be used as an alternative to the loop cable to create a localised or portable system to avoid interference with other systems or where confidentiality is concerned.

## 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 cover the ventilation holes of the amplifier with anything.
- Do not place the Loop Amplifier close to sources of heat, such as radiators.

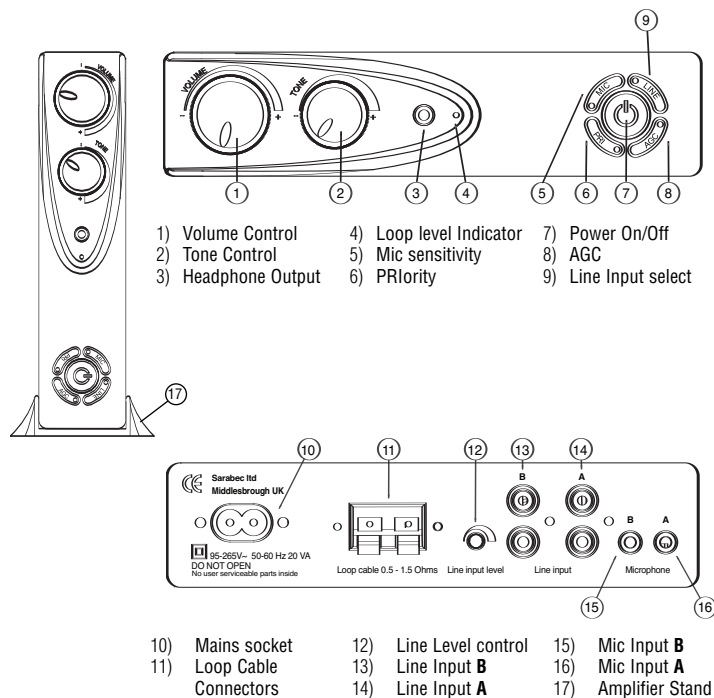
### United Kingdom connection to mains supply

- 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**

## PRODUCT OVERVIEW

An enhanced microprocessor controlled loop amplifier with outstanding sound quality designed to be used with modern audio and video products to transmit the sound direct to your hearing aid. Your hearing aid must be switched to the T position to use the loop system. You can also enjoy the benefits of the loop amplifier by simply plugging a set of headphones into the headphone socket on the front of the amplifier. For best results connect the amplifier directly to your TV or other sound source using the lead kit supplied.



## SETTING UP

A loop system is supplied ready for use with the following items

- Loop Amplifier with stand.
- Mains lead with fitted plug.
- 1 Microphone with Velcro™ pads
- Direct connection lead kit : 1.2m phono – phono lead, SCART to phono adaptor and 3.5mm stereo jack to phono adaptor
- 37m(120ft) Loop Cable and pack of 50 cable clips OR Loop Pad with 5m (15ft) connecting cable
- Guarantee Card
- Operating Instructions

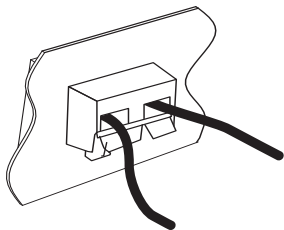
Place the amplifier in a convenient well ventilated area near to the TV or other audio source.

### IMPORTANT

**Always disconnect from mains supply before making any connections**

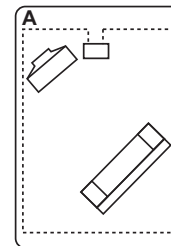
#### Connect Loop Cable or Loop Pad to the amplifier

When the loop cable connector buttons are pushed a hole will appear. Push the bare wire into the hole. Ensure that only the bare wire and not the plastic insulation goes in, then release the button. Figure (B).



#### Loop Cable

- Run the loop cable around the room starting and ending at the amplifier, figure (A). The cable may be tucked under the edge of the carpet, or fixed to either a picture / dado rail, or skirting board with the clips provided. Where the cable passes a door or other obstacle, either fix the cable around the frame or tuck under the carpet. The cable only has to go round the area to be looped, it does not matter about going up and over doors/windows or round fireplaces etc.
- Connect both ends of the loop cable to the loop cable connectors, one wire in each connector.



**Excess loop wire may be cut off, provided a MINIMUM of 11metres (35feet) is left connected to the amplifier.**

#### Loop Pad

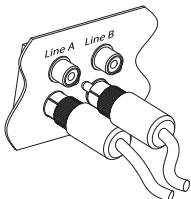
- Place the loop pad in a suitable position on the chair to be used for listening, either on the chair back or under the seating area. Lay the connecting lead from the Pad to the back of the Amplifier. Make sure that the connecting lead is kept out of the way to prevent injury or obstruction.
- Attach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

Connect to TV or other sound source

**For best results connect your loop amplifier with the direct connection lead kit.**

## Direct connections

The preferred method to connect the loop amplifier to your TV or other sound system is to use the line input of the Loop Amplifier. This uses the red/white phono audio connectors on the rear of the Loop Amplifier (13) or (14).



Using the lead kit supplied, connect the lead to a similar set of phono sockets on the rear of the TV or other equipment.

If you are only connecting 1 piece of equipment use the two sockets marked A (14). The second set marked B (13) can be used to connect to a second piece of sound equipment. The line switch (9) selects the sound from either channel A (no light) or B (lit)

If the TV or other sound source does not have a set of phono connectors then use the SCART or jack adaptors accordingly to connect the equipment. If you use the jack adaptor you may find that when plugging into a headphone socket on your TV etc., this turns off the internal speaker. On some TVs there may be a switch that allows the TV speaker to be left on.

The line level control (12) can be used to alter the overall loudness of the line inputs and can be used to balance them with the sound from a microphone if necessary.

## Microphones

If a direct connection is not possible then a microphone can be used to pick up the sound from a TV or other loudspeaker. Microphones can also be used for someone to speak directly into the loop system so they can speak directly to the hearing aid user while they listen to TV. A microphone can also be used in either a classroom or other public speaking situations.

A microphone can be used at the same time as the line inputs to monitor environmental sounds such as a doorbell or telephone bell.

## Power

Plug the mains power lead into the 2 pin socket (10) on the rear of the amplifier and then plug into a mains outlet. Switch on the power at the outlet.

## OPERATION

Before switching on, ensure that the Volume control (1) is set to minimum and the Tone control (2) is set in the normal position (12 'o' clock).

To switch on press the Power button (7), the blue indicator will illuminate. To switch off press the Power button again and the blue indicator will go off.

Set the television or other audio equipment to the normal listening level for other members of the household. Switch your hearing aid to the 'T' position. Adjust the loop amplifier volume for best results.

### Volume control (1)

Use to adjust the volume of the signal received by the hearing aid.

### Tone control (2)

Use to vary the tone of the signal. In the clockwise direction the higher frequencies will be emphasised and in the anti-clockwise direction the lower frequencies will be emphasised.

### Headphone socket (3)

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.

### Loop level Indicator (4)

This indicates that a signal is being transmitted by the loop cable. It flickers with a low volume and remains steady with louder volumes. Testing the system can be done by speaking into a microphone and seeing the light flash, this will indicate that a signal is flowing round the cable.

## FUNCTION BUTTONS

All the function buttons are operated in the same way. Press the button to turn on, the associated led will light. Press the button again to turn off and the led will go out.

### MIC microphone sensitivity (5)

This function adjusts the sensitivity of the microphone channel.

This can be useful if the room is noisy as the background sounds can be reduced. It can also be used to balance the system when used in conjunction with line inputs.

### PRI priority function (6)

If a microphone is plugged into socket B (15) and this function is on, then the any sound received by it will override all the other sounds in the loop system. This can be useful when monitoring a doorbell or telephone bell or if someone wants to attract the attention of the hearing aid user through the loop.

### Power (7)

Turns the amplifier on and off.

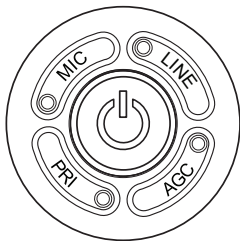
### AGC Automatic Gain Control (8)

When activated this function will limit the loop output to a maximum level set by the volume control.

This can be useful to stop the volume going above a set level that the user might find annoying, such as during commercial breaks on TV.

### LINE Line Input selector (9)

Useful if you want to listen to either a television or a sound system without changing leads. Allows the selection of the line input signal from either channel A or B but not both. If the light is off channel A is selected. If the light is on channel B is selected.



## PROBLEM'S AND CURES

### Symptom

Possible cause and remedy

#### No sound.

- Re-check all connections. Check diagrams.
- Amplifier not switched on. Switch on at mains socket. Press mains switch. Check Blue LED light is on.
- Microphone not plugged in or other audio source not connected.

#### Low sound.

- Hearing aid not on "T/MT" or "T" facility not working.
- Microphone too far from sound.
- Loop cable wired incorrectly.
- Volume control set too low. Turn up volume on amplifier.
- Radio or TV volume set too low. Turn up volume on Radio or TV.

#### Distorted sound

- Line Input Level Control too low. Turn up.
- Loop Volume control too high. (Loop Level indicator on) Turn volume down.
- Radio or TV volume set too high. Turn down volume on Radio or TV.
- Line Input Level Control too high. Turn down.
- Move microphone away from loud speaker.
- Microphone plug/lead damaged.

#### Background noise (hum or buzz)

- 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.
- 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.