

# LA90 Portable Loop System

## Owner's Manual

### Before First Use

1. Check contents of package.
2. Open battery compartment, connect the battery pack & replace battery compartment cover.
3. Charge system before first use for approx 4 hours until charge light goes out.

### Quick Use Guide

1. Place the unit on a suitable surface in a line between the hearing aid user and the speaker.
2. Face the unit with the coloured panel facing the hearing aid user.
3. Ask hearing aid user to switch to "T" or loop program
4. Switch on the unit by pressing the "I" button.
5. The system is now ready to transmit the speech of the person wishing to be heard.
6. The hearing aid user may need to adjust their position and/or hearing aid volume for the best results
7. Switch off the unit by pressing the "O" button.

# Introduction

The LA90 Portable Loop System provides a convenient solution for hearing aid users to listen more easily to conversation in noisy situations via the "T" or loop program of their hearing aid.

A built-in microphone within the unit picks the sound up of the person needing to be heard and transmits a loop signal to the hearing aid user. The speaker and hearing aid user need to be within approximately 1m(3ft) of the unit.

The system can use an additional microphone to enhance the speech of a second person or so that both individuals can have their voices transmitted.

The loop system will transmit a signal both ways so both individuals can receive the signal equally well.

If required the system can be used placed flat on a table in front of the user and a separate microphone placed in a convenient position on a table amongst a group of people that need to be heard.

# Contents

- Loop Amplifier
- Choice of two coloured panels
- Battery pack
- Mains power supply, 16VDC 1Amp
- Loop Installation sticker
- Instructions
- 2 year Warranty

# 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 the main Loop Amplifier at any time; **NO** user serviceable parts can be found inside. Only the battery compartment should be accessed.
- Ensure the power supply is disconnected BEFORE any connections are made to the Loop Amplifier.
- Do not expose the Loop Amplifier 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.

# Product overview

## Front view

- 1) Replaceable Coloured Panel
- 2) System Operating Indicator



## Rear view

- 3) Internal Microphone
- 4) I - On
- 5) O – Off
- 6) Power On/Off indicator
- 7) Loop transmit indicator
- 8) Charging socket
- 9) Charging status indicator
- 10) Microphone Selection Switch
- 11) External input level control
- 12) External input socket
- 15) Battery compartment screws
- 16) Fixing Screw covers
- 17) Kensington lock socket



## Battery pack

Before first use install and charge the battery pack.

Remove both screws (15) and lift out the battery cover.

Connect the battery pack connector to the connector inside the battery compartment.

Ensure that all the wires are carefully placed in the recess otherwise the pack will not fit correctly and the battery cover will not sit correctly.

Replace the battery cover and screws

Charge the battery before first use by connecting the power supply to the charging socket. The indicator will flash red whilst charging. If the battery is totally discharged the maximum charge time is approx. 4 hours. Once the battery has been fully charged the indicator will go out. If the charger is connected when the battery is not fully charged the charger will operate and the indicator will flash for a minimum of 1 hour whilst the battery is topped up.

## Setting up and Use

The loop amplifier should be placed within 1 m of the hearing aid user to give a clear signal. It should be placed such that the vents at the top of the unit are not obstructed.

Face the unit towards the hearing aid user with the coloured panel facing them.

Select the internal microphone position (down) on the Microphone selection switch (10). Switch the unit on by pressing the button 'I' (4), a green indicator will show.

If the person wishing to be heard by a hearing aid user now speaks towards the rear of the unit, the internal microphone the Loop Transmit indicator (7) will flash orange in time with the speech.

The hearing aid user can then switch to "T" or the loop program to receive the loop sound. The user will know that the system is working due to the blue indicator on the front being lit (2).

If the system stops receiving sound for more than 3 minutes the system will turn itself off to conserve battery life. Both indicators (2) and (6) will go out. If you need to continue to use the system then press the "I" button. You may use the system whilst it is connected to the charger if necessary.

## **Using the system where both users have a hearing aid with loop facility**

If both users need the loop facility then a second microphone may be necessary to pick up the sound of the person in front of the amplifier. A tie-clip microphone can be connected to the External Microphone socket (12). Slide the Microphone Selection switch (10) to the central position which will activate both internal and external microphones. Adjust the loudness of the external microphone with the External Level Control (11) to suit the users. Note: the level of the internal microphone can not be adjusted.

## **Using the system with an external microphone**

You may wish to use the system with an external microphone to pick up sounds that are not close to you. Slide the Microphone Selection switch (10) to the top position to select just the external microphone. In this manner you may wish to use the loop amplifier sitting flat on the desk in front of you and with a separate microphone in the middle of a table to pick up the speech of a group of people around a table.

## **Using the system with an external audio source**

The system can be used with an audio source such as a TV or portable player to transmit that sound. A direct connection lead from your audio source should be connected to the microphone external input. You will need to turn the External Level Control (11) to minimum to start with.

## **Battery life**

The system should be able to give up to 6 hours continuous use without recharging. The battery pack should be capable of being recharged at least 500 recharge times without needing to be replaced. Contact your supplier if the usable time is becoming consistently less. New battery packs can be supplied when required.

## Permanent installation

Where the system needs to be securely installed on a desktop there are two covers (16) that can be removed which will reveal four screw holes. These can be used to secure the unit to a counter and the screw heads subsequently hidden.



Stick-on-feet are also provided where the unit needs to be placed onto a surface that needs to be protected. If the unit is to be used horizontally then they can be placed on the back.

A Kensington™ laptop type slot is available for a cable lock to be used with the unit.

# Problems and Cures

<b>Symptom</b>	<b>Possible cause and remedy</b>
<b>No sound.</b>	<ul style="list-style-type: none"><li>• Press "I" power-on switch and check that the system indicator (2) and power on indicator (6) are lit.</li><li>• Connect battery charger if indicators (2) and (6) do not light. Wait 5 minutes before operating with the charger connected.</li><li>• Wrong microphone selected.</li><li>• External Microphone selected but either not plugged in or level control too low.</li><li>• If loop transmit indicator does not flash with speech move closer to the microphone as required.</li><li>• If loop transmit indicator continues to flash but the user can still not hear sound, check hearing aid is on the "T" or loop program.</li></ul>
<b>Low sound.</b>	<ul style="list-style-type: none"><li>• Microphone too far from sound or speak louder</li><li>• With external microphone turn level control up or move it closer to the sound source.</li></ul>
<b>Distorted sound</b>	<ul style="list-style-type: none"><li>• Speak further away from microphones.</li><li>• Hearing aid user too close to the unit.</li></ul>
<b>Background noise (hum or buzz)</b>	<ul style="list-style-type: none"><li>• If noise remains when loop amplifier is turned off but hearing aid is still on "T" or loop program , 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>

# Specifications

<b>Power Supply</b>	<ul style="list-style-type: none"><li>• Internal 12V DC NiMH 1300mAh battery pack</li><li>• External Charger 100-240V 50-60Hz AC 20VA 16.0VDC 1.0A</li><li>• Auto power off after 5 minutes</li><li>• Charge time approx 4 hours</li><li>• Operating time per charge approx 6 hours</li></ul>
<b>Controls</b>	<ul style="list-style-type: none"><li>• External Microphone / Line Input rotary volume control.</li></ul>
<b>Input connections</b>	<ul style="list-style-type: none"><li>• 1 x internal microphone; sensitivity -60dB <math>\pm</math>3dB</li><li>• 1x external microphone line input. 3.5mm stereo jack socket.</li><li>• Socket DC powered for electret microphones.</li><li>• Sensitivity 2-500mV for full output</li></ul>
<b>Loop output</b>	<ul style="list-style-type: none"><li>• Internal Loop Coil, Output power 10W max.</li></ul>
<b>Indicators</b>	<ul style="list-style-type: none"><li>• Blue Light Emitting Diode (LED) for Power On indication on front</li><li>• Green Light Emitting Diode (LED) for Power On indication on back</li><li>• Orange Light Emitting Diode (LED) Loop Level Indicator</li></ul>
<b>Physical Properties</b>	<ul style="list-style-type: none"><li>• Width 200mm, Height 185mm, Depth 75mm</li><li>• Weight: Amplifier 680g with battery pack installed.</li></ul>
	Sarabec Ltd declares that the LA90 complies with the relevant EU directives. The full declaration of conformance is available on request.



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