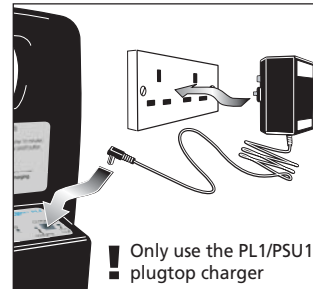


## Charging the amplifier

To ensure the amplifier is ready for use at short notice it should be regularly charged using the PL1/PSU1 plugtop charger.

Simply connect the lead from the PL1/PSU1 plugtop charger to the socket marked **charger** on the rear of the amplifier and the charger itself to a standard 13A mains socket (see right).

Whilst charging, the **charging** indicator on the rear of the amplifier will be lit green and the **batt.status** indicator will flash yellow. When the **batt. status** indicator goes out the amplifier is fully charged and ready for use.



The amplifier can be used as normal when charging or, if desired, remain permanently connected to the charger with no adverse effects.

To maintain the battery in good condition the amplifier should be charged overnight at least once a month or more regularly if its usage demands it.

You must charge the amplifier whenever the PL1's **batt.status** light is lit yellow as this indicates the battery is low. Under normal circumstances, there will be enough battery capacity to use the amplifier for a period of time before it shuts down due to insufficient charge.

If left unused for long periods, e.g. six months, a fully charged battery will slowly discharge itself. If the amplifier is stored away for over a year without recharging, the battery WILL completely discharge itself and will need replacing. This will be indicated by the yellow **batt. status** indicator being permanently lit after repeated attempts to fully recharge it. Note that a fully discharged battery must be replaced by a suitably qualified engineer.

## Accessories & spares available from your distributor

**TEAR-P** "AFILS available" sticker; **CASE1** Robust plastic storage/carry case; **AMT** Remote desk/tie microphone; **PL1/PSU1** Replacement PL1 plugtop charger, UK type; **PL1** Replacement PL1 amplifier (PSU not included); **PL1/BATT** Replacement battery for PL1; **AHHM/H** FoSmeter 'H' combined magnetic field strength meter/loop listening device; **HEAD1** Headphones for use with AHHM/H.

## Portable Induction Loop System Specification

- Internal 12V VRSLA (Valve Regulated Sealed Lead Acid) battery - monitored against deep discharge.
- Expected battery life five years under normal operating/charging conditions.
- 230v a.c. separate plugtop charger included in PL1/K1, PL1/K2, PL1/K3 and PL1/K4 kits.
- Automatic shut-off timer (nominally set to 10 minutes, adjustable to 30 minutes or 60 minutes).
- 0.5m optimum internal microphone operating distance.
- 100Hz-5KHz frequency response and fully automatic compressor (up to 5:1 max).
- Nominal 1 metre operating range at 1KHz providing an AFILS field strength of >100mA/M.
- <1% Total harmonic distortion of output current @1KHz, 1M distance & 100mA/M field strength.
- PL1 dimensions (WxHxD) = 250 x 300 x 100mm approx.
- PL1 weight (including battery) = 1.7kg

# PL1

## PORTABLE INDUCTION LOOP AMPLIFIER

## USER INSTRUCTIONS

**Please read ALL of these instructions before use - failure to do so may result in poor performance**



**IMPORTANT:** The amplifier must be charged for up to 24 hours upon delivery. Note that the amplifier can be used as normal whilst it is charging.



The PL1 is a compact audio-frequency induction loop amplifier capable of generating a loop listening field of more than 100mA/M (the level required by BS 7594 : The code of practice for audio-frequency induction loop systems) at distances greater than 1m from the unit itself.

Suitable for counter, table or desktop use, it is ideal for restricted person to person contact in areas such as banks, post offices, small meeting rooms, reception desks, open plan offices and ticket booths.

Its portable, lightweight design and simple one button operation allows it to be moved easily from location to location and ready for use within seconds, facilitating easy and economical compliance with the Disability Discrimination Act.

## What is an induction loop system?



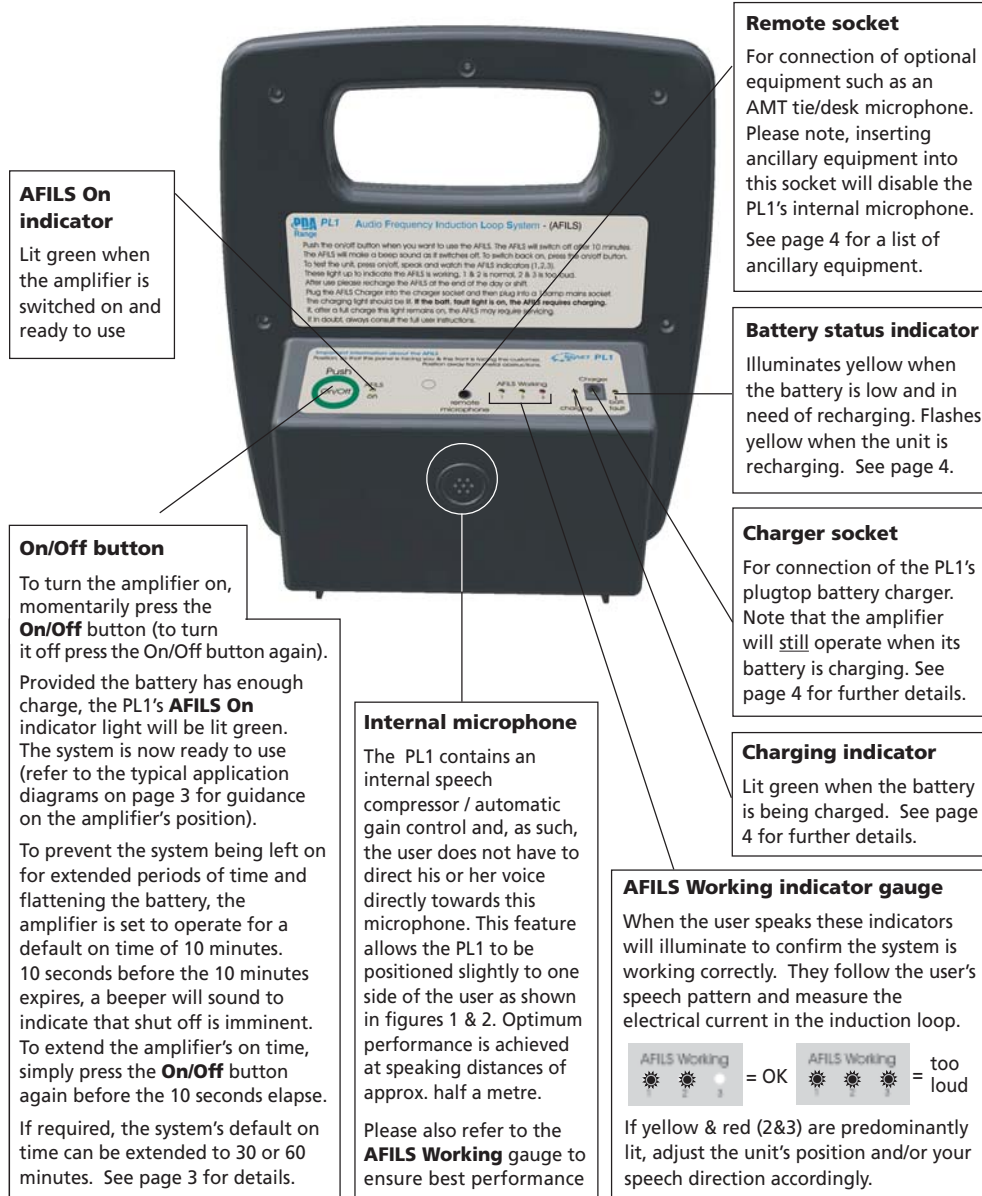
Audio frequency induction loop systems (AFILS) work by transmitting amplified sound to NHS hearing aids. Most hearing aids have a 'T' or 'MT' switch which allows them to pick up the electromagnetic signal generated by an induction loop system. The hearing aid converts this signal into a sound suited to its users specific hearing requirements, allowing them to participate more fully in general conversation, ordering goods or services, etc.

*© Errors and omissions excepted. These instructions are general and cannot be considered to cover every aspect of AFILS installation. No responsibility can be accepted by the manufacturer or distributors of this equipment for any misinterpretation of an instruction or guidance note or for the compliance of the system as a whole. The manufacturer of this equipment operates a policy of continuous improvement and reserves the right to alter product specifications at its discretion and without prior notice.*

## Familiarisation with your portable loop system

All of the amplifier's indicators and controls can be found on its rear. Although short form user instructions also appear on its reverse, we strongly recommend you read the more detailed information on the following pages before using the system.

Although the unit will operate straight from its storage box, it is advisable to charge the PL1 overnight before using it for the first time (see **charging the amplifier** section on page 4 for details).



**AFILS On indicator**  
Lit green when the amplifier is switched on and ready to use

**On/Off button**  
To turn the amplifier on, momentarily press the **On/Off** button (to turn it off press the On/Off button again).  
Provided the battery has enough charge, the PL1's **AFILS On** indicator light will be lit green. The system is now ready to use (refer to the typical application diagrams on page 3 for guidance on the amplifier's position).  
To prevent the system being left on for extended periods of time and flattening the battery, the amplifier is set to operate for a default on time of 10 minutes. 10 seconds before the 10 minutes expires, a beeper will sound to indicate that shut off is imminent. To extend the amplifier's on time, simply press the **On/Off** button again before the 10 seconds elapse.  
If required, the system's default on time can be extended to 30 or 60 minutes. See page 3 for details.

**Remote socket**  
For connection of optional equipment such as an AMT tie/desk microphone. Please note, inserting ancillary equipment into this socket will disable the PL1's internal microphone. See page 4 for a list of ancillary equipment.

**Battery status indicator**  
Illuminates yellow when the battery is low and in need of recharging. Flashes yellow when the unit is recharging. See page 4.

**Charger socket**  
For connection of the PL1's plugtop battery charger. Note that the amplifier will still operate when its battery is charging. See page 4 for further details.

**Charging indicator**  
Lit green when the battery is being charged. See page 4 for further details.

**AFILS Working indicator gauge**  
When the user speaks these indicators will illuminate to confirm the system is working correctly. They follow the user's speech pattern and measure the electrical current in the induction loop.  
AFILS Working 1 2 3 = OK      AFILS Working 1 2 3 = too loud  
If yellow & red (2&3) are predominantly lit, adjust the unit's position and/or your speech direction accordingly.

**Internal microphone**  
The PL1 contains an internal speech compressor / automatic gain control and, as such, the user does not have to direct his or her voice directly towards this microphone. This feature allows the PL1 to be positioned slightly to one side of the user as shown in figures 1 & 2. Optimum performance is achieved at speaking distances of approx. half a metre.  
Please also refer to the **AFILS Working** gauge to ensure best performance

## Typical applications

Figure 1 :  
Typical counter / ticket booth application



Figure 2 :  
Typical tabletop / meeting room application



In order to view people in wheelchairs, etc., it is important you do not position the amplifier directly in front of you. Always position the amplifier so its front is angled towards the hearing aid user without blocking their view. The microphone on the rear of the amplifier has a wide pick up range and will continue to respond to your speech if positioned as shown in the above diagrams.

If multiple portable loop systems are to be used in close proximity, it is possible that the 'field' generated by one system may be picked up by a hearing aid user stood at another. To guard against this, try to ensure there is a gap of at least two metres between each system.

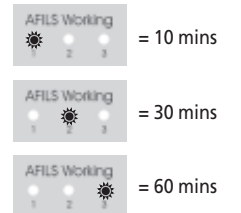
It can be seen from figure 1 that as well as covering tall people, the field of coverage of the AFILS system also extends down to cover small children, people confined to wheelchairs, etc.

## Changing the amplifier's default on time

The amplifier's default on time can be changed from the factory default setting of 10 minutes to 30 or 60 minutes as required.

To do this, make sure the amplifier is powered down and then press and hold down the **On/Off** button and watch the 'AFILS working' indicators step between 1, 2 and 3.

Let go of the button when indicator 1 is lit to set the on time to 10 mins.  
Let go of the button when indicator 2 is lit to set the on time to 30 mins.  
Let go of the button when indicator 3 is lit to set the on time to 60 mins.



For partially sighted users, the PL1 also sounds a stepped frequency beep to aid selection (low = 10 mins; medium = 30 mins; high = 60 mins).

The amplifier's on time commences the moment the **On/Off** button is released. 10 seconds before the end of the session, a beeper will sound to indicate shut off is imminent. To extend the session by a further period, simply press the **On/Off** button again before the 10 seconds elapse.

If the amplifier is switched off at any time, the default on time will return to its previous set rate when it is switched back on. Please note, if the **On/Off** button is pressed whilst the unit is on and NOT in the last 10 seconds of its session time, it will immediately turn off.