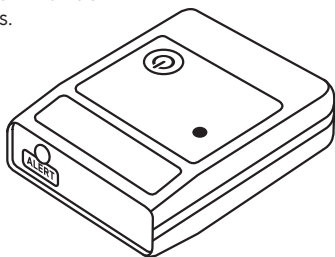


Welcome to your new Personal Noise Level Alert warning device which is one of the family of Personal Alert devices manufactured in the UK by Pamby Electronics Ltd. The other devices relate to Noise Dose, Carbon Dioxide (CO₂ - Indoor) and Nitrogen Dioxide /Ozone (NO₂/O₃ - Outdoor) measurements.

Key Features

- Self-contained unit
- Simple to use
- Long battery life
- Optical and Vibration alert
- Patented anti-knock feature
(Patent No: GB 2 551 724)



What is it?

Your device is a small battery powered unit that measures the current noise level and indicates whether the noise level in your environment is acceptably low or too high (ie. safe or not safe). **In this latter case you should take steps to obtain, and use, some hearing protection.** As the unit measures real time live noise levels, it can also be used to determine when hearing protection is **NOT** required.

How does it work?

The noise level measurement is performed by the built-in highly stable MEMS audio noise sensor and processed by the battery powered internal electronics control unit. The Pamby patented anti-knock feature is used to minimise the effect of any mechanical case noise that can affect readings.

When the noise level exceeds the pre-set thresholds, the **ALERT** lamp changes from **GREEN** to **AMBER** or **RED** (see technical specification). The **ALERT** lamp is extinguished once the noise level falls below threshold for more than 30 seconds.

Each transition of the **ALERT** lamp to **AMBER** or **RED** also triggers the vibrate alert for approximately 15 seconds. This can be suspended by a short press of the Power button.

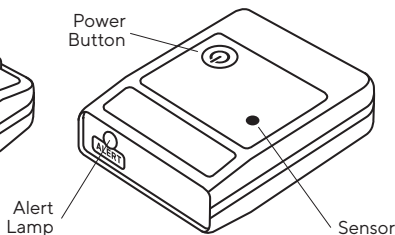
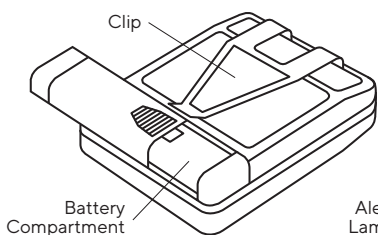


Battery life is in excess of 360h and a Low battery indication is shown by very short **RED** flashes of the **ALERT** lamp.

How do I use it?

Using the device is simplicity itself. Carefully insert your battery into the battery compartment (located at the rear of the unit) taking note of the polarity markings. A quality AA (LR6) alkaline type battery is recommended.

Press the Power button on the front face and wait for **ALERT** lamp to illuminate and flash **GREEN**.



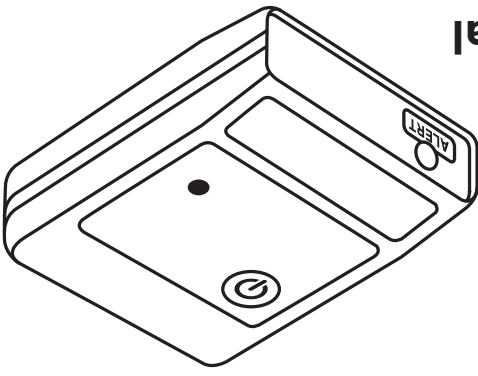
Clip the device onto your clothing and keep it exposed to your environment. Do **NOT** place in your pocket as this will adversely affect the readings and block the line of sight of the **ALERT** warning lamp.

The device constantly checks the noise levels and responds accordingly to the measured noise levels (see section "How does it work?").

The **ALERT** lamp should flash **GREEN** for a normal safe noise environment.

IF ANY OF 2 (AMBER OR RED) WARNING STATES PERSIST, IT IS IMPERATIVE YOU OBTAIN AND USE SUITABLE HEARING PROTECTION.

After use, press and hold the power button until the **ALERT** lamp goes out.



Listen Ear™ Personal Noise Level Alert



Technical Specification

Measuring range:	40dB to 120dB SPL	
Noise dose threshold levels:	ALERT Lamp Colour	Noise Level dBA
	GREEN	Less than 80dB
	AMBER	Greater than 80dB
	RED	Greater than 85dB
Threshold trip times:	1 sec ON, 30 sec OFF	
Microphone type:	High stability digital MEMS microphone	
Calibration:	Factory calibrated	
Weighting:	A weighting IEC 61672:2002 Class 2	
Warning lamp:	Multi coloured LED, Red, Green, Amber	
Warning lamp indicator states:	Lamp Colour	Flash Duration
Low battery	RED	SHORT
Normal (no alert)	GREEN	SHORT
Amber alert	AMBER	LONG
Red alert	RED	LONG
Vibration alert:	Rotating type	
Vibrate time:	15 sec	
Battery:	1x AA LR6 alkaline	
Battery life:	> 360h	
Dimensions:	71mm x 56mm x 18mm (23mm including clip)	
Weight:	70g (with a battery)	
Life time:	5 years	
Environmental:		
Temperature operation:	-40 °C to +65 °C	
Temperature storage:	-50 °C to +70 °C (no battery)	
Humidity operating:	up to 90% RH, non-condensing	
Humidity storage:	up to 90% RH, non-condensing	

IMPORTANT NOTICE

These devices are sold with the intention that a wearer can educate themselves about their environment. They are not intended to make measurements as such but merely indicate the risk to themselves of being in that environment.

PAMBRY DISCLAIMER

Pambry Electronics reserve the right to change specifications or update this user manual at any time without prior notice.

SAFETY INFORMATION

For safe practice only operate in accordance with the instructions in this manual.

WARNING

To avoid personal injury, follow the guidelines below:

- Do not remove cover.
- Use this device only as specified in this manual.
- Do not use around explosive gas or vapour.
- It is your responsibility to contribute to a clean and healthy environment by using the appropriate local return and collection systems.
- The symbol shown below indicates that separate collection systems must be used for any discarded equipment or batteries marked with the WEEE Symbol.



Pambry Electronics Ltd

Pambry House, Units 7 & 8 Ventura Centre, Ventura Place,
Upton Industrial Estate, Upton, Poole, Dorset BH16 5SW UK
Tel: **01202 624910** Email: **sales@pambry.co.uk** **www.pambry.co.uk**