Sensory impairment solutions

What are sensory impairment solutions?
Sensory impairment solutions are devices that can be added to telecare systems to support both visually and hearing impaired users to live safely at home.

They include devices such as vibrating pagers, sounder and flash beacons to ensure the user or carer is alerted when an alarm call is raised via the Lifeline home unit or other Tunstall telecare enabled system. This helps to provide added reassurance and protection to the user both during the day and at night.

Why are sensory impairment solutions needed?
According to the Royal National Institute for the Blind, there are around 2 million people in the UK with a sight problem. Among these 2 million people, over 370,000 are registered as blind or partially sighted. It is also estimated that an additional 20% could be eligible for registration but have not yet done so. 45% of blind or partially sighted adults live alone.

Age-related eye conditions are the most common cause of sight loss in the UK. 95% of people with sight problems in the UK are 65 or over. There are also nearly 9 million deaf and hard of hearing people with 2 million people using hearing aids.

This represents a large proportion of the UK population and in particular a large proportion of existing telecare users. Due to their impairment it is critical that people living with such a condition, in particular those living alone, are alerted quickly when an alarm is generated within their home.
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**DDA Pager Solutions**

The DDA Pager solution alerts the user to different events that occur in their home ranging from daily events such as incoming telephone calls and visitors at their door to potentially dangerous situations such as smoke detector activations. When a telecare sensor is activated, the Lifeline sends a signal to the pager, via a transmitter, which alerts the wearer by vibrating and lighting coloured LEDs. Unlike a number of similar systems, this pager solution doesn’t require a radio licence.

**Transmitter devices**

**MyLife X10+DDA adapter**

Compatible with the Lifeline Connect+, the MyLife adapter makes it possible for the individual event e.g. smoke detector that has generated the alarm to be recognised by the user enabling them to respond quickly and appropriately to the situation. The different events can be identified by the user by the pattern of vibration used and the colour of the LED that has been activated.

**DDA Transmitter**

The DDA Transmitter can be used instead of the MyLife X10+DDA adapter and provides compatibility with the Lifeline 4000+. However, only one vibration pattern and one LED can be activated meaning that individual telecare alarms and events cannot be identified.

**Pagers**

**Standard DDA Pager**

The Standard Pager is ideal for situations that require a longer range (up to 200m) from the transmitting device (e.g. larger homes) and also where the time between battery charges (up to 1 week) needs to be greater. Worn on a belt or clipped to clothing, the pager vibrates and lights coloured LEDs when a telecare event if generated.

**Wrist Pager**

The Wrist Pager is a small, discreet paging device that is designed to be worn like a watch. It increases the comfort of wearing the device encouraging the user to wear the device at all times when they are in or around their home. Like the standard pager, the wrist pager vibrates and lights coloured LEDs when a telecare event is generated.

**Accessories**

**Pager Charger and Pillow Alert Pad**

Each pager is supplied with a charging cradle to recharge the pager battery at night. The cradles are also designed to be connected to a pillow alert pad. When the pagers are placed in their chargers any incoming alerts automatically vibrate the pad that is placed under the user’s pillow to alert them to telecare events during the night.

**Flashing Beacon**

The Flashing Beacon can be added to the overall solution to provide visually impaired users with an additional clear and distinct warning. The beacon flashes brightly when any telecare event is generated and also lights one of its LEDs to help the user identify the event that has generated the alarm.
Other solutions

X10
X10 provides the ability to support people with visual and hearing impairments by turning on/off lights and appliances when a telecare alarm is generated. X10 controllers can be used in conjunction with bed/chair occupancy and property exit sensors. X10 can also be used more widely for any telecare event when using a MyLife adapter with a Lifeline Connect+ home unit. X10 is commonly used to turn on a bedside light when a user leaves their bed at night to go to the toilet. Using it in this way helps to prevent falls by lighting the way to the bathroom.

User/carer pager
This pager solution provides hearing impaired users with immediate notification of alarm call activation in supported and individual housing, as well as door entry alerts to ensure that the appropriate action is taken. The solution provides up to 500 metres of radio range therefore is ideal for use in instances where the user/carer requires alerts across a wider area*.

On generation of an alarm or door entry call, the body worn pager will begin to vibrate to attract the attention of the user. The pager will then provide visual identification of the type of call being raised on an illuminated display, to enable the user to respond immediately.

Each pager is dwelling specific thereby ensuring that users in supported housing schemes will only receive the alerts relevant to them.

* Requires transmitter licence.

Sounder beacon
The sounder beacon combines visual indication together with a loud siren in order to alert people with hearing or visual impairments to a certain type of alarm activation (e.g. smoke detector) or to an incoming telephone call. The sounder beacon can be connected to the Lifeline Connect+ or other Tunstall telecare enabled systems. Two colours (red and blue) are available in order to differentiate between alarm types.

Visual call beacon
The visual call beacon provides visual indication only, in order to alert users to selected types of alarm activation (e.g. smoke detector) or to an incoming telephone call. Can be connected to a Lifeline Connect+ home units or other Tunstall telecare enabled systems.

Big button phone
An easy to use big button phone is available to aid people with limited dexterity to make and receive telephone calls. The phone with its large black buttons with white numbering, hearing aid compatibility, visual call indicator and earpiece volume control is also ideal for those with hearing and visual impairments.
Technical details

**DDA Transmitter:**
- **Weight:** 142g
- **Dimensions:** 60 x 95 x 28mm (WxHxD)
- **Battery:** 9V PP3 alkaline
- **Battery life:** 5 years
- **Range:** Up to 200m (line of sight)
- **Compatibility:** Lifeline Vi+, Connect+, 4000+
- **Part Number:** D6866001A

**Standard Pager:**
- **Weight:** 70g
- **Dimensions:** 57 x 86 x 29mm (WxHxD)
- **Battery:** 1.2 V AAA NiMh rechargeable
- **Battery life:** 1 week on one charge
- **Range:** Up to 200m (line of sight)
- **Part Number:** Standard Pager D6866003A Standard Pager Charger D6866004A

**DDA Flashing Beacon:**
- **Weight:** 70g
- **Dimensions:** 70 x 140 (WxD)
- **Power:** 7.5V DC
- **Range:** Up to 200m (line of sight)
- **Part Number:** DDA Flashing Beacon D6866002A

**Other Solutions**

**MyLife X10:**
- **Compatibility:** Lifeline Vi+ & Connect+
- **Part Number:** 52900/52

**MyLife X10+DDA:**
- **Compatibility:** Lifeline Vi+ & Connect+
- **Part Number:** 52900/53

**Wrist Pager:**
- **Weight:** 27g
- **Dimensions:** 38 x 12 x 49mm (WxHxD)
- **Power:** 1.2V VARTA V40H rechargeable
- **Battery life:** 30 hours on one charge
- **Range:** Up to 100m (line of sight)
- **Part Number:** Wrist Pager Solution 9000/100 (includes pager, charger, pillow alert pad)

**Pillow Alert Pad:**
- **Weight:** 70g
- **Dimensions:** 57 x 86 x 29mm (WxHxD)
- **Battery:** 1.2 V AAA NiMh rechargeable
- **Battery life:** 1 week on one charge
- **Part Number:** Pillow Alert Pad D6866005A