Ambient Temperature Sensor

Installation Guide

Tunstall

Enabling independent living

Contents

1. Features and Introduction

The Ambient Temperature Sensor is a solution to monitor and maintain a healthy temperature within the home. It supports independent living by maintaining a pre-determined temperature to provide a comfortable living environment and monitor for unexpected changes.

It provides a unique, flexible solution for individuals at home and for grouped housing developments. It is compatible with Lifeline home units and other Tunstall systems.

The wireless, wall mounted radio sensor is designed to monitor a high and low temperature threshold that can be pre-set using the LCD screen and simple configuration menu.

The Ambient Temperature Sensor sends alarm signals to the Lifeline home unit or other Tunstall systems to provide early warnings of potentially hazardous temperatures. The 24-hour monitoring centre or carer can then take appropriate action.

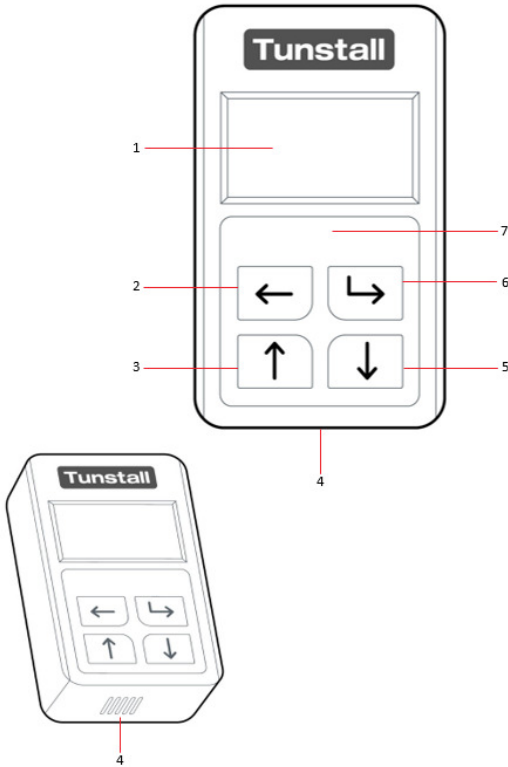## Your Ambient Temperature Sensor

The sensor is configured using the built-in buttons and LCD screen. When the high and low temperatures have been selected, the sensor will send a message to the home unit identifying when these temperature thresholds are crossed.

It has been designed to detect two ambient temperature situations; high and low.

• The high temperature alarm is generated if temperatures passes above the high temperature level for more than 5 minutes.

The low temperature alarm is generated if temperatures passes below the low temperature level for more than 5 minutes.

Illustration Legend

	Ambient Temperature Sensor
1	LCD Screen
2	Back Button
3	Up Button
4	Air Vent
5	Down Button
6	Select Button
7	Red LED

2. Getting Started

What's in the box?

1 Ambient Temperature Sensor

2 Velcro Pads

1 Technical Insert

How to install

The Ambient Temperature Sensor should be installed in a clean, dry environment and for optimum radio performance should be mounted away from metallic surfaces.
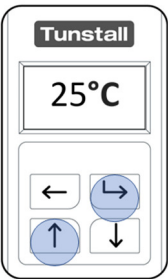
The Ambient Temperature Sensor can be fastened to the wall by a variety of methods – integral keyhole slots or Velcro Pads. The installer should determine the most appropriate method.

Unlocking the Ambient Temperature Sensor
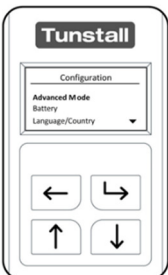
To unlock the Ambient Temperature Sensor:
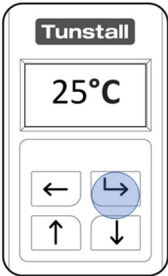
Press the "Select Button" once.

Press and hold the "Up Button" and the "Select Button"; keep holding both buttons.

The Ambient Temperature Sensor will then display "Change Settings" which can be confirmed by pressing the "Select Button".

The Ambient Temperature Sensor is now unlocked and can now be configured.

Language Selection

The Default language for a new Ambient Temperature Sensor is English (UK). You can change the language setting on the Ambient Temperature Sensor if it is incorrect or if you have accidentally changed the language.
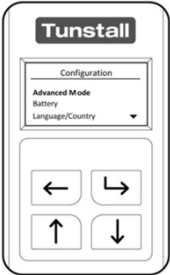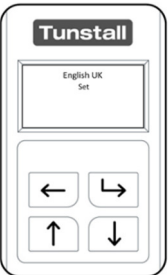
After unlocking the Ambient Temperature Sensor, the "Configuration Menu will be displayed.

Press the "Down Button" to navigate to the "Language/Country" Menu and press the "Select Button".

The "Language/Country" Menu displays a list of available languages. Navigate this list using the "Up Button" and the "Down Button" and use the "Select Button" to choose the new language.

The Ambient Temperature Sensor will confirm on screen that the newly selected language has been set. Once completed the Ambient Temperature Sensor will return to "Configuration" Menu.

Configuration Menu

The "Configuration" Menu is accessed after **unlocking the Ambient Temperature Sensor** and contains a list of the options used to Ambient Temperature Sensor set it up.

|	
Advanced Mode:	Changes can be made here to the LCD Always On, Repeat Alarm, temperature limits and measurement scale.
Battery:	Used to configure AP and ALB and displays the status of the user changeable battery.
Language:	Displays a list of selectable display languages which the Ambient Temperature Sensor can operate in.
Send Message:	Sends a test radio message from the Ambient Temperature Sensor to the Tunstall system. This will generate an alarm on the Tunstall System.
Setup Summary:	Displays the current sensor configuration.
About:	Displays the current version firmware.
Exit:	Exits the Configuration Menu. The sensor is now active.

Advanced Mode

To access the "Advanced Mode" menu:

After **Unlocking the Ambient Temperature Sensor**, the "Configuration" Menu will be displayed.

The "Advanced Mode" Menu will be selected when first opening the "Configuration" Menu press the "Select Button".
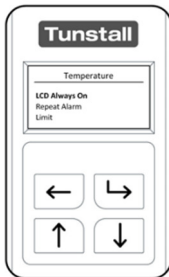

The "Advanced Mode" Menu allows the Ambient Temperature Sensor to be configured for use. Settings that can be changed here are: LCD always On, Repeat Alarm, Temperature Limits and Scale.
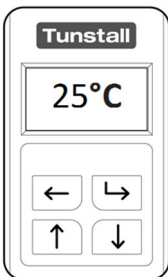
LCD Always On

To change the LCD Always on option:
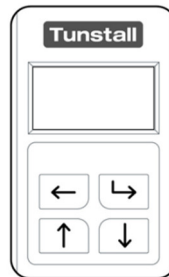
After **Unlocking the Ambient Temperature Sensor** and entering "**Advanced Mode**", the "LCD Always On" menu is highlighted, press the "Select Button" to enter.
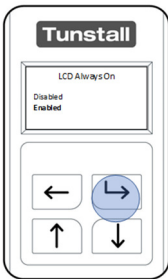
The two options displayed are "Enabled" and Disabled". By selecting "Enabled" the sensor will always display the current temperature. By selecting "Disabled", in normal operation the display will turn off after 30 seconds of no user interaction. The current temperature can then be displayed by pressing the "Select Button".
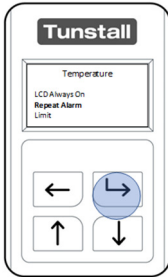
LCD Always On Enabled

LCD Always On Disabled

Repeat Alarm

The "Repeat Alarm" functionality enables the Ambient Temperature Sensor to either:

ON - Generate an alarm when a temperature threshold has been reached and repeat this alarm every 24 hours until the temperature returns to normal.

OFF – Generate a single alarm when a temperature threshold has been reached.
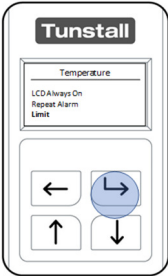

After **Unlocking the Ambient Temperature Sensor** and entering "**Advanced Mode**", press the "Down Button" once and when "Repeat Alarm" is highlighted press the "Select Button" to enter.


The two options for "Repeat Alarm" are "On" or "Off". Use the "Down Button" or "Up Button" to change the option and the "Select Button" to confirm.
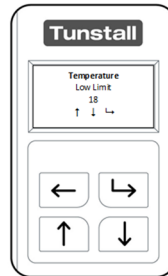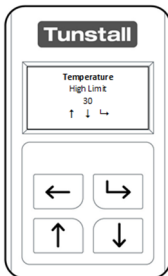
Limit

The "Limit" Menu is used to configure the temperature thresholds that when reached will generate an alarm radio message to the Tunstall system.

After **Unlocking the Ambient Temperature Sensor** and entering "**Advanced Mode**", press the "Down Button" and when "Limit" is highlighted press the "Select Button" to enter.
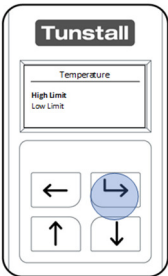
The two options within the "Limit" menu are "High Limit" or "Low Limit". Use the "Down Button" or "Up Button" to change options and the "Select Button" to confirm.

Using the "Up Button" and the "Down Button" Set the temperature limit; for high temperature the range is 25°C to 50°C (77°F to 122°F) for low temperature it is 0°C to 24°C (32°F to 75°F). Use the "Select Button" to confirm the desired threshold.

Scale

The Scale menu allows the measuring scale to be changed between either Celsius or Fahrenheit.

After **Unlocking the Ambient Temperature Sensor** and entering "**Advanced Mode**", press the "Down Button". When "Scale" is highlighted press the "Select Button" to enter.
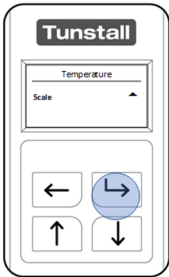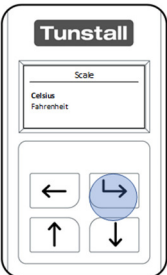

The two options within "Scale" are "Celsius" or "Fahrenheit". Use the "Down Button" or "Up Button" to change the option and the "Select Button" to confirm.
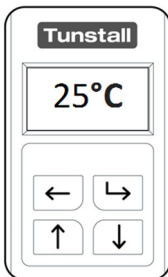
Temperature displayed in Celsius
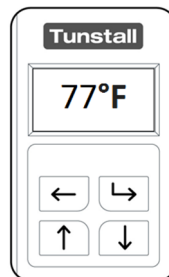
Temperature displayed in Fahrenheit

Battery

To access the Battery menu:

After **Unlocking the Ambient Temperature Sensor**, the "Configuration Menu will be displayed.

Press the "Down Button" once to navigate to the "Battery" Menu and press the "Select Button".

The Battery Menu" has three options; **ALB**, **AP** and **Status**. The Ambient Temperature Sensor must operate in either ALB or AP Mode.

ALB – Auto Low Battery
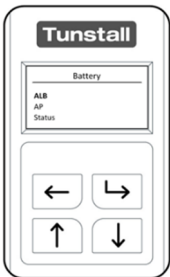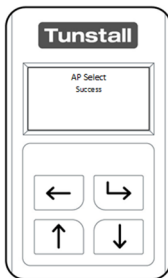
When the battery is low the Universal Sensor will automatically notify the monitoring centre. The battery should be replaced within 2 weeks of receiving an ALB warning. The ALB warning will be generated every 7 days or upon generating a radio message until the battery has run out.

AP – Auto Presence

On supporting Tunstall systems, Auto Presence provides additional checks to provide reassurance that the Universal Sensor is functioning. When AP is active the Universal Sensor sends a signal to the home unit every 4 hours.

If the Tunstall System has not seen 18 consecutive AP messages, it will generate an AP failure message which informs the monitoring centre there is a problem with the Universal Sensor e.g. it has been removed from the property, it has stopped working or the battery has been removed.

If the Universal sensor is used in AP mode and removed from the property, the device will need to be deleted from the system, otherwise AP failure alarms will continually be generated.

Status – Battery

Using the "Status" Menu it is possible to be check the status of the internal battery. The battery will either report "Normal" or "Low". When "Low" is displayed the battery should be replaced and at this stage the Ambient Temperature Sensor will have sent an ALB alarm to the monitoring centre.
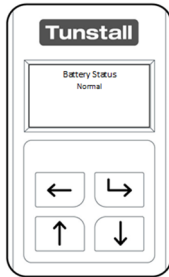
Battery Status: Normal   Battery Status: Low
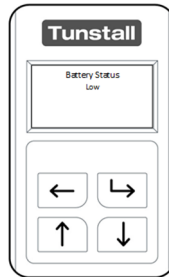
Send Message

Once the sensor has been configured it is recommended to test the connection of the Ambient Temperature Sensor to the Tunstall system; this can be done using the "Send Message" Menu.

After **Unlocking the Ambient Temperature Sensor**, the "Configuration" Menu will be displayed.

The "Advanced Mode" Menu will be selected when first opening the "Configuration" Menu press the "Down Button" to navigate to the "Send Message" Menu and press the "Select Button".
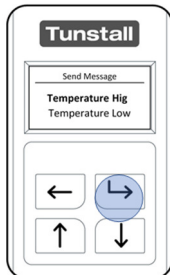
The Ambient Temperature Sensor provides two radio message options; Temperature High and Temperature Low. Press the "Select Button" to send the selected radio message or the "Back Button" to exit.
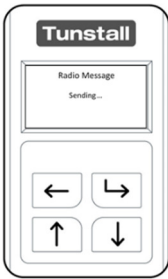
After pressing the "Select Button" the Ambient Temperature Sensor will send the radio message to the Tunstall system.

When the radio message has been sent; it will confirm the status on screen. If **configured** correctly to the Tunstall system this will now alarm in the transmitted radio type (e.g. high or low temperature).

Setup Summary

After unlocking the Ambient Temperature Sensor, the "Configuration" Menu will be displayed.

Press the "Down Button" to navigate to the "Setup Summary" Menu and press the "Select Button".

The high and low temperature values will be displayed, pressing the "Down Button" again will display the scale, the status of the always on display and the battery mode.

Pressing the "Down Button" will then display the Sensor ID. After 8 seconds the Ambient Temperature Sensor will revert to the "Configuration" Menu.

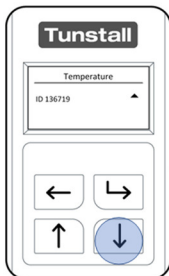## About

The About Menu displays the installed firmware version.

After unlocking the Ambient Temperature Sensor, the "Configuration" Menu will be displayed.


Press the "Down Button" to navigate to the "About" Menu and press the "Select Button".

After displaying the installed firmware version, the Ambient Temperature Sensor will return to the "Configuration" Menu after 5 seconds.

How to reset the Ambient Temperature Sensor

A reset returns all the settings on the Ambient Temperature Sensor to factory default. The Sensor will then need to be programmed before it can be deployed.
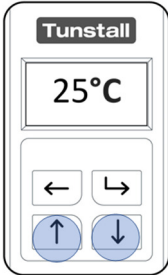
With the LCD activated press and hold the "Up Button" and "Down Button" for 30 seconds.

After holding for 30 seconds the LCD will display "Confirm Reset". Press the "Back Button" to cancel and the "Select Button" to confirm.
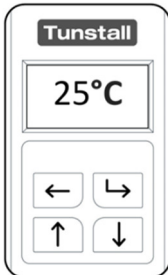
After a reset the unit will go to the displaying the current temperature; with the language set as UK English. The Ambient Temperature Sensor will need to be configured before it is installed.

3. How to program to the Tunstall System

The Ambient Temperature Sensor enables Plug and Play programming. This is achieved by putting the Tunstall system into radio trigger assign mode and then generating a radio transmission from the Ambient Temperature Sensor.

1. Press the cancel button on the Tunstall home unit until it beeps (some units will announce 'programming mode').

2. Press the cancel button again until the Tunstall home unit beeps.

3. Then activate the Ambient Temperature Sensor by using the built in "**Send Message**" functionality. The LED on the Ambient Temperature Sensor should flash to confirm a radio transmission has been sent.

4. The Tunstall home unit should beep to confirm the Ambient Temperature Sensor has been programmed to the unit.

Other Tunstall Systems

Please consult the relevant installation manuals.

4. Notes and Warnings

Service Information

The Ambient Temperature Sensor contains no user serviceable parts. It contains an EVE ER14505V 3.6V battery with up to 5 years (typical usage). This battery is replaceable and when it has expired it should be disposed of according to current local regulations.

Changing the battery

To change the battery of the Ambient Temperature Sensor;

- Place the sensor face down on the desk.

- Remove the battery cover, lifting the cover up from the centre of the Sensor.
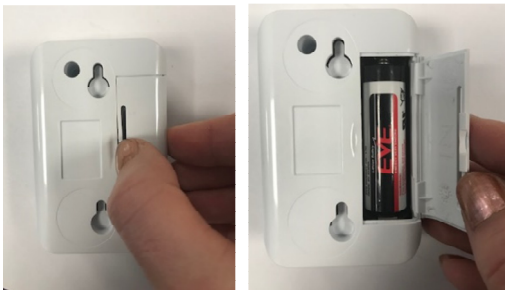
- Eject the current battery and dispose of according to local regulations.

- Insert a new 3.6V AA Battery. Tunstall recommends using the EVE ER14505V

- Replace the battery cover; replacing the outside prongs in first, ensuring that it is securely fitted.

- The Ambient Temperature Sensor will power on retaining its previous operational mode.

Note: Following a battery change remember to check the configuration is still relevant to the user.

Note: Remember to wake the screen using the "Select Button" before beginning programming.

Warning – During battery replacement the Ambient Temperature Sensor will not be able to generate a help call.

5. Compliance and Standards

Radio Frequency:	869.2125MHz
Radiated Power:	Less than 1 milliwatts
Area of Use:	Europe
Environmental Group:	Group 2 – Indoor in general
EMC:	EN 55032
	EN 301 489-1
	EN 301 489-3
	EN 50130-4
Radio:	EN300 220-3-1
	EN 300 220-2
Safety:	EN60950-1
Design, Manufacture Installation and Service:	ISO 9001:2008

Declaration of conformity

Tunstall declare that the radio equipment is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following address: **uk.tunstall.com/approvals**

Tunstall