Lifeline Vi/Vi+
Installation and Programming Guide

Tunstall

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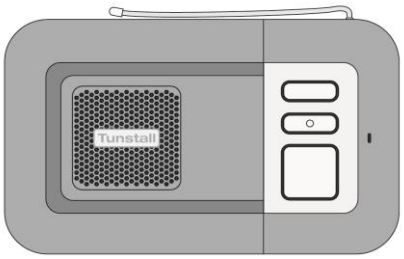
Installation Guide

What's in the box

When you open the box for the first time, please ensure you have all of the following:

Home unit



Personal radio trigger MyAmie

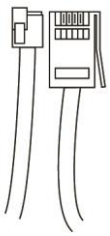
Personal radio trigger wearing options

Neckcord

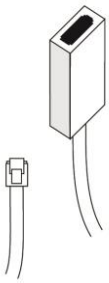
Wrist strap

Leads and adaptors

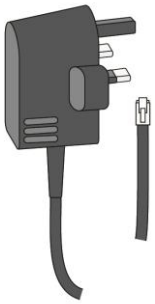
ⓐ Telephone lead (3 metre cable)



ⓑ Telephone adaptor



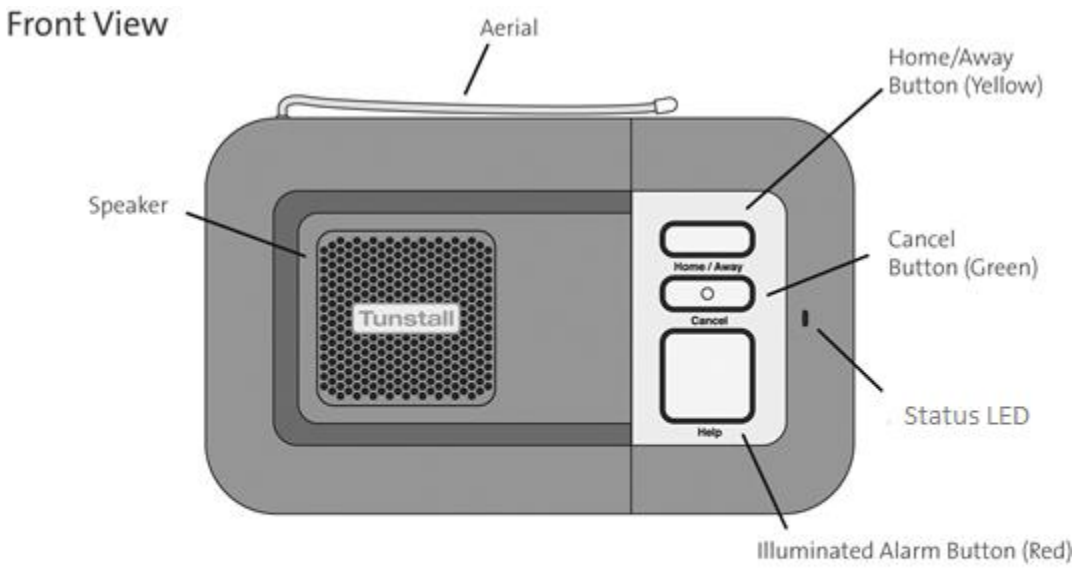
ⓒ Mains adaptor (3 metre cable)

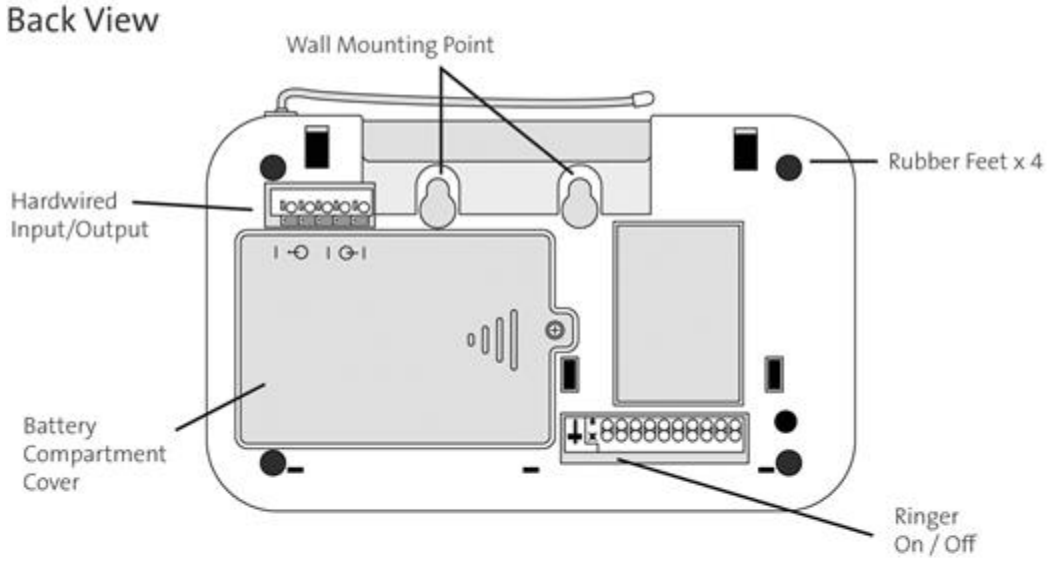


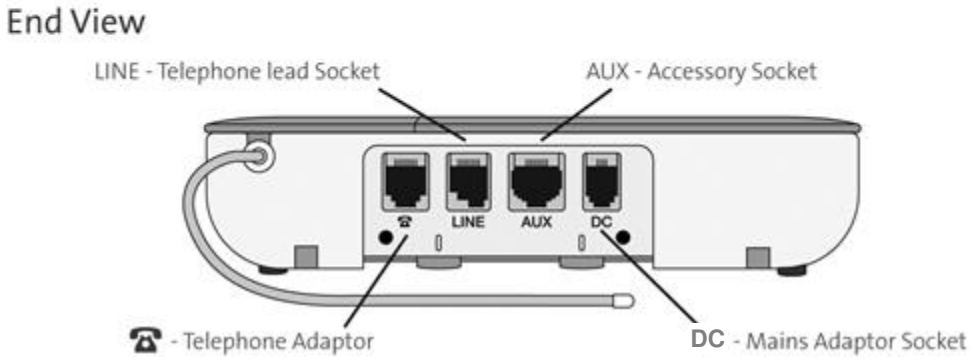
Installation and User Guide

If any of the above items are missing, please contact your supplier.

Your home unit





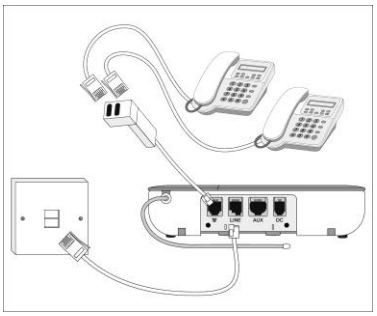


For your safety - Installation advice

IMPORTANT: Connect the home unit to the first telephone point in the house with all other extensions wired into the unit to ensure proper operation even when another telephone is in use or off hook (see below for more detailed instructions).

All equipment requiring a link to the telephone line MUST be connected as follows:

Extension phones/smart boxes/modems/TV set top boxes



All telephones in the home MUST be plugged directly into the home unit using telephone adaptor ⓑ and the home unit socket labelled ☎ to enable the home unit to disconnect extension telephones when raising an alarm call. A multiple telephone adaptor may be required to connect more than one telephone (not supplied).

Cordless phones

Ensure that the main base/charger which is registered to all other handsets in use, is connected directly to the home unit as above.

Safe Socket™

Alternatively a Safe Socket (part number 36900/55) can be installed on all extensions used by other equipment, except the Lifeline, to ensure that alarm calls are raised even when the line is being used by another extension. Contact your supplier for more information.

Broadband

Please ensure a high quality ADSL filter is in use and the home unit is connected to the phone (analogue) socket on the filter. Please contact your supplier for further advice if necessary.

Dos

- Keep the home unit connected to the mains power at all times.
- Connect the home unit to the first telephone point in the house with all other extensions wired into the unit to ensure proper operation even when another telephone is in use or off hook.
- Contact your supplier as soon as possible after the LED on the personal radio trigger indicates a low battery.

Don’ts

- Expose the home unit to water or other liquids.
- Connect cables other than those supplied with the home unit.
- Place the home unit next to something that makes lots of noise, such as next to a television, radio or washing machine.
- Place the home unit close to a heat source e.g. cooker or large metal objects e.g. microwave.

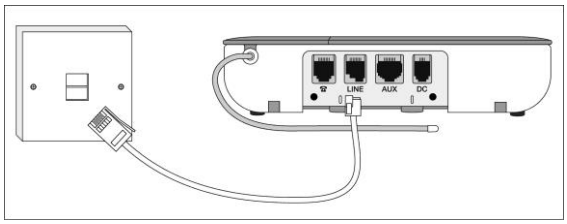
Quick start guide

IMPORTANT: In order to function the home unit must be programmed correctly to a monitoring centre or personal recipient (please see programming section).

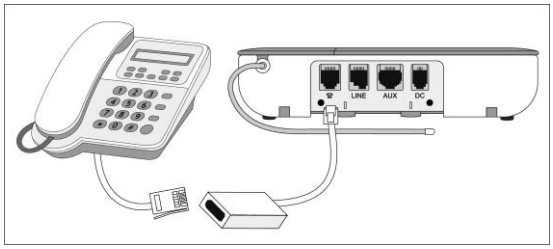
Step 1 - Connecting the leads and adaptors

Please follow the steps below to plug the leads correctly into the home unit.

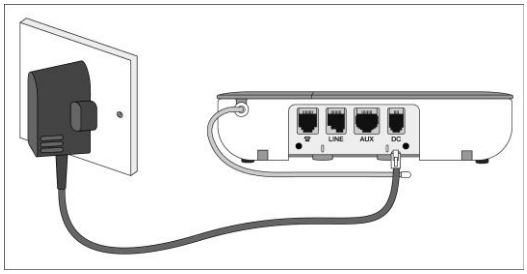
Step A – Plug the telephone lead ⓐ into the home unit socket labelled LINE and the telephone wall socket.



Step B – Plug the telephone adaptor ⓑ into the home unit socket labelled ☎ and then plug all required telephones / equipment into the telephone adaptor ⓑ using a multi socket extension if required (not supplied). See page 5 for more details.



Step C – Plug the mains adaptor ⓒ into the home unit socket labelled DC and then connect to the mains power. Note – ensure the mains power is switched on.



NOTE: Only use with the power adaptor supplied with the home unit (part number XD5206005).

Step 2 – Testing/Commissioning

Ensure the home unit is programmed to the correct telephone numbers (see page 15/16), then press the red alarm button on the home unit and ensure it raises a call through to the monitoring centre/personal recipient. Also remember to test the personal radio trigger by pressing its red button and ensuring a call is raised. The personal radio trigger test should be done at various points around the property to ensure the radio range provides sufficient coverage for the user to raise an alarm call using their personal radio trigger. Remember to also set the time on the home unit if you are using features that rely upon the home unit's clock. Also test any other radio devices that are programmed to the unit E.G. Smoke detector

Step 3 – Adding personal triggers/telecare sensors

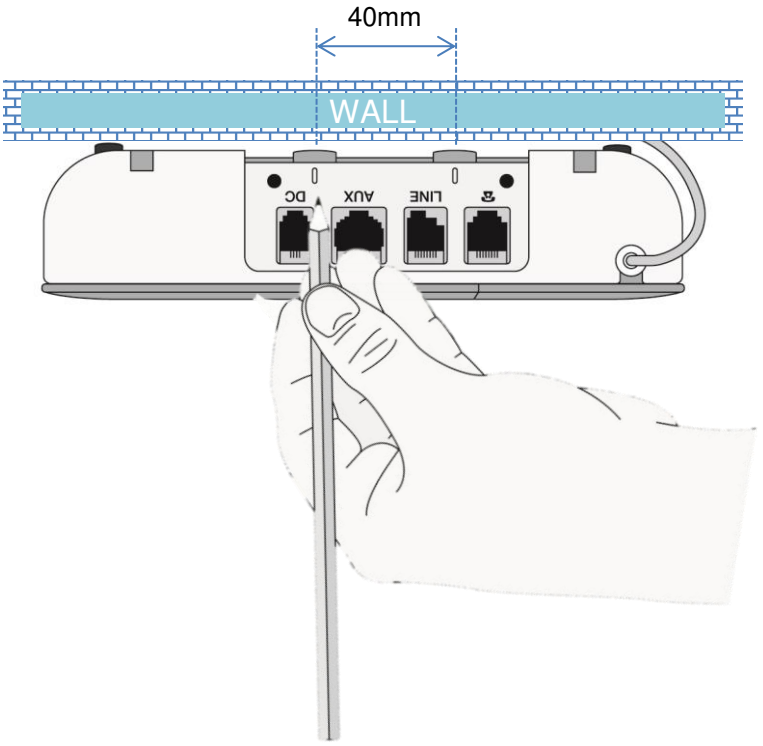
For more information on adding personal triggers, please see page 11 of this guide. The programming section of this guide also provides further information.

Step 4 – Ready to use

Once successfully tested, the home unit is ready for use.

Wall mounting (quick)

Decide where you want to situate the home unit. Remember it should be within 2 metres of a mains power socket and the main telephone line socket. Then hold the Lifeline Vi in a horizontal position and use the two wall mount markers (see diagram below) to accurately mark the wall. Drill 2 holes 40 mm apart, firmly attach screws (not supplied) leaving the screw heads protruding the surface and then locate the wall mounting points on the back of home unit with the screws.



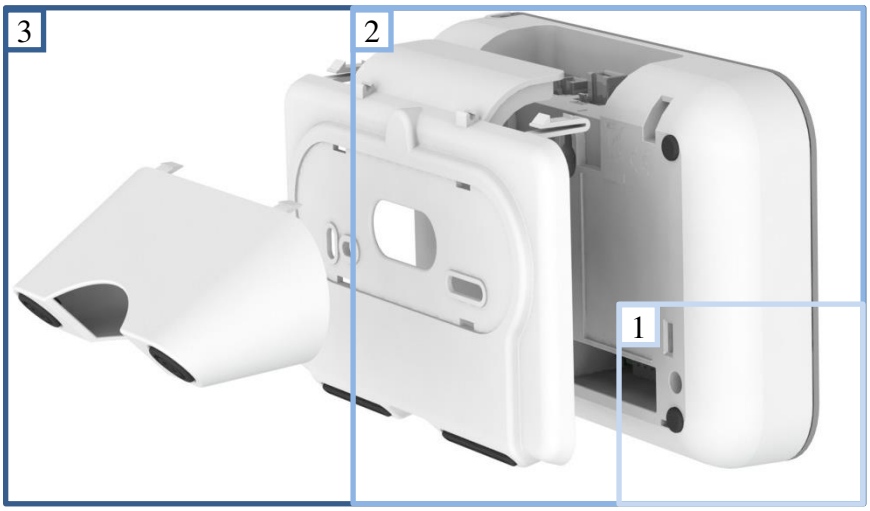
NOTE: The diagram above is for illustrative purposes only and should not be used as a measuring tool i.e. it is not drawn to scale.

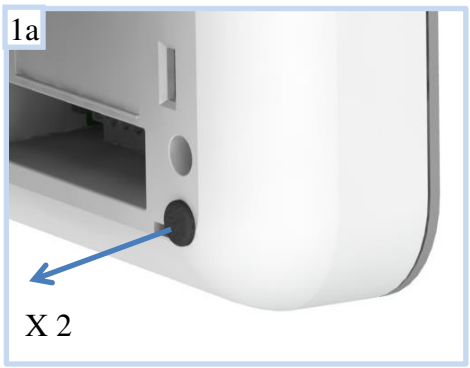
Table stand / Wall bracket (optional)

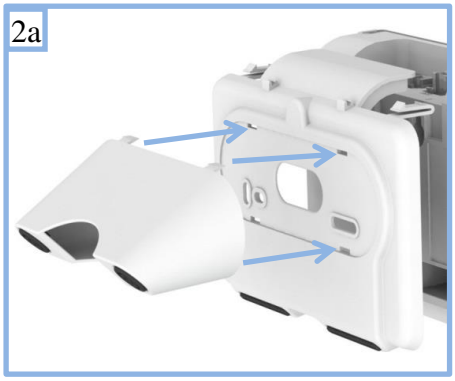
An optional table stand and wall bracket are available for the Lifeline Vi/Vi+,see part numbers below.

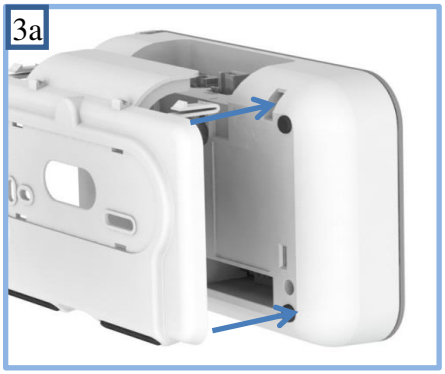
Fitting the Table Stand (D5702904)

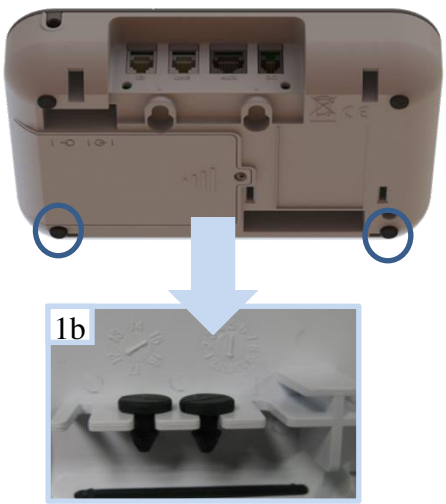
This allows the buttons and speaker to be angled towards the user. This also covers the where cables connect to the unit, this can help when the cables may get unplugged.

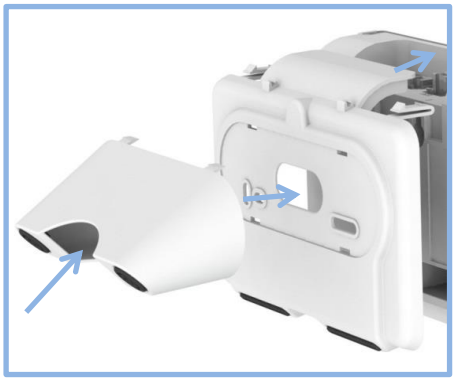






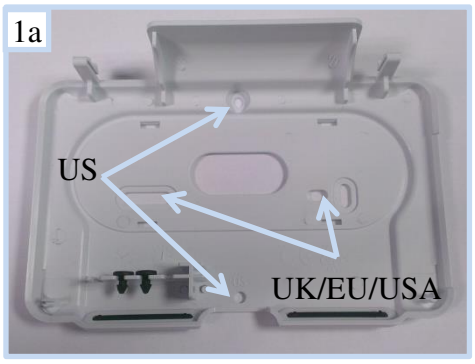


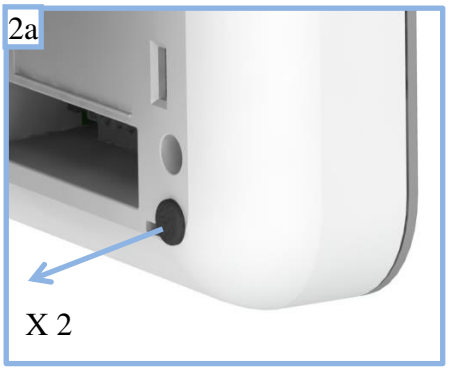


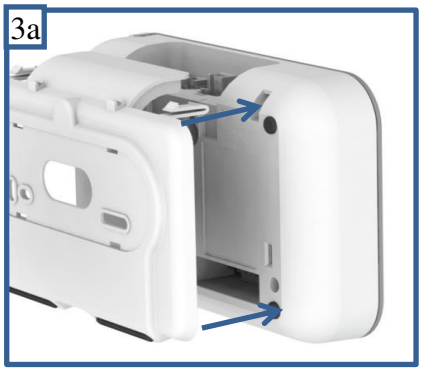


Fitting the wall bracket (D5702902)

The Lifeline Vi/Vi+ can be wall mounted using the optional bracket, this conceals the cables where they connect to the unit.



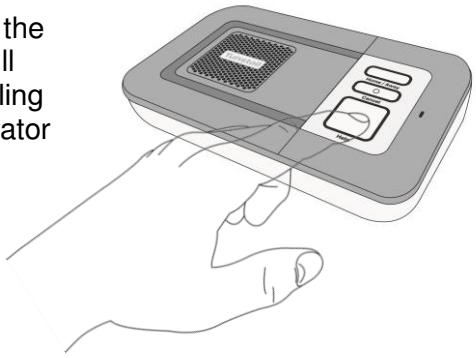




Using the home unit

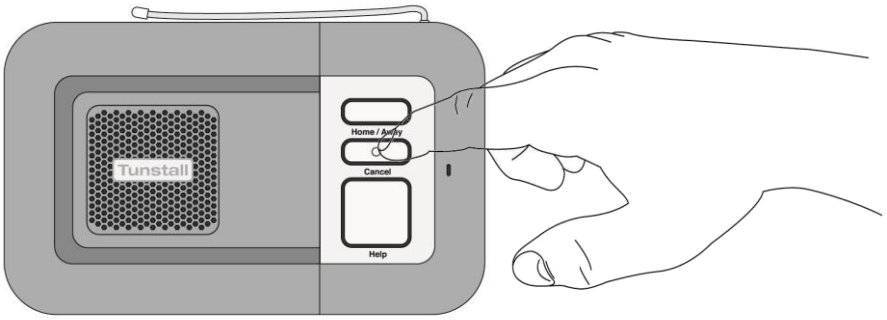
Making an alarm call

Press the red button on the personal radio trigger or the red alarm button on the home unit. The home unit will announce 'Do not worry your alarm telephone is dialling for assistance'. The call will be answered by an operator at the monitoring centre. Tell the operator why you have generated the alarm call and they will arrange for assistance.



Cancelling an alarm call

Wait 5 seconds (after the alarm button is pressed) and press the green cancel button. This in-built delay prevents false cancellation of an alarm call. Alarm calls made from a personal radio trigger can be cancelled immediately by pressing the green cancel button.



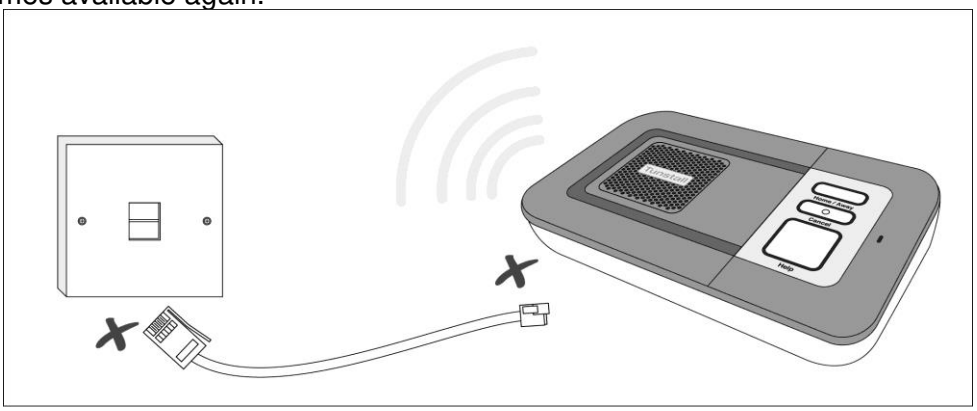
Answering calls remotely via the personal trigger

Personal radio triggers can be used to answer incoming telephone calls remotely by pressing its red button while the home unit or connected telephone is ringing. When pressed, the home unit will answer the call and you can speak to and hear the caller handsfree via the home unit. To revert to handset mode, just pick up the handset of the connected telephone. Replacing the handset will transfer the call back to handsfree mode. To end a handsfree call, press the red button on the personal radio trigger again or press the cancel button. Calls can also be answered in handsfree mode at the home unit by pressing the cancel button.

Status warnings

Telephone line monitoring

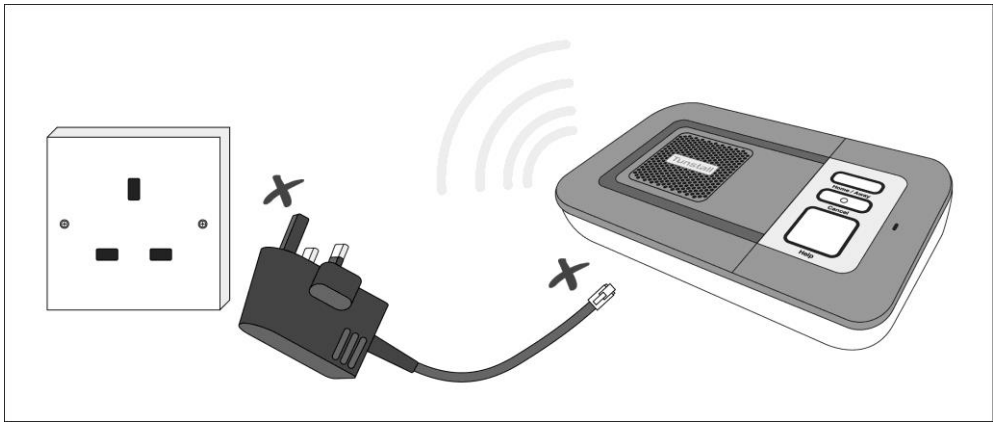
If the telephone line is faulty or becomes disconnected, the home unit will announce *'WARNING – the telephone line is disconnected'* after 1 minute and the red LED flashes. This warning will be repeated every 30 seconds until the telephone line becomes available again.



To silence the warning, re-connect the telephone line. If the telephone line is connected and the warning continues, press the green cancel button. If the warning continues you should contact your telephone line supplier (e.g. BT) as the telephone line may be faulty.

Power failure monitoring

If a power failure occurs, the home unit will continue to work using its back-up battery, however, as a warning the red alarm button LED will flash once every 4 seconds (see section – what the lights on the unit indicates). The unit will also announce *'WARNING – there is no mains power'.* This warning is repeated every 5 minutes. To silence the warning reconnect the power lead.



If the power failure lasts for more than 1 hour, during the next hour the unit will automatically call the monitoring centre. A call will be raised every 4 hours to the monitoring centre until the power is restored. The battery provides 40 hours back-up.

The lights on the home unit indicate

The lights on the home unit provide indications of its status based on the below.

Alarm Button (Red)	Home Unit Status
Red alarm button on	Normal mode
Red alarm button flashing (1 every 4 seconds)	Normal mode running on battery (mains power off)
Red alarm button flashing (1 every second)	Alarm mode

Status Led (Green/Red)	Home Unit Status
Green LED on (2 every second)	Normal Mode
Red LED flashing (1every 4 seconds)	Low Internal Battery
Red LED flashing (1 every second)	Telephone line disconnected
Red/Green flashing	Radio Blocking Detected
No lights on	Unit powered down (if power is on and connected then the unit may be faulty)

Home/Away Button (Yellow)	Home Unit Status
Yellow LED on	Away Mode
Yellow LED off	Home Mode
Yellow LED flashing (2 every second)	Intruder entry/exit time period

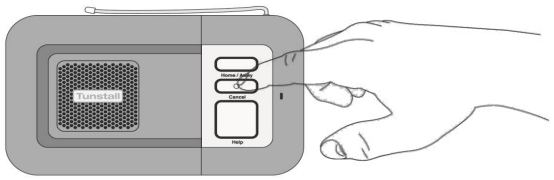
The LED on the personal radio trigger indicates

When pressed the red LED on the personal radio trigger will light up. This is to indicate that the button has been pressed. If the LED flashes when pressed this indicates that the personal radio trigger battery is low and should be replaced. You should contact your supplier as soon as possible in the event of low battery indication.

Programming a telecare sensor to the home unit

Telecare sensors with plug and play functionality can be programmed to the home unit using the following steps:

Step 1 – Press and hold down the green cancel button until it bleeps (approx. 5 seconds). The home unit announces 'Programming mode' and the red alarm button flashes slowly.



Step 2 – Press and hold down the green cancel button again until it bleeps (approx. 3 seconds). Release the cancel button, the home unit announces 'Registration Mode' and the red alarm button flashes rapidly.

Step 3 – Activate the sensor/trigger, the home unit will announce the trigger type to confirm registration.

Step 4 – Press and release the green cancel button. The home unit will bleep (programming mode exited).

Step 5 – Test the sensor/trigger by activating it and ensuring it raises an alarm call.

If you would like to know which telecare sensors are currently available, please contact your supplier.

NOTE:
Whilst in Step 3 the following quick codes can be entered via the series telephone handset to configure telecare sensors related to the intruder setup.

6003	Set last assigned trigger as a Zone 1 armer
6004	Set last assigned trigger to be a Bogus Caller
6005	Set last assigned trigger to be a Zone 1 and Zone 2 armer
6006	Set last assigned trigger to be Zone 1 and Zone 2 arm/disarmer
6008	Set last assigned trigger to start entry/exit tones on activation
6009	Set last assigned trigger to not start entry/exit tones on activation

Using the below quick code, the last assigned trigger can be given a location.

4zxx	Set the last registered trigger for zone and location	Must be done before exiting program mode where z = 0 for zone 1 and 1 for zone 2, xx = TT21 location code, see table 1

Range Test

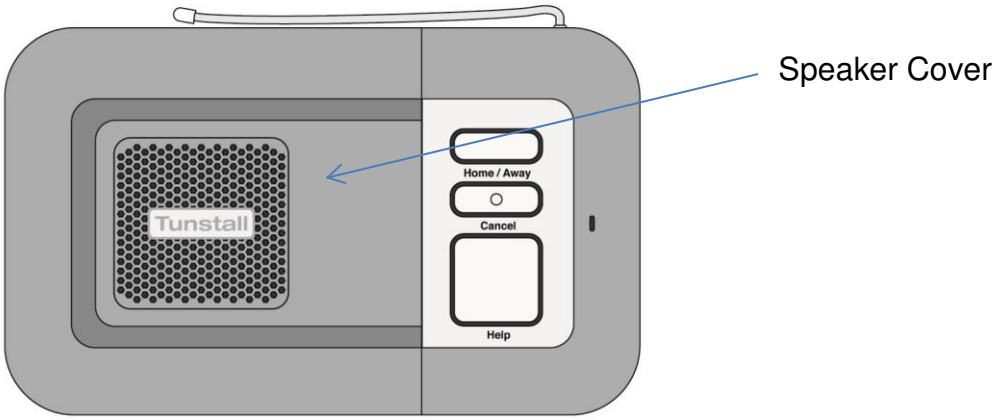
The home unit has a range test feature that enables you to test the range of personal triggers without raising an alarm call. This is done by putting the home unit into programming mode (press and hold down the green cancel button until it bleeps). When in programming mode, press the required personal trigger if it is within range the home unit will bleep and announce the trigger or telecare sensor type.

Cleaning the home unit

Dust the home unit with a soft cloth which can be moistened with a gentle detergent if required. Ensure that no moisture goes through the speaker grill.

Removing the speaker cover

It is possible to remove/replace the speaker cover if it becomes damaged or the speaker holes become clogged with dirt. Using your fingers loosen the speaker cover by working around each edge of the cover. Take care not to damage the speaker cover. Removal of the speaker cover should only be carried out by a trained installer and the cover should be replaced soon afterwards to avoid any damage to the speaker.



NOTE: Do not touch the speaker when the speaker cover has been removed.

Maintenance

The unit contains no user serviceable parts. The Lifeline home unit battery should be replaced immediately upon receipt of a battery failure alarm or after 5 years.

In order to replace the battery, firstly disconnect the telephone line from the home unit and then unplug the mains power adaptor. Then remove the battery cover and replace the battery. Once replaced, reconnect the power and telephone line.

If features requiring the date and time are being used please check the date and time programmed into the unit.

For any maintenance or issues please contact your service provider.

Programming guide

Programming of the home unit and its functions can be achieved using four different methods:

- **PC Connect programming tool** – full programming can be achieved using a TAPIT programming tool linked to the home unit and a laptop running PC Connect software. Full help files are provided within the software.
- **PNC software** – this method allows more in depth remote programming at the monitoring centre using custom designed screens within the PNC software (depending upon the software version) or via manual entry of parameters.
- **Series telephone** – basic user programming can be achieved by using the keypad of a phone connected to the serial telephone socket of the home unit. This includes quick codes and manual entry of parameters. Instructions are included within this programming guide.
- **Installer keypad** – a dedicated device with a screen that is connected to the home unit

The following table provides an overview of which features can be configured using the above programming tools. For a full list of which features each Lifeline home unit can support, please see the 'Features at a glance' section.

Icon	Feature	PC Connect (1.40 or above)	PNC5/6	Series Telephone	Installer Keypad
	Telephone Numbers & IDs	Full	Full	Basic keypad codes	Basic keypad codes
	Inactivity/Temp	Full	Basic keypad/user option codes or Manual Entry	Basic keypad/user option codes	Basic keypad/user option codes
	Call Sequences	Full	Full	None	None
	Intruder/Away/ CAS	Full	Basic quick codes or Manual Entry	Basic quick codes	None
	Radio Triggers & Events	Full	Basic add/delete	Basic keypad codes	Basic
	Periodic Calls & AP (Auto Presence)*	Full	Full	None	Basic
	Hardwired Input	Full	Full	Basic quick codes	None
	Event Configuration	Full event based configuration	Non telecare sensor alarms/events only	None	None
	Manual Entry** & Quick Code	Yes	Yes	Yes	Yes

	Fault Monitoring	Full	Mains and telephone line failure only	Basic keypad codes	Basic
	Reminders***	Fully configure (excluding recording)	None (done via IVR)	Quick codes (just recording)	Quick Codes Basic (Just recording)
	Critical Visits***	Full	Manual Entry	None	None
	Keyless Entry***	Full	Manual Entry	None	None
	Auto Answer***	Full	Manual Entry	None	None
	Time & Date	Full	Full	Keypad code	Keypad Code
	Speech Configuration	Full	Manual Entry	None	None
	Output Configuration***	Full	Full	None	None
	Virtual Sensors ***	Full	Settings adjustable, initial setup via PC Connect	None	None
	ADLife Configuration***	Full	None	Quick Codes	None
	Line Ringing Configuration	Full	None	None	None
	Time Windows	Full	None	None	None

* Auto Presence is not supported in the UK
** Programming home units using manual entry should only be done when advised by Tunstall.
***Vi+ features only

How to program via PC Connect programming software

Home units can be connected to a laptop/PC using a USB TAPIT. The computer requires PC Connect software loading onto it (this can be downloaded from http://www.tunstall.com/solutions/lifeline-vi). The software provides the ability to access enhanced programming features that series telephone/remote PNC programming does not provide access to.

The software includes detailed help files that explain all the features and how they can be tailored to meet the needs of individual people.

USB TAPITs can be purchased using part number 51900/01.

How to program via PNC software

Programming via PNC software is possible during any live alarm/test call which has been generated from the Lifeline home unit to the PNC monitoring centre.

PNC6

Using PNC6.3 monitoring software the operator can use custom designed screens to program the features of the home unit remotely.

PNC5

From PNC5, the programming screens will be the same as Lifeline Connect and Connect+ home units. Therefore some new features will not have programming screens.

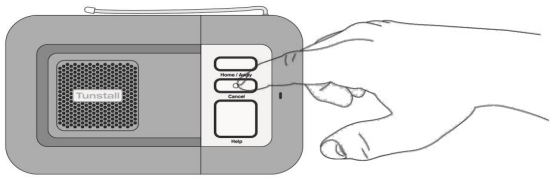
PNC3/4

Remote programming of the Lifeline Vi/Vi+ is not supported from PNC3 or 4.

How to program using a series telephone

Step 1 – Connect a telephone directly to the socket on the home unit labelled ☎.

Step 2 – Place the home unit in to programming mode by pressing and holding down the green cancel button until it bleeps (approx. 5 seconds). The home unit announces 'Programming mode' and the red alarm button flashes slowly.



Step 3 – Lift the handset of the telephone and enter the quick codes listed on the following pages. Manual entry of parameters can also be completed via this method, however this should only be used when advised by Tunstall.

How to program using the Installer Keypad

Step 1 – Connect the installer keypad to the AUX socket on the lifeline

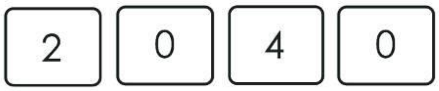
Step 2 – Enter commands via the keypad (Refer to Installer keypad section for more detail)

Frequently used series telephone codes

Enter programming mode as described on the previous page, lift the telephone handset and then enter the following codes:

Resetting the home unit but retaining radio triggers

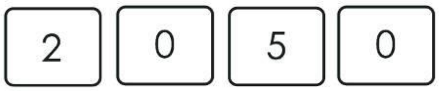
To reset all previous programmed information except the radio triggers, press:



This code means all functions are reset to default settings. The date and time remain unchanged.

Resetting the home unit

To reset all previous programmed information press:



Resetting erases all programmed telecare sensors and triggers and all functions are reset to default settings. The date and time remain unchanged.

Setting the time and date

There is a real time 24 hour clock in the home unit which automatically adjusts to BST. During power cuts the clock is backed up by the home unit's battery for up to 40 hours. However if the unit is powered down for transit then the clock must be reset again when the home unit is installed in the user's home. Once the time has been set the time can be checked by using the quick code 3020 (Lifeline Vi+ only). The unit will then announce the date and time. During the first 30 minutes of installation the Lifeline Vi+ will also announce the date and time when an incoming telephone call is received (requires CLI on the telephone line). To set the clock press:

DD represents the day of the month (01-31)
MM represents the months (01-12)
YY represents the two digit year (00-99)
HH represents hours 00-23; 24 cannot be programmed
MM represents minutes 00-59; 60 cannot be programmed
X represents the daylight saving time zone (0 = disabled, 1 = Europe, 2 = US)
Y represents enable/disable auto CLI time update feature (0 = disable, 1 = enable)

Telephone numbers

The series telephone keypad supports the programming of 10 alarm numbers. By default, telephone numbers 1-4 are set to call control centres (CC) and telephone numbers 5-10 are set to a Personal Recipient (PR) destination. To change the destination from CC to PR or normal telephone (POTS) see the next section.

Control centre numbers

Control centre numbers are programmed by pressing:

[*] [0] [0] [*] Tel. No. (max 20 digits) [*]

Sets telephone number 1

To set tel. number 2 replace 00 with 01
To set tel. number 3 replace 00 with 07
To set tel. number 4 replace 00 with 08
To set tel. number 5 replace 00 with 09
To set tel. number 6 replace 00 with 10
To set tel. number 7 replace 00 with 39
To set tel. number 8 replace 00 with 40
To set tel. number 9 replace 00 with 41
To set tel. number 10 replace 00 with 42

NOTE: A pause can be entered when programming alarm numbers by pressing #2 as part of the telephone number.

Changing telephone number destination to PR or POTS

To program an existing telephone number to a PR or POTS destination, press:

[4] [8] XY

Where X represents the telephone number position (1-9 with 0 = 10)
Where Y represents the destination type CC (0), PR (1) and POTS (2)

NOTE: It is important to set the correct destination type otherwise the recipient of the alarm call will not be able to deal with it correctly. A CC call expects a particular handshake from the control centre, a PR call requires a recipient with a touch tone telephone and a POTS call is a normal telephone call (i.e. fast dial button).

Unit ID numbers

The home unit sends a unit ID number to the monitoring centre when an alarm is sent. The number identifies which home unit is sending the alarm. Unit ID number 1 must be programmed into the home unit (default 995) in order for an alarm to be sent. The unit ID number may be the same for all monitoring centres and personal recipients. If required the home unit can be configured to send a different unit ID to each telephone number it is programmed to call.

Adding/Changing a unit ID

Unit IDs can be programmed into the home unit by pressing:

Sets Unit ID 1

To set Unit ID 2 replace 02 with 12
To set Unit ID 3 replace 02 with 13
To set Unit ID 4 replace 02 with 14
To set Unit ID 5 replace 02 with 15
To set Unit ID 6 replace 02 with 16
To set Unit ID 7 replace 02 with 17
To set Unit ID 8 replace 02 with 18
To set Unit ID 9 replace 02 with 19
To set Unit ID 10 replace 02 with 20

Deleting a unit ID

To delete a unit ID press:

Deletes Unit ID 1. Replace 02 with the numbers identified above to delete the appropriate Unit ID number.

NOTE: If no unit ID is linked to a telephone number, the first valid code will be used. The actual number of digits sent to the alarm receiver depends upon the type of monitoring centre being used. Please contact your monitoring centre for more information.

Selecting DTMF or STMF

Traditionally all home units have used Dual Tone Multi Frequency tones to communicate with monitoring centres. As a result of network changes, these can on occasion be corrupted therefore a new signalling method Sequential Tone Multi Frequency (STMF) has been designed. All Lifeline Vi/Vi have already been configured to allow the STMF method to be utilised. If a DTMF failure does occur then the home units will automatically switch to STMF for subsequent alarm dial attempts and will then continue to use STMF in preference to DTMF for all future alarm calls.

Using the following quick codes, Lifeline Vi/Vi+ home units can easily be set to use DTMF or STMF or automatically choose.

9 0 0 0 **Unit chooses DTMF or STMF** (default status).

9 0 0 1 **Unit always uses DTMF** (should be used when communicating to a monitoring centre that cannot support STMF).

9 0 0 2 **Unit always uses STMF** (for use when operating on GSM and/or NGN networks).

NOTE: Before using STMF, the PNC monitoring centre and back up centre must be configured to receive STMF protocol.

Prefix numbers

A function can be enabled/disabled to ensure a prefix number is inserted before all dialled numbers from the home unit e.g. dialling 9 when using a PBX. This can be achieved by pressing:

* 0 3 * Prefix (max 8 digits) *

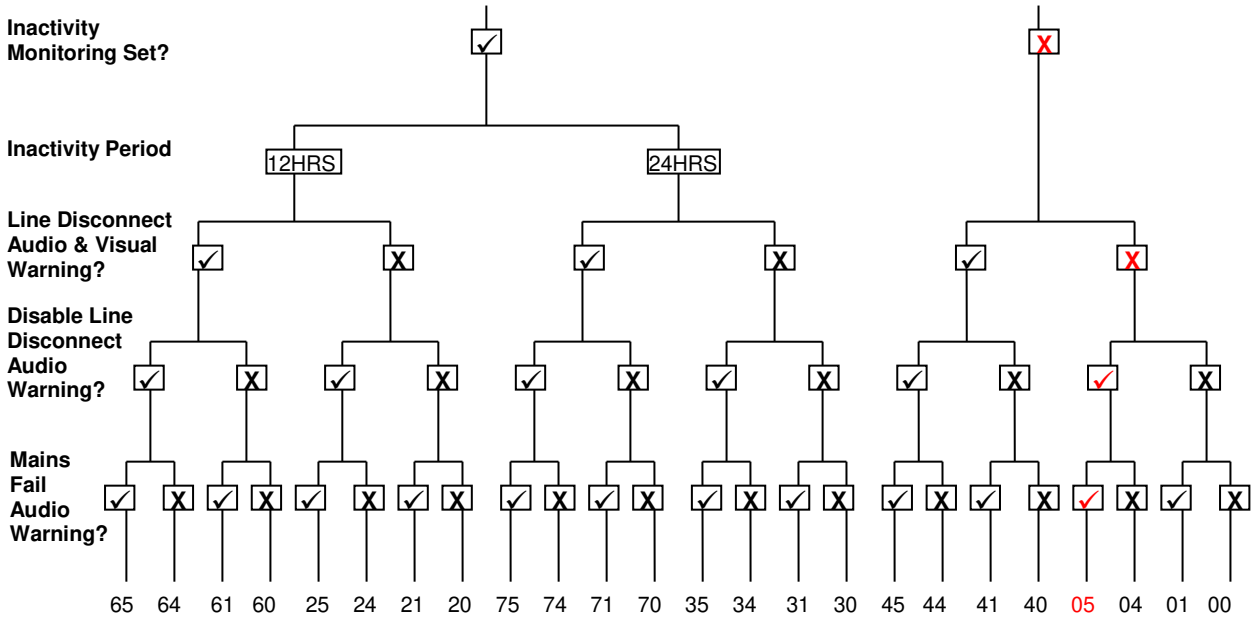
Suffix numbers

To program a suffix please use PC Connect software.

User Options Codes

The following table provides a two digit code that enables you to set parameter 11 very simply. For example, to set a home unit to have;

No inactivity monitoring, no line fail warnings (audio or visual) but with mains audio fail warning on, press;



Quick Codes

Both the Lifeline Vi and Vi+ home units have a number of quick codes that can be entered into the series telephone when the home unit is in programming mode or remotely via PNC4 (v2.5.1) and PNC5/6.

Quick Code	Purpose	Comments
2040	Reset to default but retain radio triggers	Time and date remain unchanged
2050	Reset to factory defaults	Time and date remain unchanged
2051	Reset unit	Force unit to reset. All current settings are retained.
2060	Delete ALL radio triggers	Restores to default
3000	Delete the next radio trigger transmitted	Must activate trigger
31xx	Enables periodic calls (30 day) with offset of xx hours	
3100	Disables periodic calls	
32xx	Configure pendant test reminder function	Where XX is the number of days between the reminders, When XX is set to 00 = the function is turned off
3300	Demonstrates the pendant test reminder function	Unit plays spoken messages
4zxx	Set the last registered trigger for zone and location	Must be done before exiting program mode where z = 0 for zone 1 and 1 for zone 2, xx = TT21 location code, see table 1
45xx	Set hardwire input to trigger type number	Where xx trigger type code, see table 2
46xy	Set hardwired input sensor	x = 0 for disable, 1 = n/o, 2 = n/c y = 1 for zone 1 and 2 = zone 2
47xx	Set hardwired input location	Where xx is TT21 location code, see table 1
48xy	Set destination	Where x is telephone number 1 to 10 (0 = 10) y = 0 for CC, 1 for PR and 2 for POTS
51xx	Enable inactivity monitoring for a period of 12 or 24 hrs	Where xx is 12 or 24
6001	Enable intruder	Default entry/exit time 30 secs
6002	Disable intruder	
6003	Set last assigned trigger as a Zone 1 armer	Home unit must be in assign mode
6004	Set last assigned trigger to be a Bogus Caller	Home unit must be in assign mode
6005	Set last assigned trigger to be a Zone 1 and Zone 2 armer	Home unit must be in assign mode
6006	Set last assigned trigger to be Zone 1 and Zone 2 arm/disarmer	Home unit must be in assign mode
6008	Set last assigned trigger to start entry/exit tones on activation	Home unit must be in assign mode
6009	Set last assigned trigger to not start entry/exit tones on activation	Home unit must be in assign mode
61xx	Enable intruder and set entry/exit tones	Where xx is in seconds
6413	Enable intruder disarm method of AWAY and personal trigger	
6403	Disable intruder disarm method of AWAY and personal trigger	
6414	Enable intruder disarm method by PIN	
6404	Disable intruder disarm method by PIN	
6413	Enable intruder system disarm by ‘away key and personal trigger’	
6415	Enable intruder disarm method by arm/disarm trigger	
6403	Disable intruder system disarm by ‘away key and personal trigger’	
6405	Disable intruder disarm method by arm/disarm trigger	

6600	Disable Radio Interference Monitor	Disables both local alerts and alarm calls to monitoring centre
6601	Enable local alerts (visual and audible) for Radio Interference Monitor	Alarm calls are not affected
6602	Enable alarm call to monitoring centre for Radio Interference Monitor	Local warnings are not affected
6603	Disable local audible alert for Radio Interference Monitor	Visual alerts persist only
9000	Home unit automatically switches between DTMF and STMF (default status)	
9001	Home unit always uses DTMF	
9002	Home unit always uses STMF	This should be used for GSM and Next Generation Networks.
9101	Make all event calls silent and visual	Alarm button will flash
9108	Make all event calls silent and non visual	Alarm button does not flash
9103	Restore all event calls to default states	

The following quick codes are only supported on the Vi+

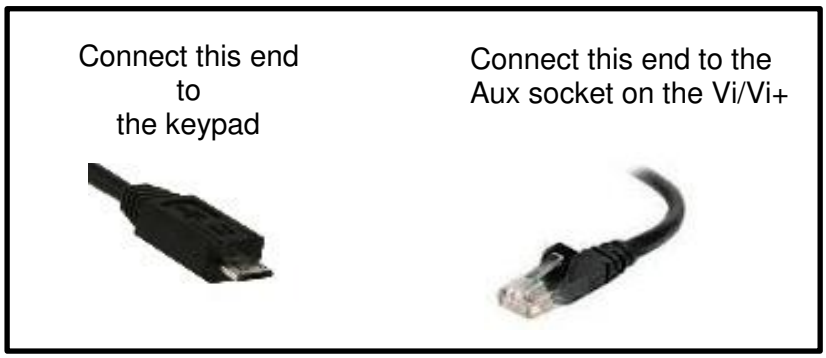
Quick Code	Purpose	Comments
3011	Activate external relay for 2 seconds	All alarms (Call Raised)
3012	Activate external relay for all alarms when call selected and de-activate when calls cleared	Call Selected Call Cleared
3013	Activate external relay on radio smoke alarm and de-activate when cleared	Smoke Alarm Call Cleared
3014	Disable external relay for all events	
3020	Announce date and time	
650x	Disable Virtual PES for x minutes	
6550	Purge ADLife data	
6551	Test call for ADLife	
7XYY	Virtual Bed/chair Absence time period	Valid values of X are “1” and “2” for Virtual Bed/Chair sensors 1 and 2 respectively. Valid values of YY are 00 to 59 minutes
7000	Record PR message	
7010	Delete PR message	
7001	Record reminder message #1	Press *on telephone keypad or cancel on Lifeline Vi to end recording
7002	Record reminder message #2	As above
7003	Record reminder message #3	As above
7004	Record reminder message #4	As above
7005	Record reminder message #5	As above
7006	Record reminder message #6	As above
7011	Delete reminder message #1	
7012	Delete reminder message #2	
7013	Delete reminder message #3	
7014	Delete reminder message #4	
7015	Delete reminder message #5	
7016	Delete reminder message #6	

Installer Keypad (51900/10)

Introduction

The keypad is designed to enable a trained installer to configure a home unit prior to use. It must not be left connected to an operational unit. If unused for 5 minutes the keypad will enter a “sleep” condition, and if left connected to a home unit warning tones will be sounded until it is disconnected. Attachment points are provided to enable the keypad to be carried on a neck cord/belt clip. The slot on the rear of the Keypad can be used to hold an ID card or this quick reference card.

Connecting the Keypad



Programming

Any parameter value can be set by using the keypad, to program a parameter enter the following key sequence:

(*)AAA(*)BBBB(max 16 digits)(*)

AAA is the parameter number and BBBB is the value to be programmed
eg * 2 * 995* would program the units ID to 995.

Enquiry

It is possible to enquire what value is stored in any parameter, to do this enter the following key sequence:

(*) Parameter number(i)

This will displays current value of the specified parameter
eg (*)(2)(i) might show *2*995EEEEEEEEEEEE

Note that “E” denotes an “empty” digit. This is shown when reading a parameter but will be added automatically when programming new values.

It is then possible to modify the content of a parameter, this can be edited using (←)(X)(→) and then re-programmed by entering(*) at the end of the sequence. Use the left arrow key to move to a digit to change it, then use the right arrow to scroll to the end and press * to save it.

Quickcodes

To program any of the quickcodes into the unit enter the 4 digit quickcode followed by (P) key

E.G. 2050 (P) will reset the unit to default settings.

Setting the Time and Date on the unit

It is possible to use the keypad to set the time and date on the unit, this is important when using any alarms that require the time/date to be correct E.G. virtual property exit sensor.

- To set the time, on the keypad enter (P)(clock)(0)(clock) HHMM(24hr format) (P)
- *To set the date, on the keypad enter* (P)(clock)(1)(0)(clock) DDMMYYYY(P)
- *To check the time and date the unit can speak the time and date, enter* 3020 (P) *on the keypad.*

Setting the Ringing Volume

To set the volume on the unit clear the display on the keypad by pressing the (X). Press the (←) to decrease the volume or the (→) to increase the volume. Once you have selected the correct volume level press the (P) key within 10 seconds to store the value.

Battery Test

The Lifeline unit battery voltage can be tested using this feature. Firstly clear the keypad's display pressing the (X) key. Then press the (TEST) key.

NOTE – do not run the test within 8 seconds of disconnecting the unit's battery.

Test Result	Action to be taken
Good battery = three ascending tones	If the battery test is good, you should turn off the mains power (unplug the unit) to ensure the battery can support the unit during a power failure.
Bad battery = single low pitched tone	This indicates that the battery has either been removed, disconnected or is faulty. If the battery test is bad, first check the battery is connected. If the battery is connected correctly then the battery should be replaced.

Programming alarm telephone numbers

It is possible to program the first 4 telephone numbers using the following sequence, to program the remaining telephone numbers use the manual entry method.

Monitoring centre numbers

Monitoring centre numbers are programmed by pressing

To add: [P] [Monitoring] 1-4 [Monitoring] Tel. No. (max 16 digits) [P]

Personal recipient numbers

Personal recipient numbers are programmed by pressing

To add: [P] [Personal] 1-3 [Personal] Tel. No. (max 16 digits) [P]

> ***NOTE:*** *If you need to enter a pause in the telephone number E.G. dialling 9 for an outside line, use the* [*] *key followed by the remaining digits.*

Deleting alarm numbers

Alarm numbers can be deleted either one at a time or all at once using the following sequences:

To erase **one** monitoring center alarm number, press:
[P] [Monitoring] 1-4 [Monitoring] [P]

To erase **all** monitoring center alarm numbers, press:
[P] [Monitoring] [P]

To erase **one** personal recipient alarm number, press:
[P] [Personal] 1-3 [Personal] [P]

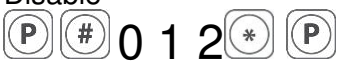
To erase **all** personal recipient alarm numbers, press:
[P] [Personal] [P]

Pauses and dialing method
Pauses can be inserted before alarm numbers or where a prefix is used between the prefix and the alarm number. The length of the pause and the dialing method (DTMF or pulse) can be set by pressing:

X is the dialling method = 0 (DTMF) or 1 (Pulse) and Y is the length of pause in seconds = 1 to 9

Prefix numbers
A prefix number can be inserted before all dialed numbers from the keypad e.g. dialing 9 when using a PBX. This can be achieved by pressing:

Enable

Disable


Call sequences

As it is not possible to program call sequences using the keypad, default call sequences are used which depend on the mixture of monitoring center, personal recipient and information numbers programmed into the Vi/Vi+. The default call sequences are as follows:

Only monitoring center numbers programmed
When an alarm is raised, the Vi/Vi+ firstly calls alarm number 1 twice and thereafter calls alarm numbers 2, 3 and 4 once each. If there is no answer from any of the four numbers, the Vi/Vi+ calls alarm number 1 again, but this time four times, and then calls the next alarm number etc until the alarm is received. The maximum number of call attempts is 10 therefore the call sequence used is as follows:

x2 x1 x1 x1 x4 x4 x4 x4 x8 x8

Only personal recipient numbers 1-3 programmed
The following call sequence is used:

x1 x1 x1 x4 x4 x4 x4 x4 x4

Both monitoring center and personal recipient numbers 1-3 programmed
The following call sequence is used:

x1 x1 x1 x2 x1 x1 x8 x8

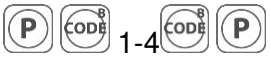
Unit ID number

The Vi/Vi+ sends a unit ID number to the alarm receiver when an alarm is sent. The number identifies which Vi/Vi+ is sending the alarm. Unit ID number 1 must be programmed into the Vi/Vi+ in order for an alarm to be sent. The unit ID number may be the same for all monitoring centers and personal recipients. Using the keypad, the Vi/Vi+ can be programmed with up to 4 unit IDs (10 ID numbers can be programmed using the other programming methods) e.g. ID 1 can be used for local alarms to a recipient in a facility and ID 2 can be used for calls to a monitoring center.

The unit ID can be programmed into the Vi/Vi+ by pressing:

NOTE: If no unit ID is linked to an alarm receiver, the first valid code will be used. The actual number of digits sent to the alarm receiver depends upon the type of monitoring center being used. Please contact your monitoring center for more information.

To erase **one** unit ID number, press:



To erase **all** unit ID numbers, press:

Pendants and telecare sensors

To erase **one** pendant/sensor, press:

then activate the pendant/sensor.

To erase **all** pendants/sensors, press:

Turning features on and off

The Vi/Vi+ units have a wide range of other features that can be turned simply on or off. When these features are turned on they automatically use the default settings listed on the next page. The Xs below relate to the feature number in the feature list (see following page). Some features can also be configured in the required way, for more information see the section 'Features explained and configuring settings' on page 23.

To turn a feature **ON**, press:

To turn a feature **OFF**, press:

To turn a feature **ON** and assign a value, press:

NOTE: Where values are required please refer to the notes column in the features list for further instructions.

Features list

Feature number (XXX)	Feature	Default value	Notes
010	Pauses & dialing method	2 sec pause, DTMF	
012	Prefix number		
014	Suffix number	Sends a #	
080	Periodic test calls – fixed period	Every 24 hours at time of programming	
081	Periodic test calls – fixed time	Every 24 hours at 00:00 hours	
150	Signal beep using pendant		Enables user to signal a beep to monitoring center if they cannot speak.
180	Inactivity monitoring	Continuous Mode 3 with elapsed time of 16 hrs.	
181	Intruder monitoring	Entry/exit period = 30 sec	
190	Power failure alarm	Send every 4 hours after first hour.	Sends alarm when power failure occurs.
195	Power restored alarm		Sends alarm when power is restored.
200	Personal recipient message		
201-203	Reminder messages No. 1-3		Vi+ only
204-206	Reminder messages No. 4-6		
210	Reminder function	Reminder chime 30 mins.	
211	Critical visits	Window time set to 60 mins.	
220	Speech message for telephone line/AC power failure		Unit provides spoken warning of telephone line/AC power failure.
230	Range test		Temporarily puts the unit in range test mode. Press cancel key to exit.
990	Reset unit		All features are set to the original factory settings.

Inactivity monitoring

The Vi/Vi+ can monitor movement around the home and send an alarm call to the monitoring center if no movement is detected within a specific time period. When configured using the keypad, inactivity monitoring is simplified using default settings. When configured via the PC Connect programming tool or monitoring center, the inactivity monitoring feature has three modes (see note below). In all modes, before an inactivity alarm is raised an inactivity warning period will occur. This warning period is intended to inform the user by announcing 'An inactivity call is about to be made, please press cancel' therefore giving them the opportunity to cancel the alarm.

Enabling and changing the inactivity monitoring period, press:

XX is the length of inactivity before an alarm is raised = 00 (15 minutes), 01-99 (time in hours)

The above sets continuous (24 hour) Mode 3 monitoring with a XX time period, a 5 minute warning period and inactivity monitoring suspended after first alarm until further activity is detected. Therefore if movement is not detected for XX time in any 24 hour period an alarm call will be raised following a 5 minute warning period.

NOTE:
Mode 1 – generates an alarm if the user is inactive for a configurable 12 or 24 hour period (continuous period).

Mode 2 – generates an alarm if the user is inactive between a configurable start and end time (time window). Two time windows are supported e.g. 7am – 10am and 4pm – 7pm.

Mode 3 – generates an alarm if the user is inactive for a period of time within a time window or continuous period. Two monitoring windows are supported e.g. raise an alarm call if the user is inactive for any 1 hour period between 7am-10am and any 40 minute period between 4pm – 7pm.

In all modes, before an inactivity alarm is raised an inactivity warning period will occur. This is fixed at 10 minutes for Mode 1 and is configurable between 0 and 9 minutes for Modes 2 and 3. This warning period is intended to inform the user that an inactivity alarm is about to be raised therefore giving them the opportunity to cancel the alarm.

After an alarm has been raised, inactivity monitoring can either be suspended until further activity is detected (all Modes) or can optionally restart immediately (Modes 2 and 3 only).

NOTE: To avoid false calls to the monitoring center, inactivity monitoring should be de-activated when the user leaves their home.

- **Activate (home mode)** - press the away button
- **De-activate (away mode)** - press the blue away button

Reminder functionality

The Vi+ allows up to 6 voice reminder messages to be recorded onto the unit and then played back at a given time on a one-off or daily basis. Messages can be recorded locally using the keypad or remotely using an interactive voice response (IVR) system. A maximum recording time of 60 seconds is available across all 6 messages.

Listening to a reminder message

When a message is due to be played, the lifeline will bleep and announce '*Reminder*' every 30 seconds. The user must press the cancel button to hear the message. If the user does not acknowledge the message then a 'reminder-no acknowledge' alarm will be raised.

Turning the reminder feature on

The reminder feature must be turned on by pressing the following keys.

The reminder messages and times can then be programmed into the home unit using either the IVR or keypad configuration methods (see the following pages).

Saving Unit templates.

Up to four configuration “templates” of customised settings can be stored in the keypad’s memory for subsequent programming to other home units.

This function must be used with care. Specific settings such as unit ID, radio trigger assignments/configurations, personal recipient/auto-answer numbers etc must be individually configured after any template is applied.

Only settings able to be configured by service providers and which have been changed from their default values (maximum 40 parameters) are stored/overwritten, though radio peripheral and unit identities are unaffected. A stored template should only be applied to home units of the same model and release level as the unit from which it was read otherwise a warning will be given and the process halted.

Always test a configuration template before use.

Save a template into the keypads memory from the home unit

Press followed by the destination template location the settings are going to be stored in ( ), which must be held for 3 seconds, then followed by the key.

Write Template from the keypad to the home unit

Press the key followed by the source template ( ) key, which must be held for 3 seconds, then followed by the key.

List Stored Templates

It is possible to list the stored templates and their associated software version.

Press the key followed by to display the information.

Delete Template from Keypad

To delete a template press followed by the source template ( ) key, which must be held for 3 seconds, then press the key.

Features explained

Telephone numbers & IDs

Up to 10 telephone numbers can be entered in the boxes. The destination type has to be changed to the correct type for each telephone number. There are three different destination types:

- Control centre - this should be used for all telephone numbers used for control centre call handling
- Personal recipient - this should be used for sending an alarm call to a normal house phone or mobile phone
- POTS - this is used when setting up a fast dial button on the home unit e.g. the away button used a fast dial button

The home unit sends a unit ID number to the control centre when an alarm is sent. The number identifies which home unit is sending the alarm. The specific unit ID field enables you to enter a different unit ID for each telephone number

Call sequences

The call sequence consists of up to 10 telephone numbers that the home unit can be set to dial in any order with multiple attempts to each alarm number. The home unit will ring each number in the order set up via PC Connect or PNC. If the home unit reaches the end of a call sequence without the alarm being answered it will start again at the beginning of the sequence. There are a total of 10 call sequences.

Away button options

The away button can be set to provide different actions when pressed, these include:

- Standard Home/Away - the Away button will suspend inactivity monitoring and arm the intruder alarm if it is enabled.
- Service Key - the Away button act as a fast dial button and call a designated telephone number when pressed.
- Check in/Out Button - Setting the Away button to a Check in/Check Out Button will raise a carer arrived event on the initial press and a carer departed event on the subsequent press.

Radio triggers

The Lifeline Vi supports up to 15 (Lifeline Vi+ = 35) telecare sensors/radio triggers. Using PC Connect the radio triggers can be set up with the correct trigger type, location code and the usage of the trigger e.g. whether it is used as part of a virtual sensor.

Periodic calls

The home unit allows a periodic call event to be generated either at a configurable period or at a fixed time. In the configurable period case, the period between events can range from seconds through to days. In the fixed time case, the period between events is a configurable number of days. When the unit is configured to generate periodic call events at a configurable period, an initial offset time can be specified which must elapse before the first periodic call event is generated. This feature allows a unit that is configured during the day to generate periodic call events at a more appropriate time i.e. during the night.

NOTE: Periodic calls must be set with a period of 24 hours or more when operating with a Tunstall PNC monitoring centre.

Backup battery monitoring

The unit battery low feature provides the following alerts:

1. **Under mains failure condition** – home unit alerts monitoring centre when the home unit battery reaches 1/3 of its capacity and therefore has approximately 13 hours remaining back up time. This alert is in addition to the existing alerts provided during a mains failure situation.(Code JB)
2. **Battery terminal voltage too high or too low** – this alert is provided at any time when the battery voltage goes above or below set limits indicating a unit battery fault or failure.(Code J8)

If mains failure alerts are received close to the 'System Battery Low' and 'Battery or Unit Failure' messages then it can be assumed that the message relates to the battery backup time remaining during a power failure. Therefore this alerts the monitoring centre that there is only 13 hours battery time remaining until the unit will shut down unless the mains power is restored.

Alerts received when no mains failure alerts have been received relate to a battery fault or failure. Such alerts should be dealt with promptly by replacing the unit's back up battery. These can be ordered from Tunstall using part number D3706005C.

This supports battery management procedures and in particular avoids the need to carry out the 6 monthly unit battery tests as previously recommended and will also raise alerts to any battery failures at the earliest opportunity.

Intruder monitoring

The home unit has the ability to provide a simple to use intruder alarm facility, which will alert the monitoring centre or personal recipient on detection of an intruder.

When configured using the series telephone keypad, the intruder monitoring function is simplified and uses a number of default settings. These settings other than the entry/exit times period, can only be configured using the PC Connect programming tool or via the monitoring centre.

By turning the function ON using the keypad, Intruder monitoring will use the following settings.

- Arm method – press the away button, unit announces 'Away' and entry/exit tones will be heard for 30 seconds.
- Disarm method – press away button followed by the personal radio trigger, the unit will announce 'Home' and the entry/exit tones will stop.

To configure the intruder settings use the following quick codes:

61xx	Enable intruder and set entry/exit tones	Where xx is in seconds
6413	Enable intruder disarm method of AWAY and personal trigger	
6403	Disable intruder disarm method of AWAY and personal trigger	
6414	Enable intruder disarm method by PIN	
6404	Disable intruder disarm method by PIN	
6415	Enable intruder disarm method by arm/disarm trigger	
6405	Disable intruder disarm method by arm/disarm trigger	

If an intruder detection event is detected that is within the armed zone(s) and is from an entry/exit sensor then the entry period will commence and entry tones will sound. The user has until the entry period expires to disarm the intruder system otherwise an intruder alarm will be generated.

NOTE: The intruder function can be configured to meet the individual user's need using either the PC Connect programming tool or via the monitoring centre. This enables more complex settings to be configured including: different arming methods, optional entry/exit tones, how the unit reacts to intruder detection events (event-based configuration), zoning etc.

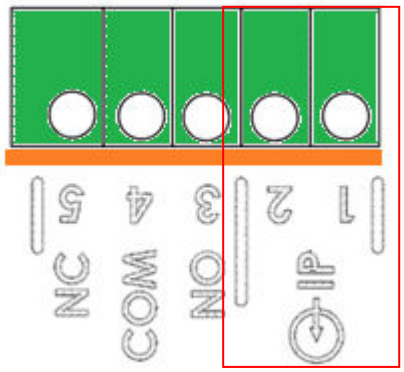
Event configuration

This feature enables the home unit to react to each event in a different way and allows these events to be configured via PC Connect and PNC (non telecare sensor events only) based on whether they should; raise an alarm call, act as an intruder/inactivity system input, provide visual/audible reassurance, enable the microphone/speaker, operate the relay output plus much more. The events are split into the following categories:

- Buttons
- Virtual sensors (Lifeline Vi+ only)
- Faults
- Telephony
- Misc

Hardwired input

The hardwired input is located on the underside of the unit with a green 2 wire sprung terminal block. Inputs can be normally open or normally closed volts free contacts.

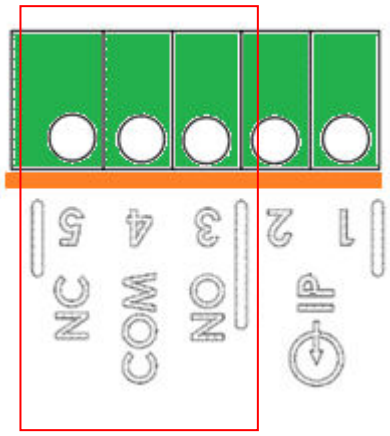


To set an input you will need to configure the unit accordingly either with the serial telephone Quick Codes below, a PNC5/6 monitoring centre or via PC Connect.

45xx	Set hardwire input to trigger type number	Where xx trigger type code, see table 3
46xy	Set hardwired input sensor	x = 0 for disable, 1 = n/o, 2 = n/c y = 1 for zone 1 and 2 = zone 2
47xx	Set hardwired input location	Where xx is TT21 location code, see table 2

Hardwired output (Lifeline Vi+ only)

The hardwired output in the Lifeline Vi+ home unit provides common (COM), normally closed (NC) and normally open (NO) contacts.



Its operation can be controlled via a series telephone using the quick codes below, or by setting the correct boxes in the Remote Output Control of PC Connect or remotely by a PNC5/6 monitoring centre.

3011	Activate external relay for 2 seconds	All alarms (Call Raised)
3012	Activate external relay for all alarms when call selected and de-activate when calls cleared	Call Selected Call Cleared
3013	Activate external relay on radio smoke alarm and de-activate when cleared	Smoke Alarm Call Cleared
3014	Disable external relay for all events	

Fault monitoring

Fault monitoring enables the settings to be changed to ensure the home unit reacts in the required way when it senses a fault such as power, telephony and battery failures. These are configured using PC Connect.

Inactivity monitoring

The home unit can monitor movement around the home and send an alarm call to the monitoring centre if no movement is detected within a specific time period.

Inactivity monitoring has three different modes, Lifeline Vi supports only simple inactivity monitoring (mode 1) whilst Lifeline Vi+ supports all three modes.

Mode 1 - Simple – generates an alarm if the user is inactive for a configurable 12 or 24 hour period (continuous period). (Lifeline Vi and Vi+)

Mode 2 - Real Time – generates an alarm if the user is inactive between a configurable start and end time (time window). Two time windows are supported e.g. 7am – 10am and 4pm – 7pm (Lifeline Vi+ only).

Mode 3 - Elapsed – generates an alarm if the user is inactive for a period of time within a time window or continuous period. Two monitoring windows are supported e.g. raise an alarm call if the user is inactive for any 1 hour period between 7am-10am and any 40 minute period between 4pm – 7pm (Lifeline Vi+ only).

In all modes, before an inactivity alarm is raised an inactivity warning period will occur. This is fixed at 10 minutes for Mode 1 and is configurable between 0 and 9 minutes for Modes 2 and 3. This warning period is intended to inform the user that an inactivity alarm is about to be raised therefore giving them the opportunity to cancel the alarm.

After an alarm has been raised, inactivity monitoring can either be suspended until further activity is detected (all Modes) or can optionally restart immediately (Modes 2 and 3 only).

When configured using the quick code, inactivity monitoring is simplified using default settings. The following quick code can be used to enable simple (mode 1) inactivity monitoring.

51xx	Enable inactivity monitoring for a period of 12 or 24 hrs	Where xx is 12 or 24

Configuration of advanced inactivity monitoring must be done via the PC Connect programming tool or monitoring centre.

NOTE: To avoid false calls to the monitoring centre, inactivity monitoring should be de-activated when the user leaves their home.

- **Activate (home mode)** - press the yellow away button (unit announces 'Home' and the yellow LED will turn off)
- **De-activate (away mode)** - press the yellow away button (unit announces 'Away' and the yellow LED will turn on)

The home unit's clock must be set to operate Inactivity monitoring.

Personal recipient messages

Dealing with personal recipient calls from a touch-tone telephone

Alarm calls can be sent to personal recipients, when a personal recipient receives an alarm call they will hear a spoken message 'This is an alarm call from' followed by either the Unit ID or a recorded message e.g. Mrs Smith (Lifeline Vi+ only – see next section). The recipient can then handle the call using their keypad as follows:

Function	Button	Notes
Accept Call	5	
Clear Call	* then #	Call must be accepted first
Volume up	1	Alters home unit volume
Volume down	2	
Talk	7	Only required if mode is changed from Hands-free Voice Switched (HVS) to tone switched by pressing 7 followed by *.
Listen	*	

Recordable personal recipient messages (Lifeline Vi+ only)

A personal recipient message can be recorded on the Lifeline Vi+ home unit to replace the ID message that a personal recipient would normally hear when they receive an alarm call.

To record the message:
Firstly enter programming mode on the Lifeline by holding the cancel button down until it beeps, then press the following on the connected telephone keypad.

Then record the message,

press * to end the recording. If using the keypad

press cancel to stop recording

Note: if a message is already recorded, this key sequence will replay the message. If this is the case the message must be deleted before a new message can be recorded.

To delete the message, press:

Speech configuration

This feature configures how the speech prompts programmed into the home unit are used during alarms, local warnings and programming. Please see the help files within PC Connect for more details. Lifeline Vi only supports basic reassurance speech configuration whereas Lifeline Vi+ offers complete speech configuration.

Reminder functionality (Lifeline Vi+ only)

The Lifeline Vi+ home unit allows up to 6 voice reminder messages to be recorded onto the unit and then played back at a given time on a Once Only, Daily, Weekly or Monthly. A maximum recording time of 60 seconds is available across all 6 messages.

Messages can be recorded locally using a serial telephone keypad or remotely using an interactive voice response (IVR) system. PC Connect software is required to program reminder messages recorded locally using a telephone keypad.

THE IVR system only supports the setup of messages that are to be played 'Daily' or 'Once only'. All other calendar-based reminder periods must be setup via PC Connect and the message recorded via the serial telephone.

Listening to a reminder message

Reminders can be set to be played automatically and an alarm sent to the control centre if the resident does not acknowledge it by pressing the cancel key. Or the unit can be set to bleep and play the message 'Reminder' until the user presses cancel and the message will be played back.

Setting up via IVR (For Once only and Daily messages)

In order to use the IVR method, reminders need to be enabled first time using PC Connect. The home unit must be called from another telephone and the incoming call answered by pressing the cancel button or personal radio trigger. The caller will be able to set reminder times and record messages using a system of IVR prompts and menus (see below). Alternatively, the home unit can be programmed via PC Connect to auto answer incoming calls using Caller Line Identification (CLI) and automatically divert the caller to the IVR reminder menu.

NOTE: The home unit's clock must be set to operate reminder functionality

IVR reminder menu

Step 1 – Use a normal telephone (or mobile phone) to call the home unit.
Step 2 – Answer the call using the personal trigger or cancel key. If the call is answered by the user on their normal telephone, you must ask them replace the handset and answer the next call using their personal trigger or cancel key. Then call the home unit again.
Step 3 - When answered correctly, press [*] [1] on the telephone keypad
Step 4 - You will then be prompted to key in the PIN (default 1234)
Step 5 - The time currently held on the home unit's internal clock will then be confirmed.
Step 6 - You will then be given the below menu options. Firstly alter the time* if incorrect (menu option 3) and then follow the menu to configure and record each message.

NOTE: The reminder facility may be a useful aid to complement professional medication compliance measures, however it should not be relied upon as a medication compliance device. No guarantee of actual compliance should be relied upon when using this feature. Lifeline Vi+ is not a medical device and Tunstall is not responsible for any outcome associated with the programming or use of the reminder facility.

MENU	INSTRUCTIONS
To add a reminder, press 1	*Please type in the hour and then press *.* *Please type in the minute and then press ** *To repeat this reminder once only, press 1, to repeat this reminder daily press 2.* *Please record the reminder message now.* Then return to main menu.
To listen to or remove a reminder, press 2	Each reminder will be replayed followed by: *To save this reminder, press 1.* *To remove this reminder, press 2.* Then return to main menu.
To set the time, press 3	*Please type in the hour and then press *.* *Please type in the minute and then press *.* *The time will then be confirmed.*
To hang up, press 4.	
NOTE: Times must be entered in 24 hour format e.g. 01 = 1am, 12 = midday, 13 = 1pm and 00 = midnight. Please contact your supplier for more information on reminder messages.	

Recording reminder messages via a series telephone keypad

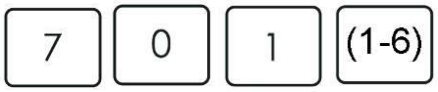
To record a reminder message:
Firstly enter programming mode on the Lifeline by holding the cancel button down until it beeps, then press the following on the connected telephone keypad.

Then record the message.

Press * to end the recording.

Note: (1-6) represents the message slot number. If a message is already recorded under the number entered, this key sequence will replay the message. To re-record a message, the existing number must be deleted first. Before deleting ensure the message slot is not being used for any other purposed e.g. voice announcers.

To delete a reminder message, press:



Note: (1-6) represents the message slot number. Before deleting ensure the message slot is not being used for any other purposed e.g. voice announcers.

Configuring reminder messages
PC Connect software is required to program reminder messages such as the reminder time out of the reminder message, the duration of the reminder bleep, whether the unit should announce 'Reminder' or bleep and the regularity of the reminder (e.g. one off or every day).

Configuring reminders for a specific day, week of the month and day of month
To configure a particular reminder to trigger on a particular day of the week, a week of the month or a day in the month then PC Connect must be used. The IVR should not be used. To record reminder messages these should be set via the series telephone.

Pendant test reminders

The unit is able to announce a spoken message to the user asking them to test their pendant. This can be enabled via PC Connect under the Reminders menu. The test period can be set from 1- 99 days with a randomisation period of 0-9 days. This is to limit the number of test calls the monitoring centre will receive in one day. The time window in which the pendant test reminder will be announced can be set between a start and stop time.

Once the resident hears the message '*Test reminder please press personal trigger'* the user should press the alarm button or personal trigger within 5 minutes (default setting) to send a test call to the monitoring centre. If the reminder is not responded to, the home unit will remind the user again at a different time the following day.

If the resident raises the test call via their alarm button/personal trigger when prompted, this will be followed by a 2nd message 'Press the green cancel button to complete the test'. If the cancel button is pressed within 1 minute the home unit will announce 'Test completed' and will only remind the user again after the next test period (e.g. 30 days). If this message is ignored a 'Test Reminder not confirmed' alarm will be sent to the monitoring centre and presented to an operator. Such an alarm should be handled as a potential emergency alarm call.

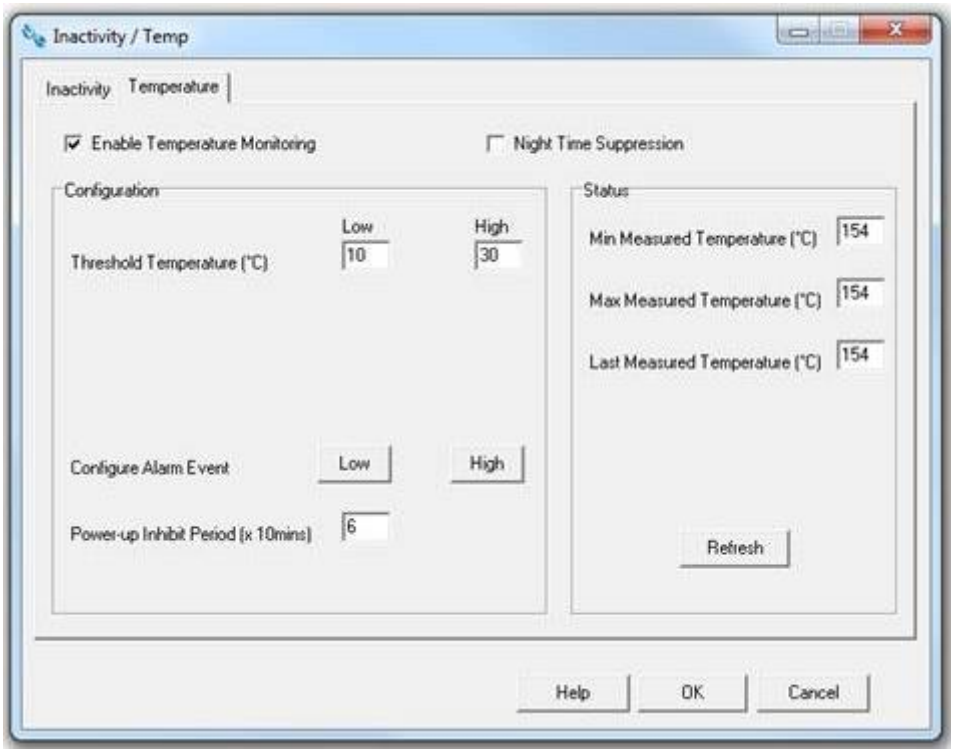
If quick code (3300) is entered then the home unit will demonstrate the feature by playing each recorded message in sequence. This can be used to help familiarise the user with the feature during installation. The quick code will not result in any calls being transmitted to the monitoring centre.

NOTE: Pendant test reminders are handled in the background of PNC5/6 if all the steps are completed by the user.

Ambient Temperature Sensor

The Lifeline Vi and Vi+ home unit has an integral temperature sensor that can monitor the environmental temperature in the room were the Lifeline is placed. By default the temperature monitoring feature is disabled. This can be enabled using PC Connect. When enabled it is important to position the Lifeline Vi/Vi+ in a place that is likely to provide a representative temperature of the home environment. Locations that are likely to be in direct sunlight, drafty, close to windows/doors or close to heating/cooling appliances (radiators, ovens, air conditioning etc) should be avoided.

The temperature feature is located under the Inactivity/Temp icon. Then choose the Temperature tab.



The minimum and maximum temperature can be set in the 2 boxes shown on the screen above. The night time suppression check box stops alarms being raised during night time hours. These are set under the 'No Fault Monitoring Speech Window' in the Speech Configuration section.

The status section shows the last measured temperature, this will be the temperature when PC Connect was connected. The Min and Max temperature are the extremes the Lifeline has measured. When temperature monitoring is first enabled these values will be blank.

To avoid false calls when first installing the unit(Power up inhibit period), there is a 1 hour delay that provides sufficient time for the home unit to adjust to the local ambient temperature.
When an alert threshold is raised , the temperature must go 1°c under/over the threshold for at least 1 minute before another alarm is generated. The number of events allowed for low and high alerts is also restricted to 1 every 24 hours for each setting.

NOTE: The ambient temperature sensor is not designed to monitor for temperatures related to fire etc. The sensor should only be used as an early warning of ambient temperatures that may be uncomfortably low or high for the user.

Radio interference monitor

What is it?
The radio interference monitor is a feature that detects unusual radio blocking occurring for a continuous period longer than 30 seconds, and which may reduce the radio range of the radio trigger. In the unlikely event that radio interference is detected, the unit will flash its status LED alternately red/green (default setting). Whilst radio interference continues this local warning will be repeated, the unit will also generate a call to the monitoring centre every 24 hours (default) if interference persists. The call code for TT21 is 'Radio Blocking' and this is handled by default as a background call therefore is logged in the database and not presented to an operator.

Why is it there?
Radio interference monitor functionality was added in order to ensure continuing compliance with European standards. In particular EN50134-3 which requires social alarm units to provide an alert should radio interference above a specified level be present for at least 30 seconds.

Providing a radio interference monitor delivers additional protection to the user should their home unit be subjected to unusual radio interference. It also provides reassurance to the user and service provider that the unit will continue to monitor its local environment and will generate warning messages should an issue arise.

What should be done if a warning is received?
It must first be emphasised that the radio interference monitor is checking for unusually high and continuous levels of interference. As a result, the number of warnings generated is likely to be very small.

In the unlikely event that radio blocking is detected the following process should be followed (note this is based on default settings which may be changed by service providers):

1. Check the Lifeline Vi home unit has the latest Radio Interference settings. These settings should be:
    a. Parameter 229 = 4C6D041040000000
    b. Parameter 566 = 1160214006061220
2. After a 'Radio Blocking' alert is received by the monitoring centre (background call as default), an operator should contact the user and ask them the following questions to help understand the home environment:

    - Have you obtained a new piece of electrical equipment recently? Is this equipment close to the home unit? Has any existing equipment been re-located closer to the home unit?
    - Check that the home unit is not close to any electrical devices such as computers, television, fan, mobile phone
        - If so, turn-off or move the equipment away from the home unit and check if this stops the warning.
        - If close-by equipment is identified as causing the problem, then remove it to a safe distance.
    - Reassure the user that should the pendant not be operable the red button on the home unit will always remain available for use.

The operator should also check the calls history for the user to ascertain if the interference is a one off or constantly repeating. Presuming no obvious cause can be

found the user should be asked to place a test call using their pendant from various points in their home.

If the warning persists and the above process has been followed, a technical representative should visit the user's home to investigate the issue further.

Voice announcer function (Lifeline Vi+ only)

Recordable speech messages can be played when a certain radio device or event is triggered on the unit. These use reminder slots 1-3, which are recorded via the series telephone. Voice announcer function only works for telecare sensors and events when they are configured not to raise an alarm call. The time when messages can be played can also be controlled using the 'times when voice announcer messages are played' by clicking on the 'Time windows' icon in PC Connect.

To configure which event or trigger causes the message to be played use the 'event configuration' or 'radio trigger & events' sections within PC Connect.

To record a voice announcer message:
Firstly enter programming mode on the Lifeline by holding the cancel button down until it beeps, then press the following on the connected telephone keypad.

Then record the message via the handset.

Press * to end the recording.

Note: (1-3) represents the message slot number. If a message is already recorded under the number entered, this key sequence will replay the message. To re-record a message, the existing number must be deleted first. Ensure the deleted message is not being used for any other reminder purposes.

To delete a voice announcer message, press:

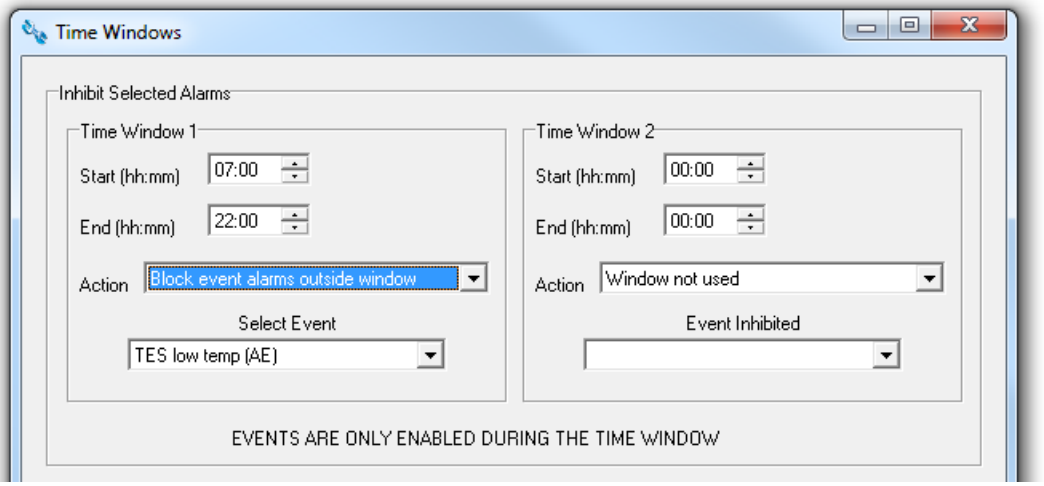
Note: (1-3) represents the message slot number. Ensure the deleted message is not being used for any other reminder purposes.

Alarm control by time (Lifeline Vi+ only)

This feature allows specific events to be inhibited by the Lifeline outside of a specific time period. This is only relevant to a small number of events, for example, when monitoring room temperatures you may wish to ignore temperatures below the threshold during the night when the resident is likely to be in bed.

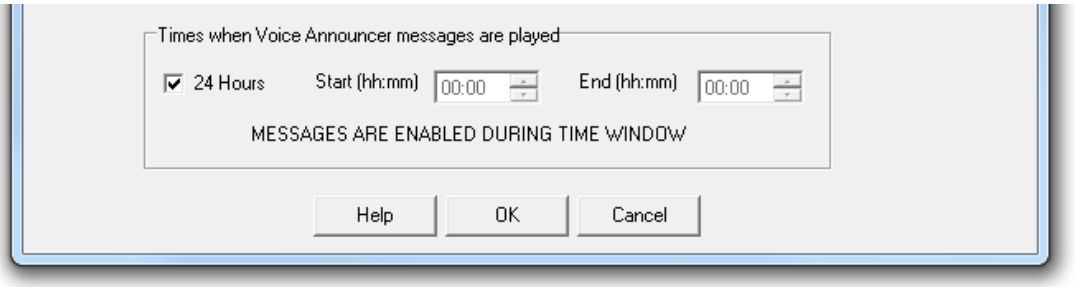
The feature can be setup using PC Connect using the Time Window section. It is possible to set the start time and end times when the alarms will be enabled. Outside of these times the particular alarm event will be inhibited depending upon the action selected.

- Block event alarms outside window - The unit will not dial the monitoring centre but the unit will still activate the relay or X10 output if configured.
- Discard complete event outside window - The alarm and any output action will not function



Times when voice announcer messages are played (Lifeline Vi+ only)

Voice announcer messages are spoken prompts triggered by an event e.g. a user opening the front door and a message been played reminding them to lock the door if they leave the property. When messages are played can be controlled by the 'Time when Voice Announcer messages are Played' window shown below.



Critical visits (Lifeline Vi+ only)

Critical visit monitoring allows scheduled carer visits to users to be monitored and enables alarms to be raised if the schedule is not met. The home unit allows up to six daily carer visits to be monitored. Each carer visit is defined by a visit time and a time window (centred on the visit time), which is an acceptable time window for the visit to occur. The default time window is 60 minutes i.e. the visit should occur between 30 minutes before and 30 minutes after the set visit time. During the time window, the home unit must receive a transmission from a carer trigger (part number 67005/57) otherwise a Carer Non-Arrival alarm will be generated. Critical visits must be programmed via PC Connect.

NOTE: Using the PC Connect programming tool any personal trigger can be defined as a Carer Trigger. The home unit's clock must be set to operate critical visits.

Auto Answer (Lifeline Vi+ only)

The home unit can be set to automatically answer incoming telephone calls using either Caller Line Identification (CLI) or non CLI. The home unit can also be programmed via PC Connect to answer the call as either a normal telephone call (POTS) or with the reminder Interactive voice response menu for setting up and recording reminder messages remotely. If the user has CLI enabled on their telephone line then the unit can be programmed with specific numbers. When the home unit recognises the programmed number it will automatically answer the call.

Non CLI auto answer can be set to single knock or double knock. Setting it to single knock will cause the unit to answer automatically when it is dialled. By setting it to double knock, the unit will only answer if the person ringing the unit rings the unit once and hangs up (before it is answered) then rings back again for a second time within the Double Knock Primed Period limit.

Keyless entry (Lifeline Vi+ only)

This allows a person to attend a property and gain access by the use of a Keyless Access Trigger after an alarm call has been raised on the unit. An electronic door lock must have been fitted to the door for this function to work correctly. For more advice contact the Telecare Helpdesk 01977 660204.

Virtual Sensors (Lifeline Vi+ only)

Virtual sensor processing is the technique of combining event information from basic sensors to produce more intelligent responses and alarms.

Virtual sensors are pre-defined and the customer defines the behaviour of the sensor within these pre-defined constraints by means of standard parameter based configuration. The home unit supports three types of pre-defined virtual sensors:

- **Inactive client (in room)** - The purpose of this virtual sensor is to generate an alarm if a client has remained in a particular room for longer than a considered safe period of time (configurable). When the client enters the monitored room, this is detected by a sensor (Fast PIR or Door Usage Sensor) and a timer is started. If the timer expires, then an Inactive Client event is generated. If the client leaves the monitored room, before the timeout expires, then this is detected by a suitable sensor and the virtual sensor is reset. The home unit supports four Inactive Client virtual sensors.

- **Bed/Chair Absence Sensor** - The virtual bed/chair absence sensor works like the conventional bed/chair occupancy sensor therefore generating an alarm if a client has got out of bed (or chair) during a monitoring time window (e.g. night) for longer than a considered safe period of time (configurable). When the client gets out of the bed/chair (during the monitoring period), the timer is started. If the timer expires before the client has got back into the bed/chair then a Virtual Bed/Chair Absence event is generated. However the virtual sensor also provides the ability to extend the time period if user activity is detected elsewhere in the property e.g. client has gone downstairs to make a drink, therefore reducing false calls. The home unit supports two Bed/Chair Absence virtual sensors. It is also possible to set an alarm to be raised if the user does not go to bed or fails to get up out of bed at a configurable time. Different Not In/Not Out times can be set for weekdays and weekends.
  If the virtual bed sensor is used with an X10 controller and lamp module the lamp can be set to illuminate for a number of hours before the monitoring period starts.

- **Property Exit Sensor (PES)** - The virtual property exit sensor works in the same way as the conventional property exit sensor however a simple Fast PIR and door usage sensor can be used to create the complete solution. The sensor generates an alarm if a user has left the property, during a monitoring time window, for longer than a considered safe period of time (configurable). When the client leaves the property (during the monitoring period), the timer is started. If the timer expires before the client has returned to the property then a Virtual PES event is generated. A quick code (650x) is provided to allow a carer etc. to leave the property without causing an alarm to be raised. This quick code is keyed into the series telephone connected to the home unit and disables the Virtual PES for the number of minutes specified by x to give enough time for the carer to leave the property. The home unit supports a single Virtual PES which can be used to monitor multiple doors.
  It is also possible to monitor weekdays, weekends or both**.**

NOTE: The home unit's clock must be set to operate virtual sensors.

ADLife (Lifeline Vi+ only)

The Lifeline Vi+ can be used to provide activities of daily living monitoring using its ADLife functionality. Using ADLife, each time a telecare sensor (see compatible sensors below) is activated the information is stored in the Lifeline Vi+ along with the time of activation. Each night the Lifeline Vi+ then sends this data to the PNC5/6 monitoring centre which sends the collected data over a secure internet connection to the ADLife server where it can be accessed via the ADLife website by authorised users. This allows the carer to view activity trends and helps them to recognise potential declines in health before an incident occurs.

How to set up ADLife

1. Obtain an ADLife ID number from Tunstall – this will be supplied when you take out a 12 month ADLife licence with Tunstall
2. Determine the telephone number(s) of the PNC5/6 which will be used to receive the ADLife data from the unit. This may be the same PNC5/6 that normal alarm calls are sent to but can be a different PNC5/6 if required.

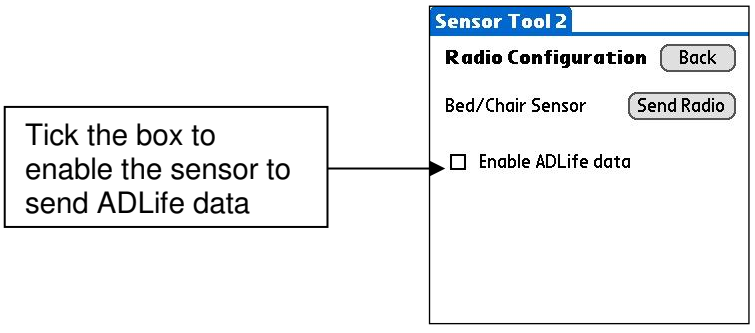
Programming telecare sensors for ADLife

ADLife uses only the following standard Tunstall telecare sensors to generate ADL data.

- Electrical Usage Sensor
- Universal Sensor (used for door usage or transmitter for the bed/chair sensor)
- Bed/Chair Occupancy Sensor
- Fast PIR

These should be installed and programmed to the Lifeline Vi+ in the following way:

1. Determine where in the property, the telecare sensors should be fitted
2. Assign the telecare sensors to the unit and ensure the correct location is specified – this can be done using 'plug and play' and quick code 4zxx (see page 18) or by using PC Connect.
3. If Bed/Chair sensors with a control unit (part number 41005/13) are being used, then using the PDA programming software, ensure the 'Enable ADLife data' box is ticked as shown in the diagram below.

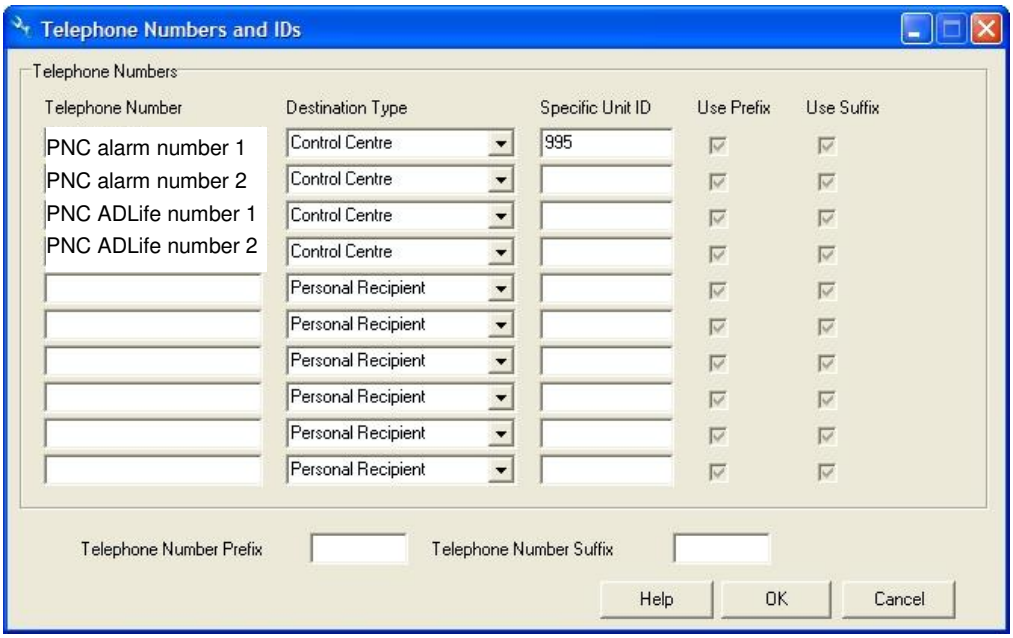


Configuring ADLife

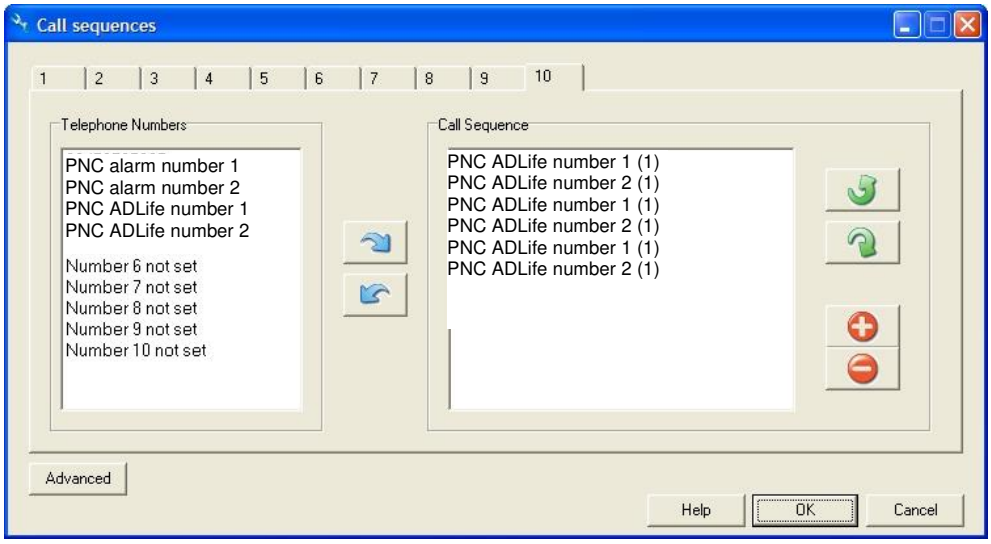
PC Connect is used to configure ADLife. The following steps are required: -

1. **Setting the PNC5/6 number** - If the Lifeline Vi+ is required to send ADLife data to a different PNC5/6 (than normal alarm calls) then it is necessary to set up the alarm numbers and call sequence for ADLife calls. This is done in the standard way using PC Connect:

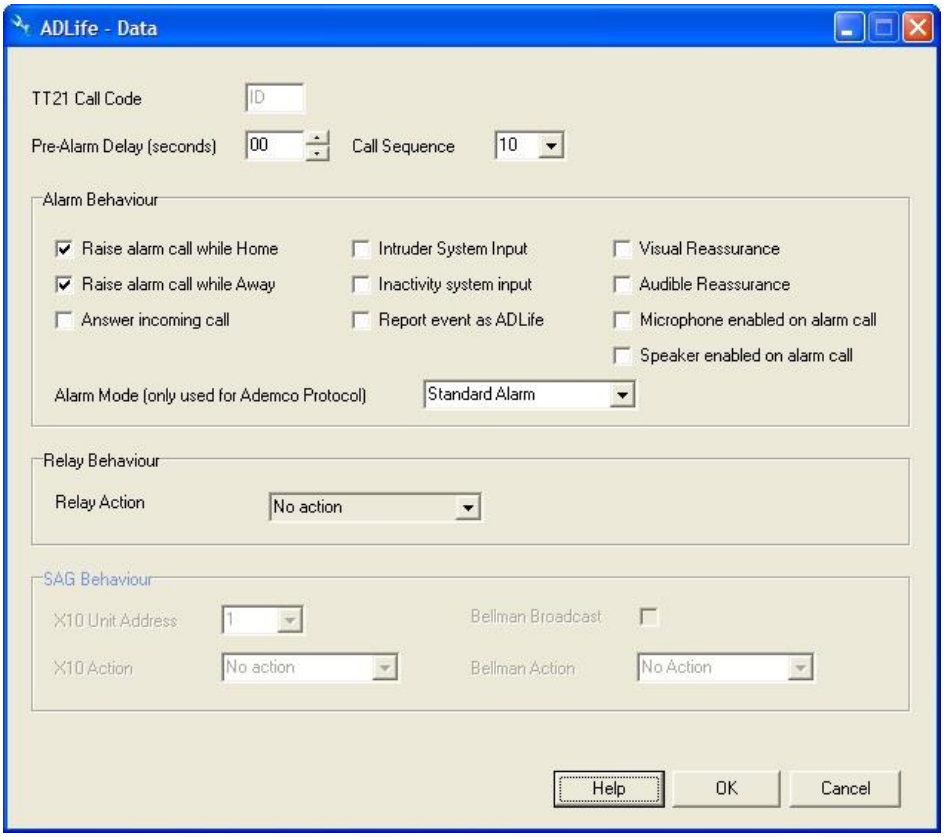
    a. Click on the Telephone Numbers and ID icon (on the main PC Connect screen) and enter the number(s) of the PNC5/6 that will receive ADLife calls – in this case numbers 3 and 4. Click OK to exit the screen.



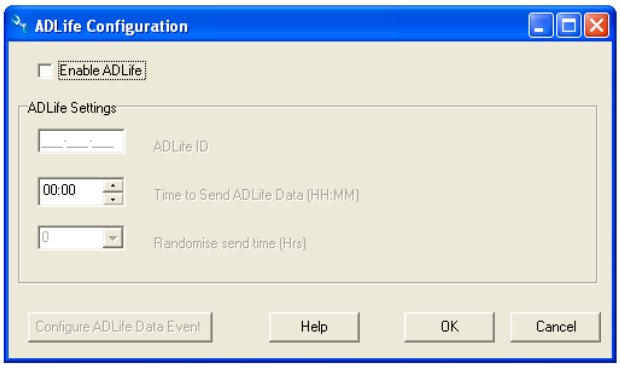
    b. Click on the Call Sequences icon (on the main PC Connect screen) and configure Call Sequence 10 to an appropriate call sequence for the PNC5/6 numbers required to receive ADLife data calls. Click OK to exit the screen.



2. **Configuring the ADLife Data Event** - The next stage is to configure the Lifeline Vi+ home unit's response to the ADLife Data event. Click on the Alarms and Events icon (on the main PC Connect screen), the Alarms Event screen will open. Click the 'Misc' tab and select the ADLife - Data option and then click configure. This will open the ADLife – Data event configuration window. Ensure the Alarm Behaviour box is configured as shown and that the correct Call Sequence is selected. Click OK to exit the screen.



3. **Configuring the ADLife Parameter** –
   a. Click on the ADLife icon (on the main PC Connect screen) which will open the ADLife Configuration screen.



   b. Tick the Enable ADLife box
   c. Enter the ADLife ID (supplied by Tunstall)

d. Enter the time at which the ADLife data will be sent to the PNC5/6 monitoring centre. This is recommended to be between 03:00 and 04:00 (24 hour format)
e. Enter the randomise send time. This programs the unit to send its data +/- 0, 1 or 2 hours from the actual send time previously set.
f. Click OK to confirm the changes
g. Set the correct time/date on the unit using the Time and Date icon (on the main PC Connect screen)
h. Click Write, then either 'Write only modified parameters' or 'Write all parameters except date and time'.

4. Completing the ADLife installation

a. Use the quick code (6550) to clean out any ADLife data from the unit. This will remove any data collected as a result of testing sensors etc. The unit will send ADLife data (within the time window specified by Parameter 94) and this can be viewed the next day on the ADLife Server.
b. Test the setup – a quick code (6551) is also available to force the unit to make an ADLife data call immediately, this data will then be presented on the ADLife website within 5 minutes. If the data doesn't appear check that the installation and configuration process has been followed correctly.

Table 1 – TT92 Codes

TT92 Code	Associated Call Code	Text	TT92 Code	Associated Call Code	Text
00		Unit	51		Living room
01	2	First resident personal	52		Dining room
02	2	Second resident personal	53		Study
03	2	Third resident personal	54		Second living room
04		Unspecified location	55	6	ROM 4 event 1
05		Unspecified location	56	6	ROM 4 event 2
06	9	Bogus Caller	57	8	Door usage auto low bat
07	3	CO Detector activation	58	6	ROM 4 event 4
08	8	CO Detector auto low bat	59	8	ROM 4 auto low bat
09	6	Intruder tamper	60		Hall/stairs not spec
10	8	Arm/Disarm auto low bat	61		Hall
11	6 or 8	Flood Detector 2	62		Landing
12	6 or 8	Flood Detector 3	63		Stairs
13	6 or 8	Flood Detector 4	64		Bath high level
14	6 or 8	Flood Detector 5	65	8	Med reminder no ack
15	6	Bed/chair not in by	66	8	Auto presence failed
16	6	Bed/chair not up by	67	6	Incontinence event
17	6	Bed/chair absent	68	8	Incontinence auto low bat
18	6	Bed/chair other	69	6	Bath high temp
19	8	Bed/chair auto low bat	70	6	Bath low temp
20		Bedroom not specified	71		Garage 1
21		Master bedroom	72		Garage 2
22		Second bedroom	73		Front garden
23		Other bedroom	74		Back garden
24		Other bedroom	75	6	Epilepsy
25	6	ROM 1 event 1	76	6	Epilepsy spare
26	6	ROM 1 event 2	77	8	Epilepsy auto low bat
27	6	ROM 1 event 3	78	8	Carer arrived
28	6	ROM 1 event 4	79	6	Carer not arrived
29	8	ROM 1 auto low bat	80	8	Bath auto low bat
30		Bathroom WC not specified	81	6	Dose missed
31		Main bathroom	82	6	Med dispenser fault
32		Second bathroom	83	8	Med dispenser auto low bat
33		Downstairs WC	84	6	CO end of life
34		Outside WC	85	6	CO fault
35	6	ROM 2 event 1	86	3	Temp rise
36	6	ROM 2 event 2	87	6	Low temp
37	8	Electrical Usage auto low bat	88	8	Temp sensor fault
38	6	ROM 2 event 4	89	3	High temp
39	8	ROM 2 auto low bat	90	8	Temp sensor auto low bat
40		Kitchen not spec	91	8	Fall detector auto low bat
41		Main kitchen area	92	2 or 5	Fall detector button press
42		Second kitchen area	93	2 or 5	Fall detector fall
43		Other kitchen area	94	6 or 8	Flood detector 1
44		Other kitchen area	95	3	Gas detector activated
45	6	ROM 3 event 1	96	8	Gas detector auto low bat
46	6	ROM 3 event 2	97	9	Door left open
47	6	ROM 3 event 3	98	9	Property exit
48	6	ROM 3 event 4	99	8	Property exit auto low bat
49	8	ROM 3 auto low bat			
50		Living room area not spec			

Table 2 - TT21/BS8521 Location Codes

TT21 Code	TT21 Location Text	BS8521 Code	BS8521 Location text
00	Blank	00	No location information
01	Resident 1	00	No location information
02	Resident 2	00	No location information
03	Resident 3	00	No location information
04	Unspecified	00	No location information
05	Unspecified	00	No location information
06	Unspecified	00	No location information
07	Unspecified	00	No location information
08	Unspecified	00	No location information
09	Unit	01	Local unit
10	Kettle	00	No location information
11	Television	00	No location information
12	Stove	00	No location information
13	Microwave	00	No location information
14	Toaster	00	No location information
15	Vacuum	00	No location information
16	Appliance 1	00	No location information
17	Appliance 2	00	No location information
18	Appliance 3	00	No location information
19	Appliance 4	00	No location information
20	Bedroom	07	Bedroom 1 (master)
21	Master bedroom	07	Bedroom 1 (master)
22	Second bedroom	08	Bedroom 2
23	Third bedroom	09	Bedroom 3 (other)
24	Fourth bedroom	10	Bedroom 4 (guest)
25	Other bedroom	07	Bedroom 1 (master)
26	Other bedroom	07	Bedroom 1 (master)
27	Other bedroom	07	Bedroom 1 (master)
28	Other bedroom	07	Bedroom 1 (master)
29	Other bedroom	07	Bedroom 1 (master)
30	Bathroom /WC	17	Bathroom (main)
31	Main bathroom	17	Bathroom (main)
32	Second bathroom	18	Bathroom (second)
33	Downstairs WC	20	WC/toilet (downstairs)
34	Outside toilet	21	WC/toilet (other)
35	En- suite	21	WC/toilet (other)
36	Shower	21	WC/toilet (other)
37	Other bathroom	17	Bathroom (main)
38	Other bathroom	17	Bathroom (main)
39	Other bathroom	17	Bathroom (main)
40	Kitchen	22	Kitchen (main)
41	Main Kitchen	22	Kitchen (main)
42	Second kitchen	23	Kitchen (second)
43	Other kitchen	24	Kitchen area (other)
44	Other kitchen	24	Kitchen area (other)
45	Other kitchen	24	Kitchen area (other)
46	Other kitchen	24	Kitchen area (other)
47	Other kitchen	24	Kitchen area (other)
48	Other kitchen	24	Kitchen area (other)
49	Other kitchen	24	Kitchen area (other)
50	Living area	11	Living room (main)
51	Living room	11	Living room (main)
52	Dining room	14	Dining room (main)
53	Study	38	Study/office (other)
54	Living room 2	12	Living room (second)
55	Living area	13	Living area (other)
56	Living area	13	Living area (other)
57	Living area	13	Living area (other)
58	Living area	13	Living area (other)
59	Living area	13	Living area (other)
60	Hall/stairs	06	Landing
61	Hall	03	Hallway (upstairs)
62	Landing	06	Landing
63	Stairs	04	Stairs (main)
64	Hall/stairs	05	Stairs (other)
65	Hall/stairs	05	Stairs (other)
66	Hall/stairs	05	Stairs (other)
67	Hall/stairs	05	Stairs (other)
68	Hall/stairs	05	Stairs (other)

69	Hall/stairs	05	Stairs (other)
70	Garden/garage	52	Garden (other)
71	Garage 1	32	Garage (main)
72	Garage 2	33	Garage (other)
73	Front garden	50	Garden (front)
74	Back garden	51	Garden (rear)
75	Shed	48	Shed
76	Garden/garage	52	Garden (other)
77	Garden/garage	52	Garden (other)
78	Garden/garage	52	Garden (other)
79	Garden/garage	52	Garden (other)
80	Front door	28	Front door (main)
81	Back door	30	Back door (main)
82	Fridge door	00	No location information
83	Medicine cabinet	00	No location information
84	Wardrobe door	00	No location information
85	Food cupboard	00	No location information
86	Other door 1	00	No location information
87	Other door 2	00	No location information
88	Other door 3	00	No location information
89	Other door 4	00	No location information
90	Unspecified	00	No location information
91	Unspecified	00	No location information
92	Unspecified	00	No location information
93	Unspecified	00	No location information
94	Unspecified	00	No location information
95	Unspecified	00	No location information
96	Unspecified	00	No location information
97	Unspecified	00	No location information
98	Unspecified	00	No location information
99	Unspecified	00	No location information

Table 3 - Trigger Type Codes

Trigger	Type Code	Trigger	Type Code
Personal + ALB	01	Carer Trigger	15
Personal + AP	02	ROM #1	16
Temperature Extreme Sensor	03	ROM #2	17
Flood Detector	04	ROM #3	18
CO Detector	05	ROM #4	19
Smoke Detector	06	Nat Gas	20
Door Usage Sensor	07	Property Exit	21
Pressure Mat	08	Arm/Disarm	22
Radio Pull Cord	09	Bogus Caller	23
Enuresis Sensor	10	Electrical Usage	24
Bed/Chair Sensor	11	Medication Dispenser	26
PIR Entry/Exit	12	Bath Sensor	27
Fall Detector	13	Epilepsy	28
PIR Standard	14	Zoning Trigger	29

Table 4 - TT21/BS8521 Event Codes

TT21 Call Code	TT21 Event Text	BS 8521 Event Code	BS8521 Event Text	BS 8521 Status Code	BS8521 Status Text
AA	Personal Trigger activation	019	Personal Trigger 1	00	Normal default
Aa	Personal Trigger activation (LB)	019	Personal Trigger 1	07	Low battery status set
AB	Personal Trigger AP	019	Personal Trigger 1	08	Busy
Ab	Personal Trigger AP (LB)	019	Personal Trigger 1	08	Busy
A0	Personal Trigger ALB	019	Personal Trigger 1	06	Fault status (alarm not active)
A1	Personal Trigger AP Fail	019	Personal Trigger 1	06	Fault status (alarm not active)
AB	Personal Trigger AP Restore	019	Personal Trigger 1	04	In service (fault rectified)
AC	TES High Temp	032	High Temperature	00	Normal default
Ac	TES High Temp (LB)	032	High Temperature	07	Low battery status set
AD	TES Fault	032	High Temperature	06	Fault status (alarm not active)
Ad	TES Fault (LB)	032	High Temperature	06	Fault status (alarm not active)
AE	TES Low Temp	033	Low Temperature	00	Normal default
Ae	TES Low Temp (LB)	033	Low Temperature	07	Low battery status set
AF	TES Temp Rise	034	Temperature rate of rise	00	Normal default
Af	TES Temp Rise (LB)	034	Temperature rate of rise	07	Low battery status set
AG	TES AP	032	High Temperature	08	Busy
Ag	TES AP (LB)	032	High Temperature	08	Busy
A2	TES ALB	032	High Temperature	06	Fault status (alarm not active)
A3	TES AP Fail	032	High Temperature	06	Fault status (alarm not active)
AG	TES AP Restore	032	High Temperature	04	In service (fault rectified)
AH	Flood Detector activation	047	Flood	00	Normal default
Ah	Flood Detector activation (LB)	047	Flood	07	Low battery status set
AI	Flood Detector AP	047	Flood	08	Busy
Ai	Flood Detector AP (LB)	047	Flood	08	Busy
A4	Flood Detector ALB	047	Flood	06	Fault status (alarm not active)
A5	Flood Detector AP Fail	047	Flood	06	Fault status (alarm not active)
AI	Flood Detector AP Restore	047	Flood	04	In service (fault rectified)
AJ	CO Detector activation	026	Carbon Monoxide	00	Normal default
Aj	CO Detector activation (LB)	026	Carbon Monoxide	07	Low battery status set
AK	CO Detector EOL	026	Carbon Monoxide	09	Out of Service
Ak	CO Detector EOL (LB)	026	Carbon Monoxide	09	Out of Service
AL	CO Detector fault	026	Carbon Monoxide	06	Fault status (alarm not active)
Al	CO Detector fault (LB)	026	Carbon Monoxide	06	Fault status (alarm not active)
AM	CO Detector AP	026	Carbon Monoxide	08	Busy
Am	CO Detector AP (LB)	026	Carbon Monoxide	08	Busy
A6	CO Detector ALB	026	Carbon Monoxide	06	Fault status (alarm not active)
A7	CO Detector AP Fail	026	Carbon Monoxide	06	Fault status (alarm not active)
AM	CO Detector AP Restore	026	Carbon Monoxide	04	In service (fault rectified)
AN	Smoke Detector activation	016	Smoke	00	Normal default
An	Smoke Detector activation (LB)	016	Smoke	07	Low battery status set
AO	Smoke Detector AP	016	Smoke	08	Busy
Ao	Smoke Detector AP (LB)	016	Smoke	08	Busy
A8	Smoke Detector ALB	016	Smoke	06	Fault status (alarm not active)
A9	Smoke Detector AP Fail	016	Smoke	06	Fault status (alarm not active)
AO	Smoke Detector AP Restore	016	Smoke	04	In service (fault rectified)
AQ	Door Usage opening	013	Door Contact	00	Normal default
Aq	Door Usage opening (LB)	013	Door Contact	07	Low battery status set
AR	Door Usage closing	013	Door Contact	00	Normal default
Ar	Door Usage closing (LB)	013	Door Contact	07	Low battery status set
AS	Door Usage AP	013	Door Contact	08	Busy
As	Door Usage AP (LB)	013	Door Contact	08	Busy
B0	Door Usage ALB	013	Door Contact	06	Fault status (alarm not active)
B1	Door Usage AP Fail	013	Door Contact	06	Fault status (alarm not active)
AS	Door Usage AP Restore	013	Door Contact	04	In service (fault rectified)
AT	Pressure Mat activation	012	Pressure Mat	00	Normal default
At	Pressure Mat activation (LB)	012	Pressure Mat	07	Low battery status set
AU	Pressure Mat AP	012	Pressure Mat	08	Busy
Au	Pressure Mat AP (LB)	012	Pressure Mat	08	Busy
B2	Pressure Mat ALB	012	Pressure Mat	06	Fault status (alarm not active)
B3	Pressure Mat AP Fail	012	Pressure Mat	06	Fault status (alarm not active)
AU	Pressure Mat AP Restore	012	Pressure Mat	04	In service (fault rectified)
AV	Pullcord activation	011	Fixed trigger 2	00	Normal default
Av	Pullcord activation (LB)	011	Fixed trigger 2	07	Low battery status set

AW	Pullcord AP	011	Fixed trigger 2	08	Busy
Aw	Pullcord AP (LB)	011	Fixed trigger 2	08	Busy
B4	Pullcord ALB	011	Fixed trigger 2	06	Fault status (alarm not active)
B5	Pullcord AP Fail	011	Fixed trigger 2	06	Fault status (alarm not active)
AW	Pullcord AP Restore	011	Fixed trigger 2	04	In service (fault rectified)
AX	Enuresis Sensor activation	036	Enuresis	00	Normal default
Ax	Enuresis Sensor activation (LB)	036	Enuresis	07	Low battery status set
AY	Enuresis Sensor AP	036	Enuresis	08	Busy
Ay	Enuresis Sensor AP (LB)	036	Enuresis	08	Busy
B6	Enuresis Sensor ALB	036	Enuresis	06	Fault status (alarm not active)
B7	Enuresis Sensor AP Fail	036	Enuresis	06	Fault status (alarm not active)
AY	Enuresis Sensor AP Restore	036	Enuresis	04	In service (fault rectified)
AZ	Bed/Chair Not in	037	Bed Occupancy	00	Normal default
Az	Bed/Chair Not in (LB)	037	Bed Occupancy	07	Low battery status set
BA	Bed/Chair Not up	037	Bed Occupancy	00	Normal default
Ba	Bed/Chair Not up (LB)	037	Bed Occupancy	07	Low battery status set
BB	Bed/Chair Absence	037	Bed Occupancy	00	Normal default
Bb	Bed/Chair Absence (LB)	037	Bed Occupancy	07	Low battery status set
BC	Bed/Chair Other	037	Bed Occupancy	00	Normal default
Bc	Bed/Chair Other (LB)	037	Bed Occupancy	07	Low battery status set
BD	Bed/Chair ADLife In	037	Bed Occupancy	00	Normal default
Bd	Bed/Chair ADLife In (LB)	037	Bed Occupancy	07	Low battery status set
BE	Bed/Chair ADLife Out	037	Bed Occupancy	00	Normal default
Be	Bed/Chair ADLife Out (LB)	037	Bed Occupancy	07	Low battery status set
BF	Bed/Chair AP	037	Bed Occupancy	08	Busy
Bf	Bed/Chair AP (LB)	037	Bed Occupancy	08	Busy
B8	Bed/Chair ALB	037	Bed Occupancy	06	Fault status (alarm not active)
B9	Bed/Chair AP Fail	037	Bed Occupancy	06	Fault status (alarm not active)
BF	Bed/Chair AP Restore	037	Bed Occupancy	04	In service (fault rectified)
BG	PIR (E/E) activation	014	Passive infra red (PIR) detector	00	Normal default
Bg	PIR (E/E) activation (LB)	014	Passive infra red (PIR) detector	07	Low battery status set
BH	PIR (non E/E) activation	014	Passive infra red (PIR) detector	00	Normal default
Bh	PIR (non E/E) activation (LB)	014	Passive infra red (PIR) detector	07	Low battery status set
BI	PIR Tamper	014	Passive infra red (PIR) detector	05	Fault status (alarm active)
Bi	PIR Tamper (LB)	014	Passive infra red (PIR) detector	05	Fault status (alarm active)
BM	PIR AP	014	Passive infra red (PIR) detector	08	Busy
Bm	PIR AP (LB)	014	Passive infra red (PIR) detector	08	Busy
C0	PIR ALB	014	Passive infra red (PIR) detector	06	Fault status (alarm not active)
C1	PIR AP Fail	014	Passive infra red (PIR) detector	06	Fault status (alarm not active)
BM	PIR AP Restore	014	Passive infra red (PIR) detector	04	In service (fault rectified)
BN	Fall Detector Button	019	Personal Trigger 1	00	Normal default
Bn	Fall Detector Button (LB)	019	Personal Trigger 1	07	Low battery status set
BO	Fall Detector Fall	021	Fall trigger 1	00	Normal default
Bo	Fall Detector Fall (LB)	021	Fall trigger 1	07	Low battery status set
LK	Fall Detector Not Worn	021	Fall trigger 1	00	Normal default
Lk	Fall Detector Not Worn (LB)	021	Fall trigger 1	07	Low battery status set
LL	Fall Detector Activation Cancelled	021	Fall trigger 1	00	Normal default
Ll	Fall Detector Activation Cancelled (LB)	021	Fall trigger 1	07	Low battery status set
BP	Fall Detector AP	021	Fall trigger 1	08	Busy
Bp	Fall Detector AP (LB)	021	Fall trigger 1	08	Busy
C2	Fall Detector ALB	021	Fall trigger 1	06	Fault status (alarm not active)
C3	Fall Detector AP Fail	021	Fall trigger 1	06	Fault status (alarm not active)
BP	Fall Detector AP Restore	021	Fall trigger 1	04	In service (fault rectified)
BQ	Carer Trigger activation	091	Service call	00	Normal default
Bq	Carer Trigger activation (LB)	091	Service call	07	Low battery status set
BR	Carer Trigger AP	091	Service call	08	Busy
Br	Carer Trigger AP (LB)	091	Service call	08	Busy
C4	Carer Trigger ALB	091	Service call	06	Fault status (alarm not active)
C5	Carer Trigger AP Fail	091	Service call	06	Fault status (alarm not active)
BR	Carer Trigger AP Restore	091	Service call	04	In service (fault rectified)
BS	ROM # 1 Event #1	010	Fixed trigger 1	00	Normal default

Bs	ROM # 1 Event #1 (LB)	010	Fixed trigger 1	07	Low battery status set
BT	ROM # 1 Event #2	010	Fixed trigger 1	00	Normal default
Bt	ROM # 1 Event #2 (LB)	010	Fixed trigger 1	07	Low battery status set
BU	ROM # 1 Event #3	010	Fixed trigger 1	00	Normal default
Bu	ROM # 1 Event #3 (LB)	010	Fixed trigger 1	07	Low battery status set
BV	ROM # 1 Event #4	010	Fixed trigger 1	00	Normal default
Bv	ROM # 1 Event #4 (LB)	010	Fixed trigger 1	07	Low battery status set
BW	ROM # 1 AP	010	Fixed trigger 1	08	Busy
Bw	ROM # 1 AP (LB)	010	Fixed trigger 1	08	Busy
C6	ROM # 1 ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
C7	ROM #1 AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
BW	ROM #1 AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
BX	ROM # 2 Event #1	010	Fixed trigger 1	00	Normal default
Bx	ROM # 2 Event #1 (LB)	010	Fixed trigger 1	07	Low battery status set
BY	ROM # 2 Event #2	010	Fixed trigger 1	00	Normal default
By	ROM # 2 Event #2 (LB)	010	Fixed trigger 1	07	Low battery status set
BZ	ROM # 2 Event #3	010	Fixed trigger 1	00	Normal default
Bz	ROM # 2 Event #3 (LB)	010	Fixed trigger 1	07	Low battery status set
CA	ROM # 2 Event #4	010	Fixed trigger 1	00	Normal default
Ca	ROM # 2 Event #4 (LB)	010	Fixed trigger 1	07	Low battery status set
CB	ROM # 2 AP	010	Fixed trigger 1	08	Busy
Cb	ROM # 2 AP (LB)	010	Fixed trigger 1	08	Busy
C8	ROM # 2 ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
C9	ROM #2 AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
CB	ROM #2 AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
CD	ROM # 3 Event #1	010	Fixed trigger 1	00	Normal default
Cd	ROM # 3 Event #1 (LB)	010	Fixed trigger 1	07	Low battery status set
CE	ROM # 3 Event #2	010	Fixed trigger 1	00	Normal default
Ce	ROM # 3 Event #2 (LB)	010	Fixed trigger 1	07	Low battery status set
CF	ROM # 3 Event #3	010	Fixed trigger 1	00	Normal default
Cf	ROM # 3 Event #3 (LB)	010	Fixed trigger 1	07	Low battery status set
CG	ROM # 3 Event #4	010	Fixed trigger 1	00	Normal default
Cg	ROM # 3 Event #4 (LB)	010	Fixed trigger 1	07	Low battery status set
CH	ROM # 3 AP	010	Fixed trigger 1	08	Busy
Ch	ROM # 3 AP (LB)	010	Fixed trigger 1	08	Busy
D0	ROM # 3 ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
D1	ROM #3 AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
CH	ROM #3 AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
CI	ROM # 4 Event #1	010	Fixed trigger 1	00	Normal default
Ci	ROM # 4 Event #1 (LB)	010	Fixed trigger 1	07	Low battery status set
CJ	ROM # 4 Event #2	010	Fixed trigger 1	00	Normal default
Cj	ROM # 4 Event #2 (LB)	010	Fixed trigger 1	07	Low battery status set
CK	ROM # 4 Event #3	010	Fixed trigger 1	00	Normal default
Ck	ROM # 4 Event #3 (LB)	010	Fixed trigger 1	07	Low battery status set
CL	ROM # 4 Event #4	010	Fixed trigger 1	00	Normal default
Cl	ROM # 4 Event #4 (LB)	010	Fixed trigger 1	07	Low battery status set
CM	ROM # 4 AP	010	Fixed trigger 1	08	Busy
Cm	ROM # 4 AP (LB)	010	Fixed trigger 1	08	Busy
D2	ROM # 4 ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
D3	ROM #4 AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
CM	ROM #4 AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
CN	Natural Gas Detector activation	027	Natural Gas	00	Normal default
Cn	Natural Gas Detector activation (LB)	027	Natural Gas	07	Low battery status set
CO	Natural Gas Detector AP	027	Natural Gas	08	Busy
Co	Natural Gas Detector AP (LB)	027	Natural Gas	08	Busy
D4	Natural Gas Detector ALB	027	Natural Gas	06	Fault status (alarm not active)
D5	Natural Gas Detector AP Fail	027	Natural Gas	06	Fault status (alarm not active)
CO	Natural Gas Detector AP Restore	027	Natural Gas	04	In service (fault rectified)
CP	PES Door Left Open	055	Door Open	00	Normal default
Cp	PES Door Left Open (LB)	055	Door Open	07	Low battery status set
CQ	PES Client Wandered	015	Boundary Breach	00	Normal default
Cq	PES Client Wandered (LB)	015	Boundary Breach	07	Low battery status set
CR	PES AP	030	Property Exit 1	08	Busy
Cr	PES AP (LB)	030	Property Exit 1	08	Busy
D6	PES ALB	030	Property Exit 1	06	Fault status (alarm not active)
D7	PES AP Fail	030	Property Exit 1	06	Fault status (alarm not active)
CR	PES AP Restore	030	Property Exit 1	04	In service (fault rectified)
CS	Arm/Disarm activation	010	Fixed trigger 1	00	Normal default
Cs	Arm/Disarm activation (LB)	010	Fixed trigger 1	07	Low battery status set
CT	Arm/Disarm AP	010	Fixed trigger 1	08	Busy
Ct	Arm/Disarm AP (LB)	010	Fixed trigger 1	08	Busy

D8	Arm/Disarm ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
D9	Arm/Disarm AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
CT	Arm/Disarm AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
CU	Bogus Caller activation	018	Bogus caller trigger	00	Normal default
Cu	Bogus Caller activation (LB)	018	Bogus caller trigger	07	Low battery status set
CV	Bogus Caller AP	018	Bogus caller trigger	08	Busy
Cv	Bogus Caller AP (LB)	018	Bogus caller trigger	08	Busy
E0	Bogus Caller ALB	018	Bogus caller trigger	06	Fault status (alarm not active)
E1	Bogus Caller AP Fail	018	Bogus caller trigger	06	Fault status (alarm not active)
CV	Bogus Caller AP Restore	018	Bogus caller trigger	04	In service (fault rectified)
CW	Electrical Usage Sensor ON	010	Fixed trigger 1	00	Normal default
Cw	Electrical Usage Sensor ON (LB)	010	Fixed trigger 2	07	Low battery status set
CX	Electrical Usage Sensor OFF	010	Fixed trigger 3	00	Normal default
Cx	Electrical Usage Sensor OFF (LB)	010	Fixed trigger 4	07	Low battery status set
CY	Electrical Usage Sensor AP	010	Fixed trigger 5	08	Busy
Cy	Electrical Usage Sensor AP (LB)	010	Fixed trigger 6	08	Busy
E2	Electrical Usage Sensor ALB	010	Fixed trigger 7	06	Fault status (alarm not active)
E3	Electrical Usage Sensor AP Fail	010	Fixed trigger 8	06	Fault status (alarm not active)
CY	Electrical Usage Sensor AP Restore	010	Fixed trigger 9	04	In service (fault rectified)
CZ	Medication Dispenser Dose Missed	035	Medication dispenser	00	Normal default
Cz	Medication Dispenser Dose Missed (LB)	035	Medication dispenser	07	Low battery status set
DA	Medication Dispenser Device Fault	035	Medication dispenser	06	Fault status (alarm not active)
Da	Medication Dispenser Device Fault (LB)	035	Medication dispenser	06	Fault status (alarm not active)
DB	Medication Dispenser Dose Taken	035	Medication dispenser	00	Normal default
Db	Medication Dispenser Dose Taken (LB)	035	Medication dispenser	07	Low battery status set
DC	Medication Dispenser AP	035	Medication dispenser	08	Busy
Dc	Medication Dispenser AP (LB)	035	Medication dispenser	08	Busy
E4	Medication Dispenser ALB	035	Medication dispenser	06	Fault status (alarm not active)
E5	Medication Dispenser AP Fail	035	Medication dispenser	06	Fault status (alarm not active)
DC	Medication Dispenser AP Restore	035	Medication dispenser	04	In service (fault rectified)
DD	Bath Sensor High Level	048	Bath level	00	Normal default
Dd	Bath Sensor High Level (LB)	048	Bath level	07	Low battery status set
DE	Bath Sensor High Temp	048	Bath level	00	Normal default
De	Bath Sensor High Temp (LB)	048	Bath level	07	Low battery status set
DF	Bath Sensor Low Temp	048	Bath level	00	Normal default
Df	Bath Sensor Low Temp (LB)	048	Bath level	07	Low battery status set
DG	Bath Sensor AP	048	Bath level	08	Busy
Dg	Bath Sensor AP (LB)	048	Bath level	08	Busy
E6	Bath Sensor ALB	048	Bath level	06	Fault status (alarm not active)
E7	Bath Sensor AP Fail	048	Bath level	06	Fault status (alarm not active)
DG	Bath Sensor AP Restore	048	Bath level	04	In service (fault rectified)
DH	Epilepsy Sensor activation	042	Seizure	00	Normal default
Dh	Epilepsy Sensor activation (LB)	042	Seizure	07	Low battery status set
DI	Epilepsy Sensor other	042	Seizure	00	Normal default
Di	Epilepsy Sensor other (LB)	042	Seizure	07	Low battery status set
DJ	Epilepsy Sensor AP	042	Seizure	08	Busy
Dj	Epilepsy Sensor AP (LB)	042	Seizure	08	Busy
E8	Epilepsy Sensor ALB	042	Seizure	06	Fault status (alarm not active)
E9	Epilepsy Sensor AP Fail	042	Seizure	06	Fault status (alarm not active)
DJ	Epilepsy Sensor AP Restore	042	Seizure	04	In service (fault rectified)
DK	Zoning Trigger Zone 1	010	Fixed trigger 1	00	Normal default
Dk	Zoning Trigger Zone 1 (LB)	010	Fixed trigger 1	07	Low battery status set
DL	Zoning Trigger Zone 2	010	Fixed trigger 1	00	Normal default
Dl	Zoning Trigger Zone 2 (LB)	010	Fixed trigger 1	07	Low battery status set
DM	Zoning Trigger AP	010	Fixed trigger 1	08	Busy
Dm	Zoning Trigger AP (LB)	010	Fixed trigger 1	08	Busy
F0	Zoning Trigger ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
F1	Zoning Trigger AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
DM	Zoning Trigger AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
AA	MFT Event 1 Activation	010	Fixed trigger 1	00	Normal default
Aa	MFT Event 1 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
AA	MFT Event 2 Activation	010	Fixed trigger 1	00	Normal default
Aa	MFT Event 2 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
AA	MFT Event 3 Activation	010	Fixed trigger 1	00	Normal default
Aa	MFT Event 3 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
AA	MFT Event 4 Activation	010	Fixed trigger 1	00	Normal default

Aa	MFT Event 4 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
DN	MFT AP	010	Fixed trigger 1	08	Busy
Dn	MFT AP (LB)	010	Fixed trigger 1	08	Busy
F2	MFT ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
F3	MFT AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
DN	MFT AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
CU	Keypad Event 1 Activation	010	Fixed trigger 1	00	Normal default
Cu	Keypad Event 1 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
CS	Keypad Event 2 Activation	010	Fixed trigger 1	00	Normal default
Cs	Keypad Event 2 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
DK	Keypad Event 3 Activation	010	Fixed trigger 1	00	Normal default
Dk	Keypad Event 3 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
BQ	Keypad Event 4 Activation	010	Fixed trigger 1	00	Normal default
Bq	Keypad Event 4 Activation (LB)	010	Fixed trigger 1	07	Low battery status set
DO	Keypad AP	010	Fixed trigger 1	08	Busy
Do	Keypad AP (LB)	010	Fixed trigger 1	08	Busy
F4	Keypad ALB	010	Fixed trigger 1	06	Fault status (alarm not active)
F5	Keypad AP Fail	010	Fixed trigger 1	06	Fault status (alarm not active)
DO	Keypad AP Restore	010	Fixed trigger 1	04	In service (fault rectified)
HA	Red Button	010	Fixed trigger 1	00	Normal default
Ha	Cancel Button	010	Fixed trigger 1	00	Normal default
HB	DE Privacy Button	010	Fixed trigger 1	00	Normal default
Hb	Talk Button	010	Fixed trigger 1	00	Normal default
HC	Door Open Button	010	Fixed trigger 1	00	Normal default
Hc	Away Button	010	Fixed trigger 1	00	Normal default
HD	Function Button #4	010	Fixed trigger 1	00	Normal default
IA	Intruder Alarm	028	Intruder	00	Normal default
Ia	Inactivity Alarm	043	Inactivity	00	Normal default
IB	Periodic Call	058	Automatic periodic test call	00	Normal default
Ib	Firemans Switch	010	Fixed trigger 1	00	Normal default
IC	Fire Panel Input	017	Fire	00	Normal default
Ic	Medical Reminder - No Ack	035	Medication dispenser	00	Normal default
ID	ADLife - Data	057	System status	00	Normal default
Id	Virtual Bed/Chair #1 Absence	037	Bed Occupancy	00	Normal default
IE	Virtual Bed/Chair #1 Client In	037	Bed Occupancy	00	Normal default
Ie	Virtual Bed/Chair #1 Client Out	037	Bed Occupancy	00	Normal default
IF	Virtual Bed/Chair #2 Absence	037	Bed Occupancy	00	Normal default
If	Virtual Bed/Chair #2 Client In	037	Bed Occupancy	00	Normal default
IG	Virtual Bed/Chair #2 Client Out	037	Bed Occupancy	00	Normal default
Ig	Virtual Inactive Client #1	043	Inactivity	00	Normal default
IH	Virtual Inactive Client #2	043	Inactivity	00	Normal default
Ih	Virtual Inactive Client #3	043	Inactivity	00	Normal default
II	Virtual Inactive Client #4	043	Inactivity	00	Normal default
Ii	Virtual PES	030	Property Exit 1	00	Normal default
IJ	H/W Input #1	010	Fixed trigger 1	00	Normal default
Ij	H/W Input #2	010	Fixed trigger 1	00	Normal default
IK	SM Low Temp Input (Code 6)	010	Fixed trigger 1	00	Normal default
Ik	SM Auxiliary Input (Code 0)	010	Fixed trigger 1	00	Normal default
IL	Warden Panic Alarm	023	Personal attack 1	00	Normal default
Il	Carer Arrived	091	Service call	00	Normal default
IM	Carer Non-Arrival	091	Service call	09	Out of Service
Im	SM Smoke Input (Code 3)	016	Smoke	00	Normal default
IN	SM CMPS Input (Code 2)	011	Fixed trigger 2	00	Normal default
In	SM Inactivity Input (Code 7)	043	Inactivity	00	Normal default
JA	Mains Fail	051	Mains power	06	Fault status (alarm not active)
Ja	Mains Restore	051	Mains power	04	In service (fault rectified)
JB	System Battery Low	053	Battery	00	Normal default
Jb	Auto Presence Failure	057	System status	06	Fault status (alarm not active)
JC	Auto Low Battery	057	System status	06	Fault status (alarm not active)
Jc	Telephone Line #1 Fail	059	Telephone line 1	06	Fault status (alarm not active)
JD	Telephone Line #1 Restore	059	Telephone line 1	04	In service (fault rectified)
Jd	Telephone Line #2 Fail	060	Telephone line 2	06	Fault status (alarm not active)
JE	Telephone Line #2 Restore	060	Telephone line 2	04	In service (fault rectified)
Je	Pager Fault	063	Serial Data Link	06	Fault status (alarm not active)
JF	CCFP Paging Fault	063	Serial Data Link	06	Fault status (alarm not active)
Jf	Fault - Radio System	061	Radio receiver	06	Fault status (alarm not active)
JG	Fault - Poll Failure	057	System status	06	Fault status (alarm not active)
Jg	Fault - Door Panel Keypad	057	System status	06	Fault status (alarm not active)
JH	Fault - Failed To Contact ARC	057	System status	06	Fault status (alarm not active)
Jh	Fault - SAG Failure	057	System status	06	Fault status (alarm not active)
JI	AP Restore	057	System status	04	in service (fault rectified)

J1	EEPROM Fail	057	System status	06	Fault status (alarm not active)
J2	Stuck Key	057	System status	06	Fault status (alarm not active)
J3	Fault #3	057	System status	06	Fault status (alarm not active)
J4	Fault #4	057	System status	06	Fault status (alarm not active)
J5	Fault #5	057	System status	06	Fault status (alarm not active)
J6	Fault #6	057	System status	06	Fault status (alarm not active)
J7	Manual Test Alarm	010	Fixed trigger 1	00	Normal default
J8	Fault - Unit Failure	057	System status	06	Fault status (alarm not active)
J9	Battery Charged	053	Battery	04	Normal default
J0	Fault #10	057	System status	06	Fault status (alarm not active)
KA	Door Call	057	System status	00	Normal default
Ka	Ringing start	057	System status	00	Normal default
KB	Ringing end	057	System status	00	Normal default
Kb	General Alarm	010	Fixed trigger 1	00	Normal default
Kd	Away State entry	057	System status	00	Normal default
KE	Home State entry	057	System status	00	Normal default
Ke	Call Raised	057	System status	00	Normal default
KF	Call Selected	057	System status	00	Normal default
Kf	Call Cleared	057	System status	00	Normal default
KG	Speech Module Selected	057	System status	00	Normal default
Kg	System onsite	057	System status	00	Normal default
KH	System offsite	057	System status	00	Normal default
Kh	Dialling complete	057	System status	00	Normal default
KI	Protocol complete	057	System status	00	Normal default
Ki	TT New Acceptor Code 0 (D)	057	System status	00	Normal default
KJ	TT New Acceptor Code 3 (D/G)	057	System status	00	Normal default
Kj	TT New Acceptor Code 6 (D)	057	System status	00	Normal default
KL	TT New Acceptor Code A (D)	057	System status	00	Normal default
Kl	TT New Acceptor Code B (D)	057	System status	00	Normal default
KM	TT New Acceptor Code C (D)	057	System status	00	Normal default
Km	TT New Acceptor Code D (D)	057	System status	00	Normal default
KN	TT New Acceptor Code * (D)	057	System status	00	Normal default
Kn	TT New Acceptor Code 8 (G)	057	System status	00	Normal default
KO	TT New Acceptor Code A (G)	057	System status	00	Normal default
Ko	TT New Acceptor Code C (G)	057	System status	00	Normal default
KP	TT New Acceptor Code E (G)	057	System status	00	Normal default
Kp	TT New Acceptor Code * (G)	057	System status	00	Normal default
K0	Momentary offsite	057	System status	00	Normal default
K1	Intruder system armed	057	System status	00	Normal default
K2	Intruder system disarmed	057	System status	00	Normal default
K3	Carer Left	099	Service incompleted	00	Normal default
K4	Intruder Timeout	057	System status	00	Normal default
K5	Keyless Access	057	System status	00	Normal default
K6	Concierge Call	010	Fixed trigger 1	00	Normal default
K7	Information Call (likely to be removed)	057	System status	00	Normal default
K8	Ademco Reset	057	System status	00	Normal default
K9	Ademco Timeout	057	System status	00	Normal default
LA	Telelarm Low Battery	057	System status	00	Normal default
La	Confirmation - Call Cleared	057	System status	00	Normal default
LB	Confirmation - Call Raised	057	System status	00	Normal default
Lb	Incoming call answered	057	System status	00	Normal default
LC	Incoming call cleared	057	System status	00	Normal default
Lc	Outgoing call started	057	System status	00	Normal default
LD	Outgoing call finished	057	System status	00	Normal default
Ld	Poll Voice Server	057	System status	00	Normal default
LE	IP Module Fail	062	IP communication Link	00	Normal default
Le	IP Connectivity Fail	062	IP communication Link	06	Fault status (alarm not active)
LF	IP Connectivity Restored	062	IP communication Link	04	In service (fault rectified)
Lf	PNC Contact	062	IP communication Link	00	Normal default
LG	Unknown Trigger Alarm	010	Fixed trigger 1	00	Normal default
Lg	Roaming Alarm	010	Fixed trigger 1	00	Normal default
LH	LAN Fail Alarm	062	IP communication Link	00	Normal default
Lh	PBX Fail Alarm	062	IP communication Link	00	Normal default
LI	Test Alarm (Red Button)	010	Fixed trigger 1	00	Normal default
Li	Test Alarm (Pendant)	010	Fixed trigger 1	00	Normal default
LJ	Test Alarm Not Confirmed (Red Button)	010	Fixed trigger 1	00	Normal default
Lj	Test Alarm Not Confirmed (Pendant)	010	Fixed trigger 1	00	Normal default
Lm	Radio Blocking	061	Radio receiver	06	Fault status (alarm not active)

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Technical Details

Weight:	572g (939g packaged)
Dimensions:	185 x 122 x 41mm (WxLxD)
Mains power:	230v ac 13A electrical socket
Stand-by battery:	1200mAhr capacity (continually internally charged)
Back-up time:	40 hours of stand-by operation with one 30 minute alarm call (minimum expected at date of purchase and when fully charged)
Radio frequency:	869.2125MHz, compliant with the European Social Alarm frequency band
REN:	1
External connections:	3m telephone line cord with type BS6312 plug Plug top transformer with 3m cable

Environmental

Temperature:	Operating temperature (to perform to full specification) = 0°C to 45°C, storage = -10°C to 50°C
Humidity:	Operating relative humidity (non condensing to perform to full specification) = 0 to 80%, storage relative humidity (non condensing) = 0 to 93%

Standards

EMC:	EN55022, EN50130-4 EN301 489-1, EN301 489-3
Safety:	EN60950
Radio:	EN300 220-2 Category 1
CE:	Compliant
Social alarm:	EN50134-1:2002, EN50134-2:1999 (trigger device)

Design, Manufacture, Installation and Service: ISO9001:2008

Declaration of Conformity

We, Tunstall declare that this social alarm equipment is in compliance with the essential requirements and other relevant provisions of the R&TTE Directive 1999/5/EC.

FM12477

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