tynetec FM0827 Sensor Controller User Guide

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A brand of legrand

869MHz
Sensor Controller
Trusted Technology
Caring for People

DIGITALLY ENABLED

- Compatible with Reach IP, Advent XT2, Carer Response and Touchsafe Pro V4.01 onward
- Used to monitor movement within the home
- Range of bed and chair sensors available
- Floor mat and door contacts also available
- Real time clock with auto-BST adjustment
- Supplied with mains adapter & rechargeable battery
- Operating Temperature: +5° C to +40° C
- Telecare Transceiver: 869.2125MHz Class 1.5
- Digital Heartbeat
- Weight: 285 grams
- Dimensions: 190mm x 100mm x 32mm
- **Product Code: ZXT840**

Contents

Positioning

The sensor controller is free-standing, it is normally placed alongside or under the bed/chair being monitored.

Alarm Condition (Standard Sensor Kits)

The sensor controller can be supplied as a kit, either;
ZXT841: sensor controller with a bed sensor
ZXT842: sensor controller with a chair sensor
With these sensors an alarm can be raised either instantly the user leaves their bed/chair or after a 1 to 99 minute programmable absence period if they do not return. If they do not return and an alarm is raised but they are OK, then anoptional 1 to 99 minute programmable reset period can be set. If the user is not detected back in their bed/chair at the end of this period, then the alarm will be raised again.
Monitoring starts when the user has been in their bed/chair for 30 seconds (default logged in bed time). Continuous monitoring is possible if the controller is set to be on all the time. Alternatively, up to 3 active periods can be programmed to repeat every day. There is also the option toraise an alarm if the user is not in their bed/chair after a 0 to999 minute programmable delay from the start of each monitoring period. Monitoring will end at the end of each monitoring period unless the still in bed/chair option is set.
This is a 0 to 999 minute programmable period – if the user is still in their bed/chair at the end of this period an alarm will be raised.

Alarm Condition (Non-Standard Sensors)

The sensor controller and all sensor options are also available separately. With a Magic Stick or SensAlert bed/chair sensor an alarm can be raised either instantly the user leaves their bed/chair or after a programmable 0 to 999 second countdown delay. With a floor mat or door contact an alarm can be raised either instantly the user steps on the mat/opens the door or after a programmable 0 to 999 second countdown delay.
The alarm can be cancelled during the countdown by pressing the ▼ key.

Home/Away Mode

If the user is going to be away from home for a few days, the sensor controller has an Away Mode feature which suspends monitoring to prevent false alarms.
When the user returns home the unit must be switched back into Home Mode and normal monitoring will resume.

Carer Call

The sensor controller has a Carer Call button to make an alarm call at any time. An optional pear-push lead is also available to activate a carer call.

Low Battery Condition

If the mains power fails, the sensor controller will continue to operate from its battery. The length of time the unit will operate for on battery alone will depend on usage. When the battery is running low, the unit will beep and display “Sending a Low Battery Alarm”. When the battery is exhausted the unit will display “Low Battery – Controller is Powering Down” before turning itself off. When the mains power is restored it will need at least 8 hours to fully recharge the battery. The low battery beep can be disabled in programming.

Maintenance

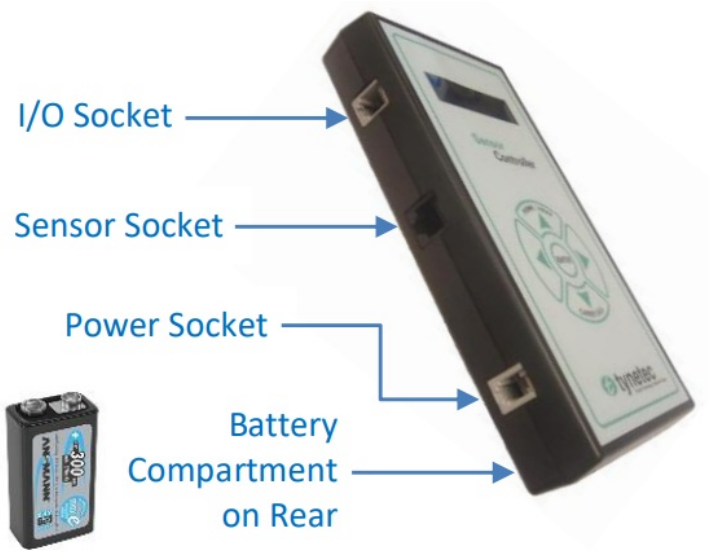
Test the sensor controller once a month.
Check the condition of the mains adapter, sensors and leads, any damaged items should be replaced.
Clean with a damp cloth or anti-bacterial wipe, do not use solvents or cleaners.
Do not immerse the controller or sensors in water.

Disposal

Waste electrical products should not be disposed of with normal household waste.
The sensor controller is ideally suited for disposal within the waste electronic and electrical equipment (WEEE) recycling scheme.
Please recycle where facilities exist. Check with your local authority or contact your supplier for recycling/disposal advice.

How to install the Sensor Controller

The sensor controller should be located within 3 metres ofa mains supply. Slide the battery compartment open on the rear of the sensor controller and connect the battery.



Plug the mains adapter into the Power socket and connect to the mains supply.
Plug the sensor, mat or contact into the Sensor socket.
The I/O Socket is only used for an optional Pear Push or a Nursecall interface lead.

How to install a Bed Sensor

The ZCS844 bed sensor must be placed between the bed base and the mattress. Check the base is in reasonable condition with a flat firm surface to lay the sensor on.

The bed sensor should be placed across the width of the bed at a point where the hips of the person will be when lying down.
Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dimensions: 650mm x 130mm x 10mm

How to install a Chair Sensor

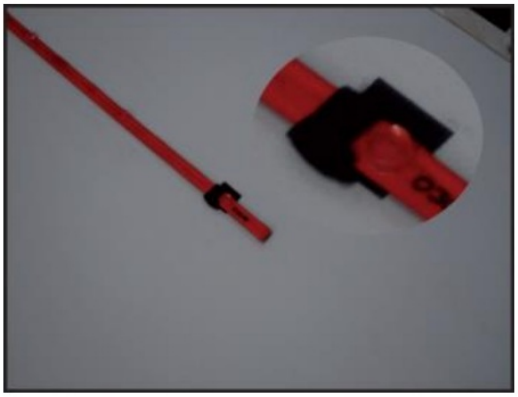
The ZCS859 Chair Sensor must be placed between the seat base and the cushion. Check the base is in reasonable condition with a flat firm surface to lay the sensor on.

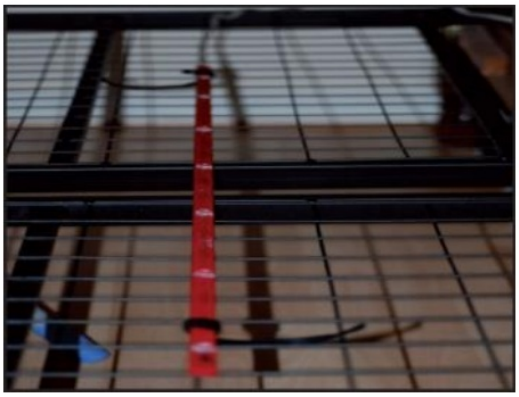
The chair sensor should be placed across the width of the chair at a point where the person will be sitting.
Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dimensions: 325mm x 130mm x 10mm

How to install a Floor Mat
The ZCS857 floor mat must be placed under the carpet or a rug alongside the bed.

The floor mat should be placed where it will be stood on when the person gets out of bed.
Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dimensions: 520mm x 400mm x 6mm
How to install a Door Contact
The ZCS854 door contacts should be installed by a competent person on the frame of the door being monitored.

Fix the contact to the door frame and the magnet to the door.
There should be no more than 10mm between the contacts when the door is closed.
Clip the cable to the door frame, route safely without causing a trip hazard and plug into the sensor controller.
How to install a Magic Stick Bed Sensor
The ZCS851 Magic Stick bed sensor must be placed between the bed base and the mattress.
If the bed has a hard flat base the “button” side of the sensor strip should be laid downwards. Secure the Magic Stick to the bed base using the Velcro straps provided.





If the bed has an open frame base the “flat” side of the sensor strip should be laid downwards. Secure the Magic Stick to the struts of the base using the Velcro straps provided.
Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dimensions: 1000mm x 15mm x 7mm

How to install a Magic Stick Chair Sensor

The ZCS852 Magic Stick chair sensor must be placed between the chair base and the cushion.

Check the base is in reasonable condition with a flat firm surface to lay the sensor on. The “button” side of the sensor strip should be laid downwards and secured using the Velcro straps.
Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dimensions: 400mm x 15mm x 7mm
How to install a SensAlert Bed Sensor
The ZCS861 SensAlert Bed Sensor must be placed on top of the mattress below the sheet.

Place the pad below the back to be alerted when the user sits up in bed.
Place below the buttocks to be alerted when the user vacates the bed.
Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dimensions: 750mm x 250mm x 5mm

How to install a SensAlert Chair Sensor
The ZCS862 SensAlert Chair Sensor must be placed on top of the seat cushion.

Ensure the lead exits safely without causing a trip hazard and plug into the sensor controller.
Dims: 375mm x 250mm x 5mm

Out of Range Notification (Reach IP)

The Reach IP can monitor all radio peripheral devices to determine whether they have been damaged or removed from an installation. Should the Reach IP be unable to detect a device's heartbeat it will automatically generate a "radio out of range" notification. Firstly, investigate if there's a genuine reason for the alert, if not, arrange for the peripheral device to be replaced immediately. The "Radio out of range timer" can be set from 30 hours to 99999 hours in Pulse CMP. "Radio supervision" can be disabled by unchecking the tick box associated with each peripheral device in Pulse CMP.

How to switch the Sensor Controller on

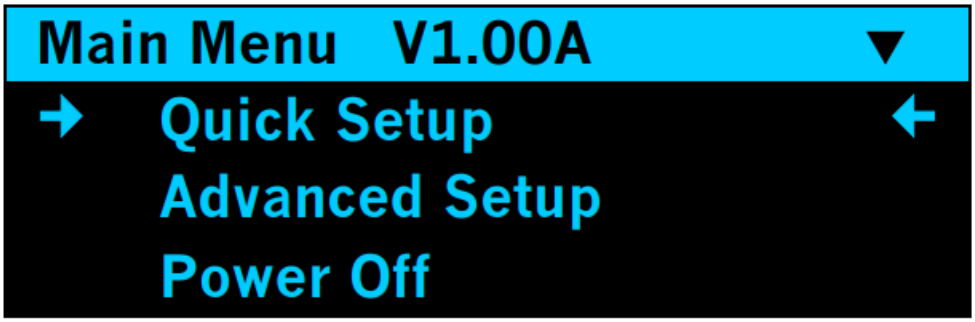
Once the mains adapter lead is plugged in and switched on the display will flash "Press ENTER for Setup".
Press the ENTER key and the Main Menu will be displayed.
The battery symbol should be flashing in the top of the Main Menu display to indicate the battery is being charged.
After 20 seconds the display will go blank, the unit is still on, but the display goes off to save power.
The sensor controller should be left plugged in and switched on at all times – this will ensure its battery is always fully charged and alarms will always be transmitted.

How to switch the Sensor Controller off

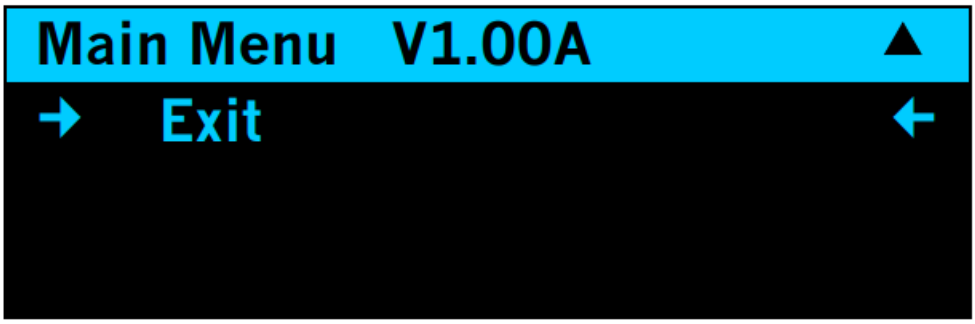
Switch the mains supply OFF and unplug power lead.
Press the ENTER key to display the Main Menu.
Press the ▼ key to select → Power Off ← then press ENTER.
The display will show “The Controller is Powering Down” before switching off.

Navigating the Display Menu’s

Press the ENTER key once and the display will illuminate.
Use the ▲▼ keys to scroll up/down through the options.
The ▲▼ arrows in the top right of the display indicate more menu options are available using the up/down keys.



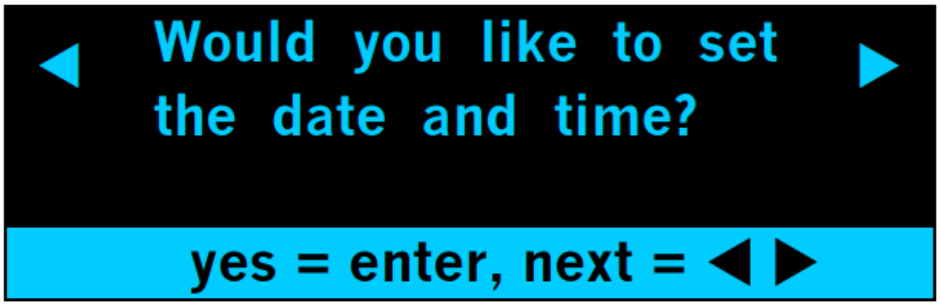
Scroll down past → Power Off ← and the display will show;



The menu option highlighted → in arrows ← can be selected with the ENTER key.
This will either take you to another sub-menu or give you the option to change settings.
Use the ▲▼ keys to increase/decrease the setting highlighted by the cursor.
Use the ◀ ▶ keys to move the cursor back/forwards between fields.
To return to the Main Menu press the ▲ & ▶ keys together.
To exit the Main Menu, select → Exit ← and press the ENTER key, the display will blank.

Quick Setup Mode

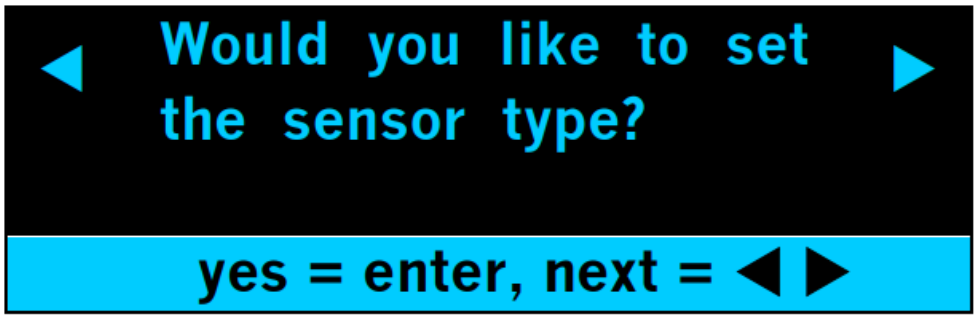
Select → Quick Setup ← from the Main Menu and press the ENTER key, the display will show;



Press ENTER and the display will change to “Enter Date” (use DD/MM/YY format).
Use the ▲▼ keys to set the Date (DD) then press ▶
Use the ▲▼ keys to set the Month (MM) then press ▶
Use the ▲▼ keys to set the Year (YY) then press ENTER and the display will change to “Enter Day”
Use the ▲▼ keys to set the Day then press ENTER and the display will change to “Enter Time” (24 hour format).
Use the ▲▼ keys to set the Hour (HH) then press ▶

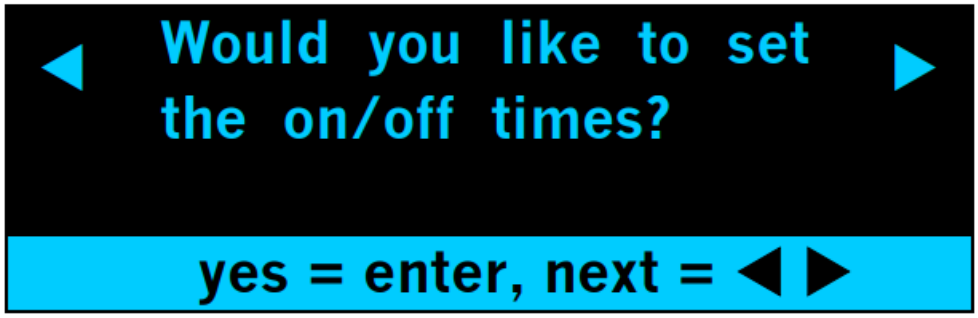
Use the ▲▼ keys to set the Minutes (MM) then press
ENTER and the display will change to “Auto BST”
Use the ▲▼ keys to set Auto BST On or Off then press
ENTER (On means the British Summer Time +/- 1 hour adjustments will be made automatically every Mar/Oct).

The display will go back to the “set date and time” menu, press the ▶ key to move to the next option;



Press the ENTER key and the display will change to “Set Sensor Type; Bed Standard”. Use the ▲▼ keys to select from; Bed Magic Stick or Chair Standard or Chair Magic Stick or Aux then press ENTER.
Note: use “Aux” for a floor mat or door contact, use “Bed Magic Stick” for SensAlert bed sensor, use “Chair Magic Stick” for SensAlert chair sensor.

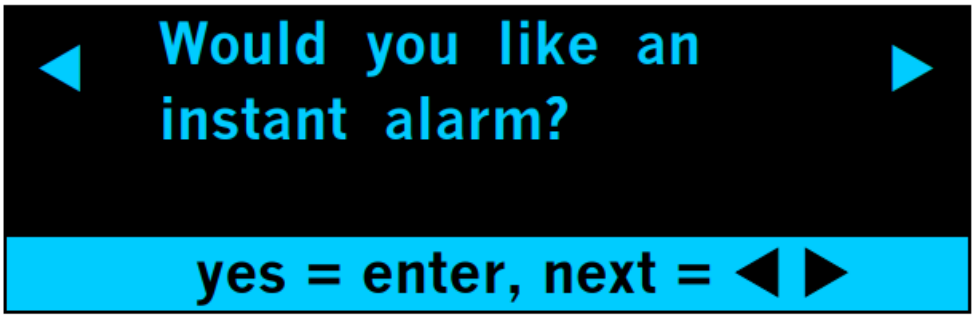
The display will go back to the “set sensor type” menu, press the ▶ key to move to the next option;



Press the ENTER key and the display will change to “On All The Time? No”
Choose if you want the bed/chair monitored all the time or during preset periods each day.
Use the ▲▼ keys to choose Yes or No then press ENTERIf you choose No the display will change to “Enter Start Time 1 00:00” (24HR format).

Use the ▲▼ keys to set the Hour then press ▶
Use the ▲▼ keys to set the Minutes then press ENTER and the display will change to “Enter Stop Time 1 00:00”
Repeat as above to set the Stop Time then press the ENTER key – the display will change to “Another Time Slot? No”
Use the ▲ key to select Yes to enter more time slots or press the ENTER key.

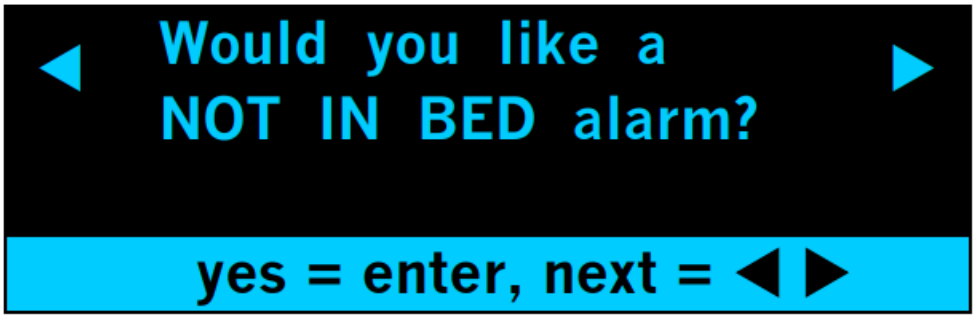
The display will go back to the “set on/off times” menu, press the ▶ key to move to the next option;



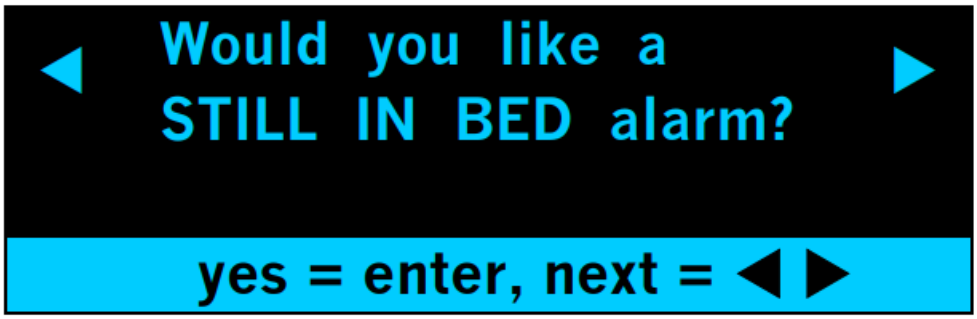
Press the ENTER key and the display will change to “Instant Alarm? No”
Use the ▲▼ keys to choose Yes or No then press ENTER.
If you choose Yes an alarm will be sent immediately the person leaves their bed/chair.

The display will go back to the “instant alarm” menu, press the ▶ key to move to the next option;

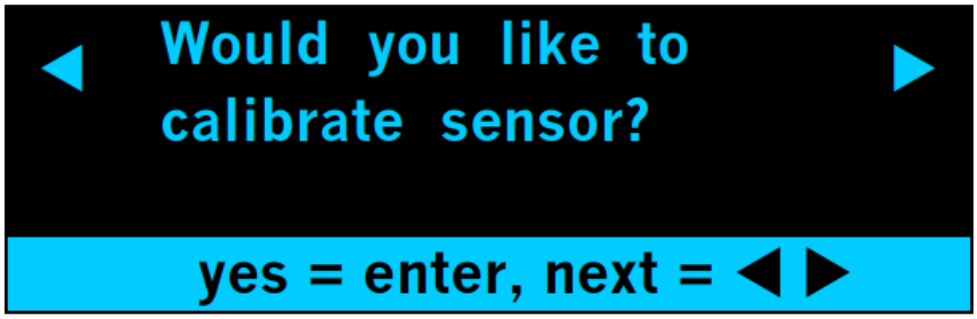
Press the ENTER key and the display will change to “Enter Time Delay; 00 Mins”
Use the ▲▼ keys to set the delay before an alarm from 1 to 99 Minutes then press the ENTER key.
The display will go back to the “delay before alarm” menu, press the ▶ key to move to the next option;



Press the ENTER key and the display will change to “Not in Bed Alarm; No”
Use the ▲▼ keys to choose Yes or No then press ENTER.
If you choose No the monitoring will start when the person is detected in bed.
If you choose Yes the display will change to “Not in Bed Alarm; How Long? 000 Mins”
Use the ▲▼ keys to set the not in bed alarm from 0 to 999 minutes then press the ENTER key (an alarm will be sent if the person is not in bed after this period).
The display will go back to the “not in bed alarm” menu, press the ▶ key to move to the next option;



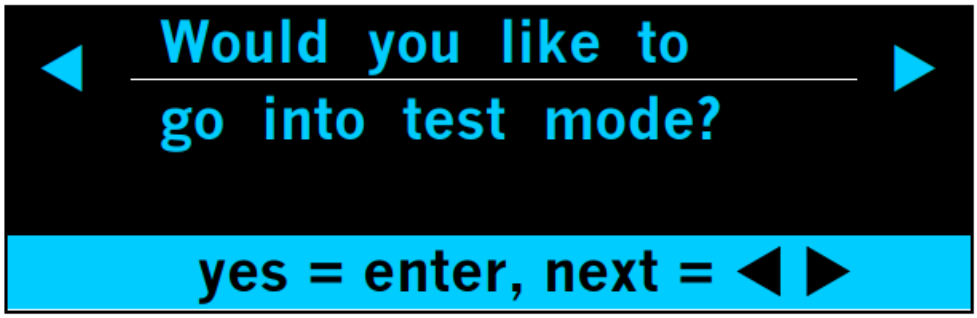
Press the ENTER key and the display will change to “Still in Bed Alarm; No”
Use the ▲▼ keys to choose Yes or No then press ENTERIf you choose No the monitoring will end at the end of themonitoring period.
If you choose Yes, the display will change to “Still in Bed Alarm; How Long? 000 Mins”
Use the ▲▼ keys to set the still in bed alarm from 0 to 999 minutes then press the ENTER key (an alarm will be sent if the person is still in bed after this period).
The display will go back to the “still in bed alarm” menu, press the ▶ key to move to the next option;



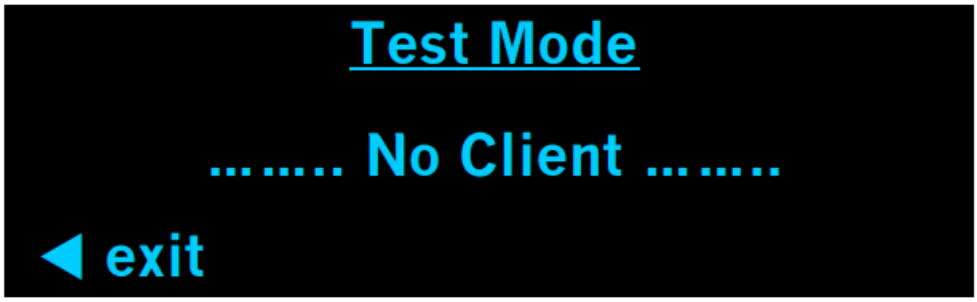
Note: this option is not relevant for Magic Sticks, SensAlert or Aux sensors.
If using a standard bed/chair sensor press the ENTER key and the display will change to “Put Sensor Under Mattress/Chair” and “Press ENTER When Ready” Place the sensor under the mattress or chair cushion then press the ENTER key.
The display will show “30 Secs Left …PLEASE WAIT…” and count down to zero while the sensor is being

calibrated.

The display will go back to the “calibrate sensor” menu, press the ▶ key to move to the next option;



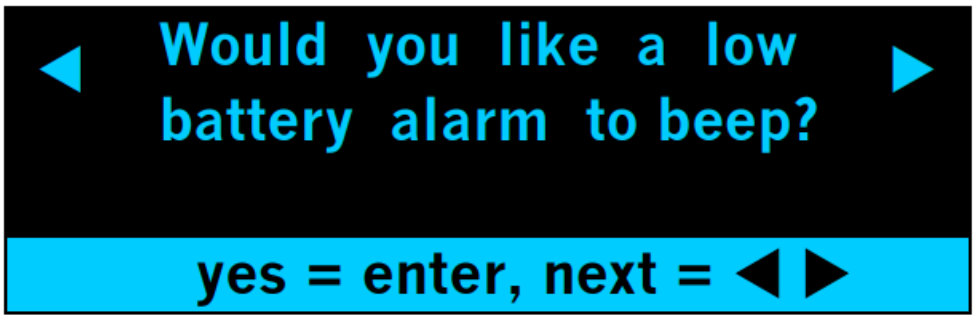
Press the ENTER key and the display will change to;



Get the client to lie on the bed/sit in the chair and the display should show “….. Client Detected…..”
Remain on the bed/chair for 10 seconds and the display will show “Unit is sending status IN code”
After a short delay the display should show “….. Client Logged IN…..”
Get the client off the bed/out the chair and the display will show “Unit is sending status OUT code”
After a short delay the display should show “….. Client OUT…..”
After 10 seconds the unit will start to beep, and the display will show “….. Alarm…..”
After a further 10 seconds and the display will show “Unit is sending ALARM code”
End of Test Mode.

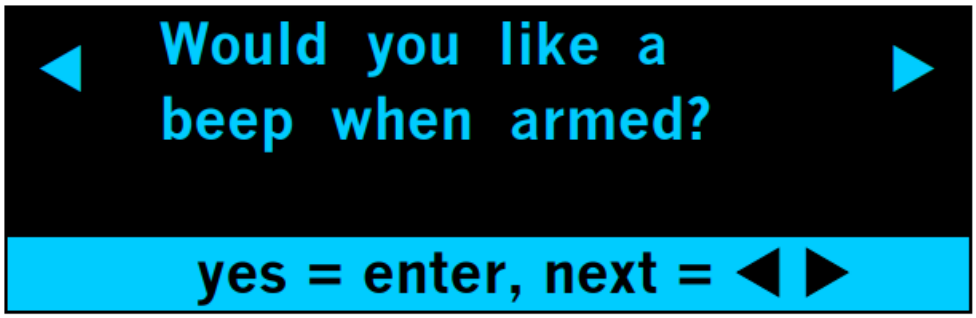
Note: if the client is not detected as in the bed/chair then you may need to adjust the sensitivity – go to the Advanced Setup ➜ Calibrate and Test ➜ Change Sensitivity option.

The display will go back to the “test mode” menu, press the ▶ key to move to the next option;



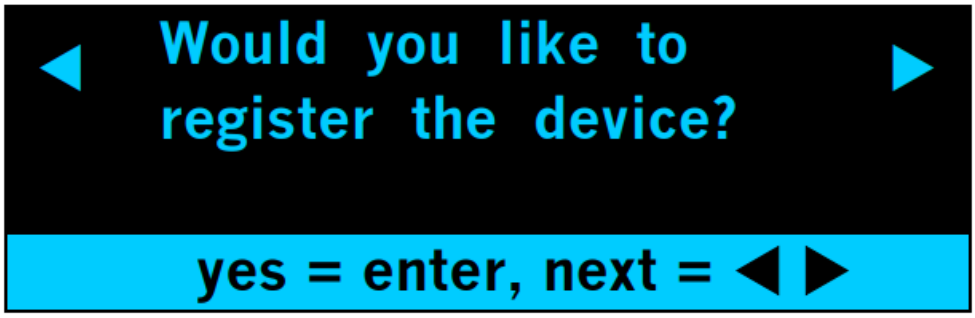
Press the ENTER key and the display will change to “Low Battery Beep? No”
Use the ▲▼ keys to choose Yes or No then press ENTER.
If you choose Yes the unit will beep as a warning when its battery power is running low.

The display will go back to the “Low Battery Beep” menu, press the ▶ key to move to the next option;



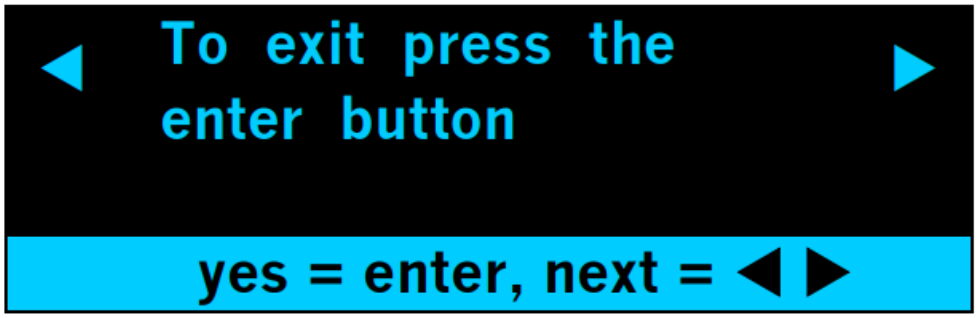
Press the ENTER key and the display will change to “Beep When Armed? No”
Use the ▲▼ keys to choose Yes or No then press ENTER.

The display will go back to the “Beep When Armed” menu, press the ▶ key to move to the next option;



The option is used to register the sensor controller onto a Reach IP, XT2 or Carer Response via radio learn mode. Before pressing ENTER the Reach IP, XT2 or Carer Response must be put into Radio Learn Mode.
Press the ENTER key and the display will change to “Registration data is being sent”

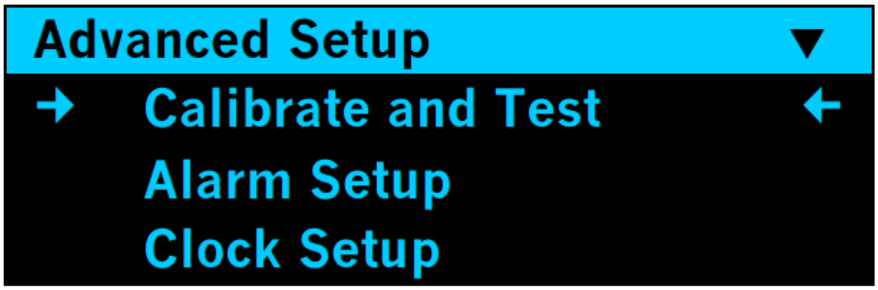
After a short delay the display will go back to the “Register Device” menu, press the ▶ key to move to the next option;



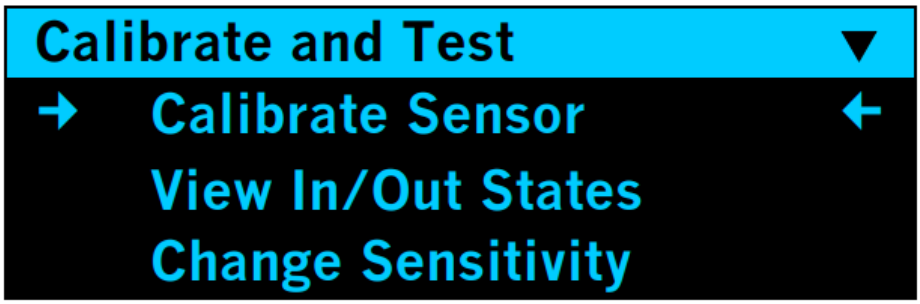
Press ENTER to go back to the Main Menu or press the ▶ key to go back to the beginning of the Quick Start Menu.

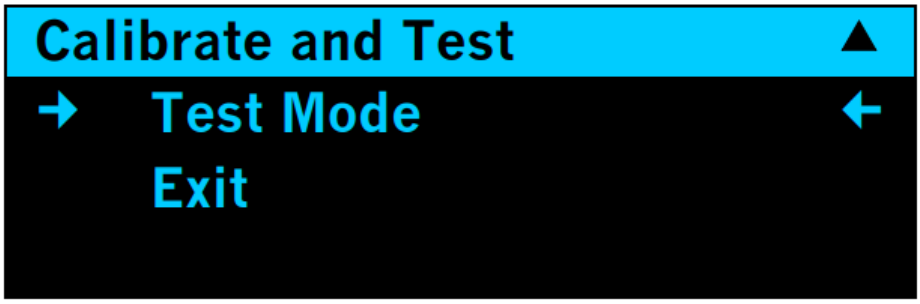
Advanced Setup Mode

From the Main Menu display select → Advanced Setup ← and press the ENTER key for the following options;

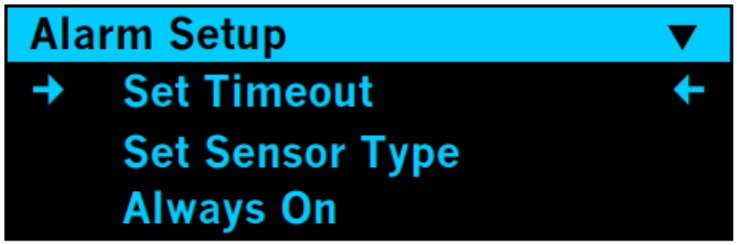


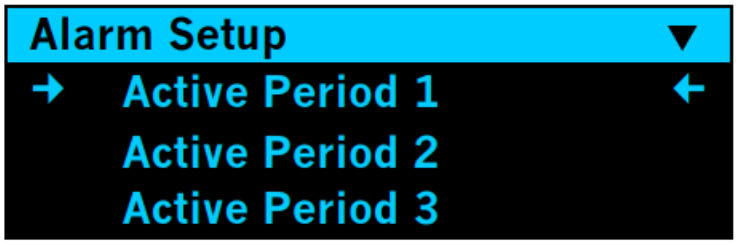
Select → Calibrate and Test ← then press ENTER;





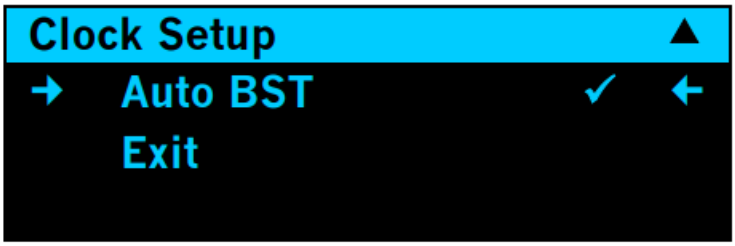
Calibrate Sensor – place the bed/chair sensor in positionand press ENTER to learn the un-occupied weight.
View In/Out States of each transducer in the bed/chair sensor.
Change Sensitivity of each transducer (0 = least sensitiveto 5 = most sensitive).
Test Mode – check the client is detected in/out of the bed/chair (see page 5 for details).
From the Advanced Setup menu select → Alarm Setup ← then press the ENTER key;



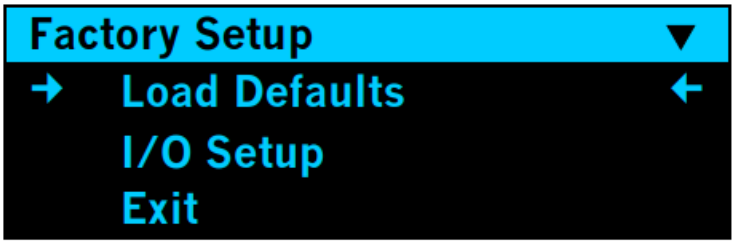


Set Timeout (0 to 99 mins) for Absence and Reset;
Absence = time a person is allowed out of their bed/chair.
Reset = time a person is allowed to get back into their bed/chair after an “out of bed/chair” alarm has been

activated.
Set Sensor Type as; Standard Bed, Magic Stick Bed, Standard Chair, Magic Stick Chair or Aux.
If Aux is chosen, then you get the option to change the Alarm Code – use the ▲▼ keys to choose PTX1 (pendant), Pullcord, Fall, Attack, Panic, PIR, Pill Dispenser, Enuresis, Bed, Chair, Epilepsy, Wandering, High Temp, Low Temp, Smoke, Gas, CO, Flood or Door.
Countdown (delay before alarm) 0 to 999 secs.
Always On – Enable/Disable, if disabled set the Active Periods;
Active Periods 1-3 – set Start/Stop times for up to 3 active periods per day (Note: these repeat every day).
Not/Still in Bed – Enable/Disable each of these options and set the delay before alarm (0 to 999 mins).
Low Battery Alert – Enable/Disable the audible beep.
Logged in Bed Time = time a person must be in their bed/chair before monitoring starts (0 to 999 secs).
Beep When Armed – Enable/Disable an audible beep when monitoring starts.
From the Advanced Setup menu select → Clock Setup ← then press the ENTER key;



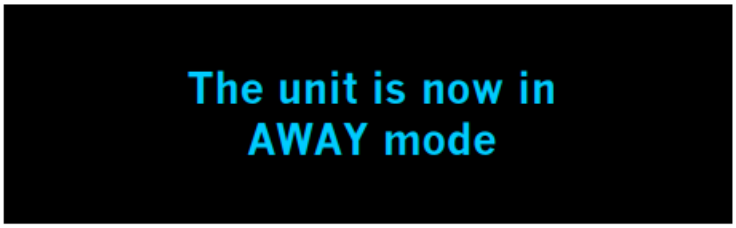
Set Date in DD/MM/YY format.
Set Day – Mon to Sun.
Set Time in HH/MM format using 24 hour clock.
Auto-BST use the ▲▼ keys to Enable ✓ or Disable ✗ automatic +/- 1 hour British Summer Time adjustments.
From the Advanced Setup menu select → Factory Setup ← then press the ENTER key;



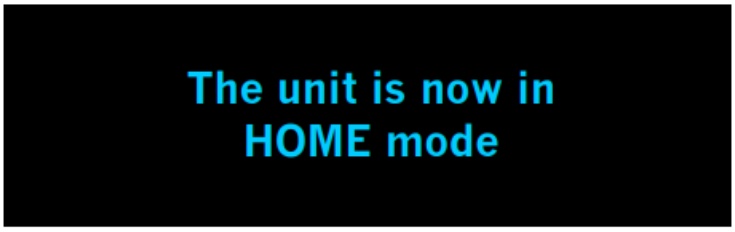
Load Defaults and Apply to restore factory settings;
Date: 01:01:00, Time 00:00 with Auto BST on
Sensor type: un-calibrated bed sensor
On all the time: No
Active start/stop time periods: all 00:00 (disabled)
Instant alarm: Yes
Delay before Alarm: No
Not in Bed Alarm: No
Still in Bed Alarm: No
Low Battery Beep: Yes
I/O Setup to choose a Pear Push or a Relay Output, Use the ▲▼ keys to Enable ✓ or Disable ✗ a Pear Push.
If the pear push is disabled you will get the option to set the Relay On Time from 0 to 99 seconds. The relay activates with any alarm – N/O contacts on I/O socket pins 1 & 3. **Note:** it is only possible to set a Pear Push or a Relay Output (not both).

Home/Away Mode

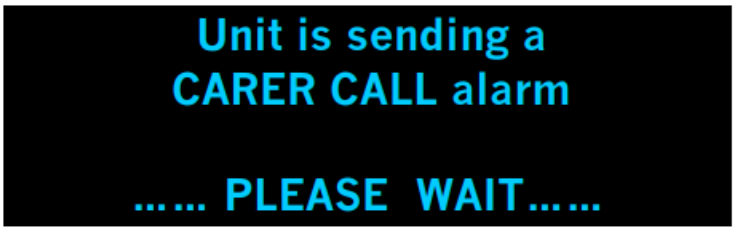
If the user is going to be away from home for more than one day you must select AWAY MODE to prevent false “not in bed” alarms.
When the sensor controller is in its normal operating mode the ▲ key is used to toggle between HOME/AWAY mode. Press this key once and the display will show;



After about 10 seconds the display will blank – during this mode no alarm calls will be sent.
REMEMBER: when the user returns home the sensor controller must be put back into the HOME mode.
Press the HOME/AWAY key once and the display will show;



After about 10 seconds the display will blank – normal monitoring is now resumed.
Carer Call
The Carer Call facility can be used to raise an instant alarm call via Reach IP, Advent XT2 or Carer Response.
When the sensor controller is in its normal operating mode the ▼ key is used to send a CARER CALL. Press this key once and the display will show;



After about 10 seconds the display will blank.
You will hear reassurance tones from the at-home alarm or warden call intercom when the call is being made.
Optional Pear Push
The Pear Push option must be enabled in the I/O Setup.
Press and hold the Pear Push for more than 3 seconds to activate an alarm call.
Pear Push with 2m Lead: Part No. ZNC680

Telecare Radio ID

The sensor controller includes a radio transceiver to communicate with the Reach IP, XT2 or Carer Response.
The Radio ID is a 10-digit code printed on the label on the back of the sensor controller…

Registering the Sensor Controller onto a Reach IP

Login to Pulse CMP (**www.tynetecpulse.com**) and enter the Reach IP Serial No. in the ALARM UNIT view. Press theAccessories button and enter the Radio ID code, Location and Equipment type. Press Save then ↻ Synchronize.

IMPORTANT: when the sensor controller is installed a test call must be made to check operation and start the digital heartbeat.

Alternatively, with the Reach IP in normal operating modeundo the fixing screw and remove the stand or connector cover to access the ● Power button.

Press the ● Power button to enter Control Mode, then press and hold the □ button until the unit announces “add radio device” then release.

Press the ● button to confirm then activate the sensor controller by pressing the Carer Call button.

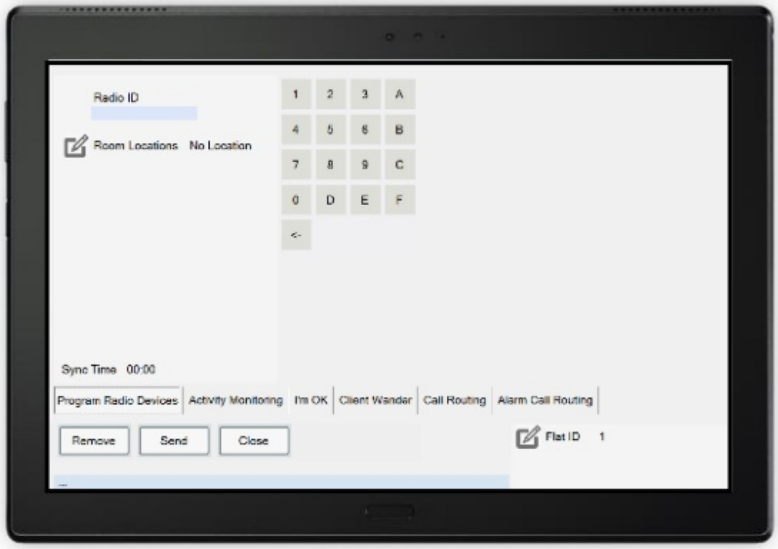
The Reach IP unit will sound a high beep if it’s a new device and announce “range test mode”.

Press ● to confirm, or press □ to step to the next function, or press ○ to exit the mode.

Activate the sensor controller by pressing the Carer Call button to check operation.

Registering the Sensor Controller onto an Advent XT2

Press the Settings button on the Home page of the Manager’s Panel. Press the Manager (or Engineer) button, enter the password and press the Programming button. Select the Program Radio Devices option from the tabs along the bottom of the screen.



Press Flat ID and enter the flat number the sensor controller is being installed in. Enter 4-digits e.g. 0014.

Press Radio ID and enter the 10-digit code taken from the label on the back of the sensor controller.

Press Room Locations and select where the sensor controller is located from the options e.g. Bedroom.

Press the Send button to update the XT2 system.

Activate the sensor controller by pressing the Carer Call button to check operation.

Registering the Sensor Controller onto a Carer Response

Refer to the Carer Response user manual for full details of the button functions and how to navigate the menus.

From the Main menu select Programming.

From the Programming menu select Add transmitter.
The display will prompt you to Activate the transmitter…
Press the Carer Call button on the sensor controller.
The Carer Response will beep and the display will change to the Add transmitter menu with a box showing No ID.
Press ↵ then ▼ to select Room, then press ↵
Press ↵ to select the room number box 0000.
Press ↵ to select the first digit, press ↵ to move between the digits and press ▲ or ▼ to change each digit.
Press ↵ when the correct room number is displayed.
Press ▼ to select the alarm type box None.
Press ↵ then ▼ to select Bed alarm then press ↵
Press the ▼ button to select Save then press ↵
The display will show Radio ID saved to memory…
Return to the Main menu and select Quit.
Activate the sensor controller by pressing the Carer Call button to check operation.

Registering the Sensor Controller onto a Touchsafe Pro

Login to the Master Touchsafe Pro Nursecall Panel (must be V4.01 onward) using Engineer or Manager password.
From the Main Menu page select the Telecare option to open the screen shown below.

Touch the Add Telecare Device box and enter the Telecare device 10-digit Radio ID using the on-screen keypad.
Touch the Filter box and enter the zone you want to add the Telecare device to using the on-screen keypad.
Touch the Room box ▼ and select the Callpoint ID from the list that will be used to cancel the Telecare alarm.
Touch the Save button on the keypad.
Touch the Close button to exit.

Activate the sensor controller by pressing the Carer Call button to check operation.

Declaration of Conformity

UK CA We declare this product complies with the relevant UK legislation on condition that it is used in the manner intended, and in accordance with the current installation standards and/or the manufacturer's recommendations. A copy of the full UKCA Declaration of Conformity is available on request.

CE We declare this product complies with the relevant European legislation on condition that it is used in the manner intended, and in accordance with the current installation standards and/or the manufacturer's recommendations. A copy of the full CE Declaration of Conformity is available on request.

Chris Dodd
CEO
Legrand Assisted Living & Healthcare

Tynetec, a business unit of Legrand Electric Ltd
Cowley Road, Blyth Riverside Business Park, Blyth, Northumberland, NE24 5TF.
Tel: +44 (0) 1670 352371 www.tynetec.co.uk

Documents / Resources

	tynetec FM0827 Sensor Controller [pdf] User Guide FM0827 Sensor Controller, FM0827, Sensor Controller, Controller

References

- User Manual