

iVi™

the intelligent pendant  
with auto fall detection

User Guide



**Tunstall**

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## **User guide**

To print a larger version of this user guide or for other languages please contact your supplier.

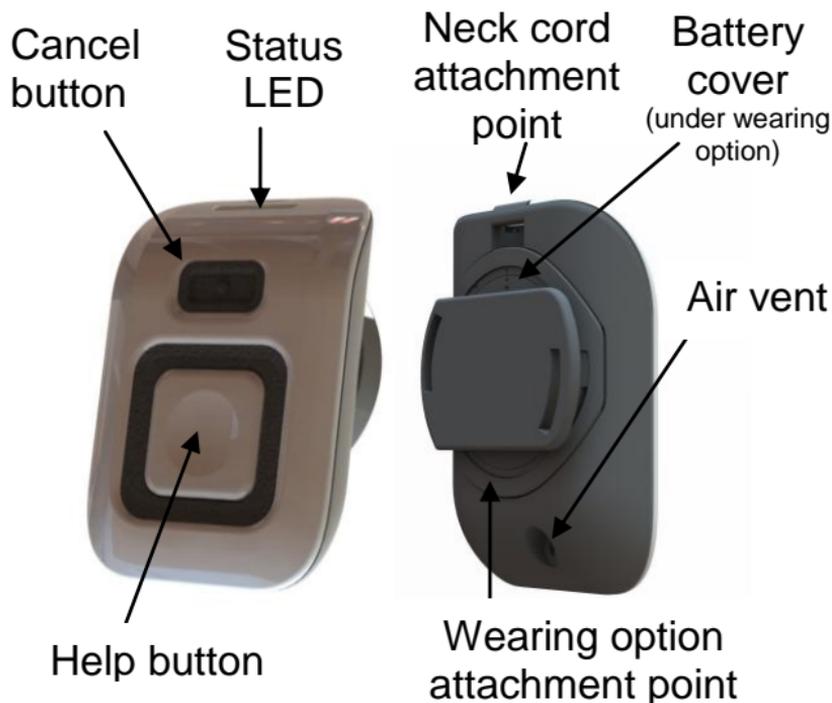
## **Intended use**

This device is intended to enable a user in a non-medical setting to request assistance by providing a method of activating their home base unit, from within the operating range, in the event of a potential medical emergency. The device also provides an additional automatic request for assistance to the home base unit if it detects that the user has fallen while wearing it on a neck cord, clipped to the chest or on a belt clip using the wearing options provided.

- **Please read this user guide carefully**

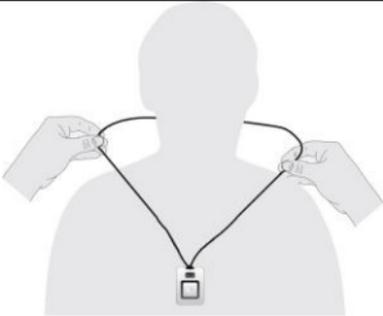
## What is the iVi?

Your iVi is an intelligent pendant. Like other pendants, your iVi allows you to press a help button to generate an alarm call when you need help. The iVi also provides an added layer of protection by automatically generating a call for assistance if a fall is detected and you are unable to push the help button.



# What is in the box?

The box contains this user guide, an iVi intelligent pendant, belt clip\*, neck cord\* and clothing clip\*.

<b>iVi intelligent pendant</b>	<b>Neck cord*</b>
 A brown, rectangular, rounded pendant with a black square cutout in the center and a small black sensor at the top.	 A diagram showing a person's silhouette with a black cord around their neck. The cord has a small white rectangular pendant hanging from it. Two hands are shown adjusting the cord on the shoulders.
<b>Clothing Clip*</b>	<b>Belt clip*</b>
 A dark grey, rectangular clip with a circular opening and a small protrusion on the side.	 A dark grey, rectangular clip with a curved top edge and a small protrusion on the side.

\*May not be supplied

## Before first use

Ensure the iVi is programmed correctly to your home base unit. To test this press the help button and ensure that it generates an alarm call to the monitoring center. Tell the monitoring center that you are making a test call and follow their instructions.

- ☛ It is important to test the iVi in all the areas of your home, including the bathroom, basement and garage. Environmental conditions such as furnishings, building structure, presence of moisture or liquid may affect the range of the iVi. A help call will NOT be initiated if the iVi is activated while out of range of the home base unit. If the iVi is not programmed correctly, please contact your supplier.
- ☛ **Please read this user guide carefully.**

## Wearing the iVi...

Your iVi will have been setup with a specific wearing accessory. Once setup you should not change the wearing accessory without contacting your supplier.

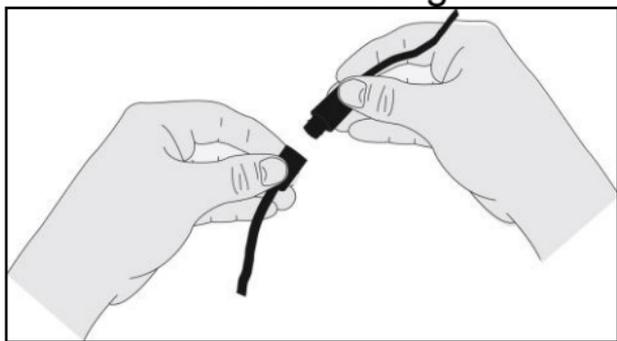
The correct wearing positions for the different wearing accessories available are shown on the following pages.

- ☛ Wearing the iVi in line with this guidance is important as it helps to ensure it is in the most optimum position to detect falls while also helping to reduce the chance of incorrect activations.
- ☛ Please remember to wear your iVi at all times when you are in or around your home. You may also wear your iVi in bed. This will help to ensure the iVi is at hand if you require it at night. However it may not detect a fall from a lying position in bed to the floor.

**WARNING** – if you wear the iVi under your clothing ensure you do not restrict access to the help button.

## ... on a neck cord

The neck cord includes break links for your safety. The length of the cord should enable you to put the neck cord over your head. Alternatively, you can pull apart the break links on the neck cord, take each side of the neck cord round your neck and then fasten the break links again.



**Tip** - Clipping it to clothing using the brooch/clothing clip while worn on a neck cord may also help to reduce false alerts.

**WARNING** – only use the neck cord supplied with the iVi as it includes safety break links to reduce the risk of entanglement or injury.

## ... as a brooch/clipped to clothing

The iVi can be worn in either of these orientations and includes (where supplied) a clothing clip in order to clip it to the top of a shirt pocket or to shirt/blouse openings etc.

- The iVi must be worn at chest height and at least 1 meter [3 ft.] from the floor when using the clothing clip.



**Tip** - The clips are reversible to enable them to be clipped to the left or right for male and female shirt/blouse openings.

## ... on a belt

The belt clip is designed to fit a wide variety of belts however you should ensure that the belt is of sufficient width to firmly hold the iVi in place.

- The iVi must be worn at waist height and at least 0.8 metres [2ft 8in] from the floor.



## Important things to remember

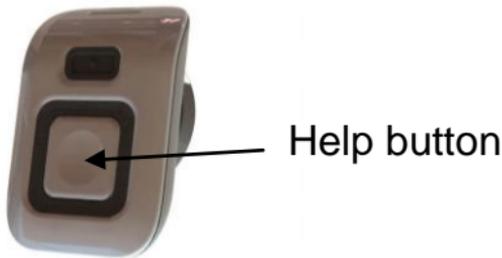
- Remember, the iVi will only detect you falling if you are wearing it.
- Due to the wide variety and type of falls, some falls may not be detected. For example, a slow gradual slide out of a chair is unlikely to be detected as a fall. In the event of a fall you should always try to press the help button on the iVi.
- The iVi must be worn in accordance with the wearing instructions, do not change the wearing option once your preferred method has been chosen.
- If you fall and the fall is detected but you cannot press the help button, the iVi will generate a call for assistance within 30 seconds.
- Test the iVi monthly by pressing the help button.
- Regularly check the status LED on the iVi (see page 28).

## How it works

The iVi is a simple to use device that includes a help button to enable you to generate a call for help if you require assistance or fall. If you are unable to press the help button, the iVi has intelligent sensors that will automatically generate a call for assistance if a fall is detected.

## Manual alarm operation

- 1) Press the help button on the iVi to generate a call for help.



- 2) The red LED indicates the iVi is sending an alarm call.
- 3) If the red LED flashes, the iVi is still sending an alarm call, but is also indicating to you that the battery needs to be replaced (see battery replacement).

## What happens if you fall

Stage 1 The iVi detects an event and analyzes it for up to 20 seconds. If the iVi determines that the event is a fall, Stage 2 is started.

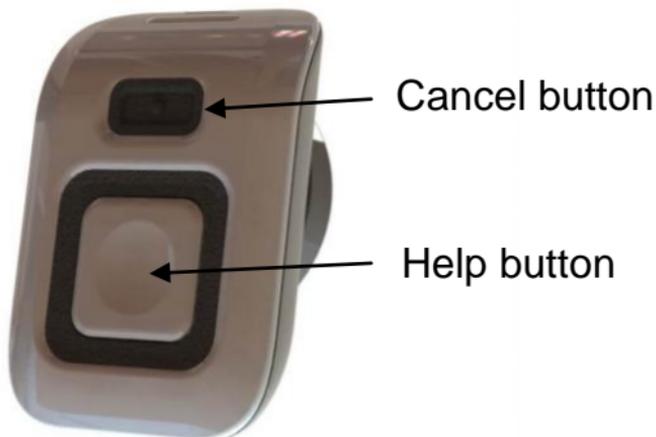
Stage 2 The green LED flashes and the sounder plays ascending tones. This warns you that a fall alarm will be made after 10 seconds. If you have not fallen or do not require assistance, you can press the cancel button during this stage to cancel the alarm.

Stage 3 If the alarm is not cancelled, the LED goes red for a short time and the sounder plays an alarm tone. A fall alarm is then sent to your home base unit.

**NOTE:** At any time during the above process you can press your help button to generate an alarm call.

## Canceling an automatic fall alarm

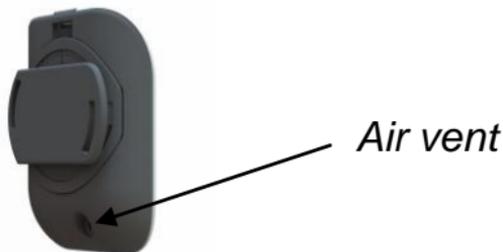
If the iVi flashes the green LED and plays ascending tones when you know you have not fallen, you can stop the iVi from generating an alarm by pressing the cancel button.



- The cancel button is designed to avoid accidental presses. If you press the cancel button by mistake you can generate an alarm call by pressing the help button.

## Taking care of the iVi

- Your iVi is fully water resistant and should be worn at all times including in the shower and bath. When wearing in the bath you should avoid submerging the iVi in water for more than a minute.
- If your iVi does get wet, dry it gently using a soft towel being careful not to press the help button. If you do press the help button by accident, don't worry, just inform the operator. They will be happy to hear from you and it will act as a useful test of the system.
- The vent on the back of the iVi is an important feature and must be kept clean and clear of any obstructions. When wearing in the shower/bath, water may cause a temporary obstruction and automatic fall detection may not function properly while the vent is obstructed.



## **Cleaning**

If required, the iVi may be cleaned periodically with a damp cloth and mild detergent or an alcohol wipe.

- ☛ Remember that the iVi will not detect falls while it is not being worn therefore you should put the iVi back on again as soon as you have finished cleaning it.

## **Spares and accessories**

For the following spares and accessories, please contact your supplier for more details.

Battery (CR2450\*)

Belt clip

Shirt clip

Neck cord

Battery cover

\*To ensure performance only use batteries recommended by Tunstall

## Battery replacement

The battery will need replacing approximately every 9-12 months. When the battery is low, the iVi will automatically notify your monitoring service. As an additional low battery indicator, the red LED will flash after the help button has been pressed.

- When a low battery is indicated it is recommended that the battery is replaced within 2 weeks.
- If it is necessary for you to change the battery, the fall detector uses a CR2450 3 Volt lithium battery. Only use batteries recommended by Tunstall.

**NOTE:** Dispose of used batteries only in accordance with your local laws and regulations. Do not dispose of in household waste.

**WARNING** – During battery replacement the iVi will not be able to generate a help call.

## To replace the battery

- 1) To access the battery, remove belt/shirt clip accessory from the back of the iVi by turning the clip counter clockwise until it clicks.



2) Remove the battery cover, insert a coin into the slot and turn it counter clockwise.

3) Remove the battery and replace it with the new battery (CR2450), remember to observe the correct orientation i.e. positive (+) side facing you. When the battery is reconnected the unit will beep.

4) Replace the battery cover and test the iVi by pressing the help button. Inform the operator that you are making a battery test call.

5) If the device fails to make a test call then check the orientation of the battery and repeat the test by pressing the help button.



## Warnings and cautions

- It is important to test the iVi in all the areas of your home, including the bathroom, basement and garage. Environmental conditions such as furnishings, building structure, submersion in liquid etc. may affect the range of the iVi. A help call will NOT be initiated if the iVi is activated while out of range of the home base unit.
- In certain situations, the iVi may not detect a fall. For example, a slow slide from a seated position on a chair may not register as a fall. It is important to remember if you need assistance always press the help button.

# Frequently asked questions

## **Can I wear the iVi in the shower or bath?**

Yes, the iVi is fully water resistant and should be worn at all times including in the shower. When wearing in the bath you should avoid submerging the iVi in water for longer than a minute. Please note that water may temporarily cause an obstruction of the vent in the back of the iVi. Submersion in water may also reduce the range of the iVi meaning that the help call may not be received by your home base unit.

## **When should I wear the iVi?**

You should wear your iVi at all times when you are in your home and within receiving range of your home base unit.

## **Can I wear the iVi under my clothes?**

Yes, the iVi can be worn under clothing however please make sure you can easily press the help button if you need assistance.

## **What happens if I accidentally press the help button?**

The iVi will generate a call to the monitoring center. Tell the operator that you pressed it by accident and do not need assistance. Don't worry they will be happy to hear from you and it will act as a test of the system.

## **Will the iVi call for help if I drop it accidentally?**

The iVi has been designed to avoid calling for help when it has been accidentally dropped. However, if the iVi starts to beep you can press the cancel button to stop it from sending a call for help.

## **If I stand up again after falling, will the iVi automatically call for help?**

Possibly, the iVi is designed to allow a period of time after a fall for you to recover. The amount of time it takes you to stand up will determine whether a fall is detected. Don't forget when the iVi starts to beep and the green LED flashes you can press the cancel button to stop it from sending a call for help.

## **What should I do if I fall but do not need help?**

When the iVi starts to beep and the green LED flashes you can press the cancel button to stop the iVi from sending a call for help. If you decide that you need help press the help button. The monitoring center is always happy to hear from you so if you are in any doubt let the iVi call for help and speak to the operator.

## **What happens if I cannot press the cancel button to stop the alarm?**

The cancel button has been designed to prevent accidental cancellation of alarm calls. The iVi has also been designed to avoid activation when you have not fallen. If you cannot press the button for any reason, don't worry, just inform the monitoring center operator that you are ok and do not require assistance.

## **Will the iVi send a call for help without me knowing?**

No, the iVi has been designed to inform you before it sends a call for help. The iVi will always beep and flashes the green LED to notify you that it has detected a fall and is about to send a call for help. When the iVi is beeping you can press the cancel button to cancel the alert and stop it from sending a call for help.

## **Can I wear the iVi in bed?**

Yes, if you wish you can wear the iVi in bed. This will help to ensure the iVi is to hand if you require it at night. However it may not detect a fall from a lying position in bed to the floor.

## **Test Conditions**

The iVi has been tested under the following user height conditions:

Neck worn – minimum user height 4ft 6in

Waist worn – minimum user height 5ft

A reduction in performance may be experienced with users below these heights.

# Troubleshooting

If the area around the button becomes damaged please contact your supplier.

## LED operation

Event	LED/Sounder action	Action
Alarm button pressed	Red LED on for the duration of the radio transmission. If Red LED flashes battery is low.	If possible, speak clearly to the monitoring center
Fall Detected (cancellation period)	Green LED flashes and ascending tones being played.	Press cancel button if help is not required
Fall Alarm Generated	Red LED on for a few seconds and alarm tones played. If Red LED flashes battery is low.	If possible, speak clearly to the monitoring center
Error – problem detected	iVi beeping and Orange LED flashing once every 30-40 seconds.	Contact your supplier immediately.

# Regulatory Compliance

## Federal Communications Commission (FCC) notices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## 312MHz iVi Intelligent Pendant (Part Number 66004/09, /10)

FCC ID: G2X-66004V

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **Industry Canada Notice**

This equipment meets the applicable Industry Canada Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment. Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

## **Australia**

The iVi operates on a frequency of 312MHz and complies with AS/NZS 4268.

# Technical information

Weight:	25g [0.88oz]
Dimensions:	58 x 38 x 14mm [2.28" x 1.5" x 0.55"] (WxHxD)
Battery:	CR2450 (3v Lithium cell)
Battery Life:	Up to 12 months (depending on usage)*
Radio Freq:	312.00MHz
Radio Range:	Up to 120m [390ft] (line of sight)
Water resistance:	IP67 (up to 1 meter [3ft.] for 30 minutes)

## 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

USA:	UL1637, UCFR47 Part 15, FDA Class (II)
Canada:	RSS-210, RSS-102
Australia/NZ:	AS/NZ 4268
Safety:	IEC 60950-1
Design and Manufacture:	ISO9001:2008



FM12477  
MD588884



N72



Intertek  
3036931



\*Battery life can be significantly reduced with heavy usage and/or use at low temperatures

# Contact Details

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1-800-892-2205  
1-905-677-1144

The Tunstall logo consists of the word "Tunstall" in a white, bold, sans-serif font, centered within a red rounded rectangular background.

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