

EVA

Digital Telecare System with Voice Guided Installation



Step by step voice guided instructions ensure this digital telecare system is installed properly, and when activated is able to send an alert for help to an Alarm Receiving Centre (ARC), or to Smartphone App Responders.

What is it?

EVA is a digital telecare system with voice guided installation. This step by step process establishes good cellular coverage, ensures range testing the personal help button, and finishes with a full system check. This enforces correct installation at all stages with validation points, to ensure user safety.

EVA has a single SIM card fitted, and operates over the 3G cellular network, reporting with data communication capabilities. A multi-provisioned SIM card allows freedom of network connectivity, and as an additional safety measure, EVA has the ability to failover to the 2G network if 3G is not available.

EVA has the option of being monitored by an Alarm Receiving Centre (ARC), or alternatively by family, friends or caregivers via the Chiptech Response App, with alerts for help escalated to the ARC if needed.

***Asterisk throughout this document denotes a configuration value.**

Who is it for?

Advanced technology is presented in an easy to use system that provides peace of mind to people who are living independently. Members of the community who may be frail and feeling vulnerable, can be safe and secure in the knowledge that help is only a button press away.



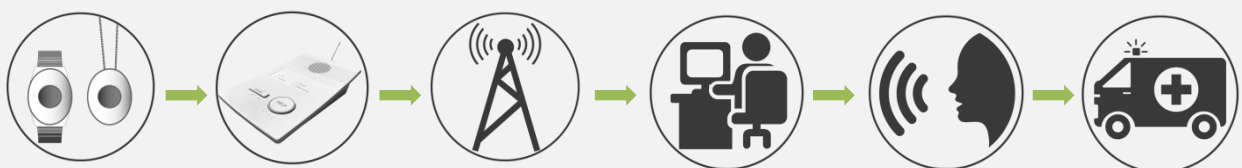
How does it work?

When help is needed at any time of the day or night, press and hold the personal help button (Pearl), and count to three. The outer rim of Pearl will flash **red** to let the user know that the call for help has been received by the EVA base unit, and will either be sent through to the ARC to respond, or to the Response App so family, friends or caregivers can respond.

A loud ten second pre-alarm will sound from the base unit and lights under the **'Help'** button will illuminate in a clockwise motion. If help is not required for any reason, then the alert can be cancelled during this period by pressing the yellow **'Cancel'** button on the base unit.

Once the pre-alarm sequence has finished, voice messages will play to keep the user informed while they are being connected to the ARC, or to responders via the App.

When the help alert has been received by either the ARC or the App responders, the operator or responder will call back and speak to the user through the handsfree speakerphone on the base unit. The caller will organise any further assistance that is needed.



Features

- EVA features easy plug and play technology, with voice guided installation.
- The ability to enable reporting to the App provides the user with the choice of being monitored by family, friends or caregivers, with backup monitoring to ARC if needed.
- EVA has been designed to ensure end user safety. Self-initiated safety checks ensure the telecare system performs as expected in an alert for help.
- Chiptech personal help buttons communicate with EVA through radio frequency (RF) transceivers and have a range of 300m+ in open air.
- EVA has the ability to quickly upgrade firmware, and configuration settings remotely through the 3G cellular data network, utilising the Chiptech Wizard. The voice guided installation process can be enabled remotely to start the installation process again, this is useful when a base unit has been moved.
- Log files can also be downloaded remotely for quick diagnostics of issues.
- EVA has 'ES-Calling'* - an emergency services call function, as an alternative option. e.g. **999** will be called on any available network should the SIM card or provisioned cellular networks be unavailable during an emergency alert.

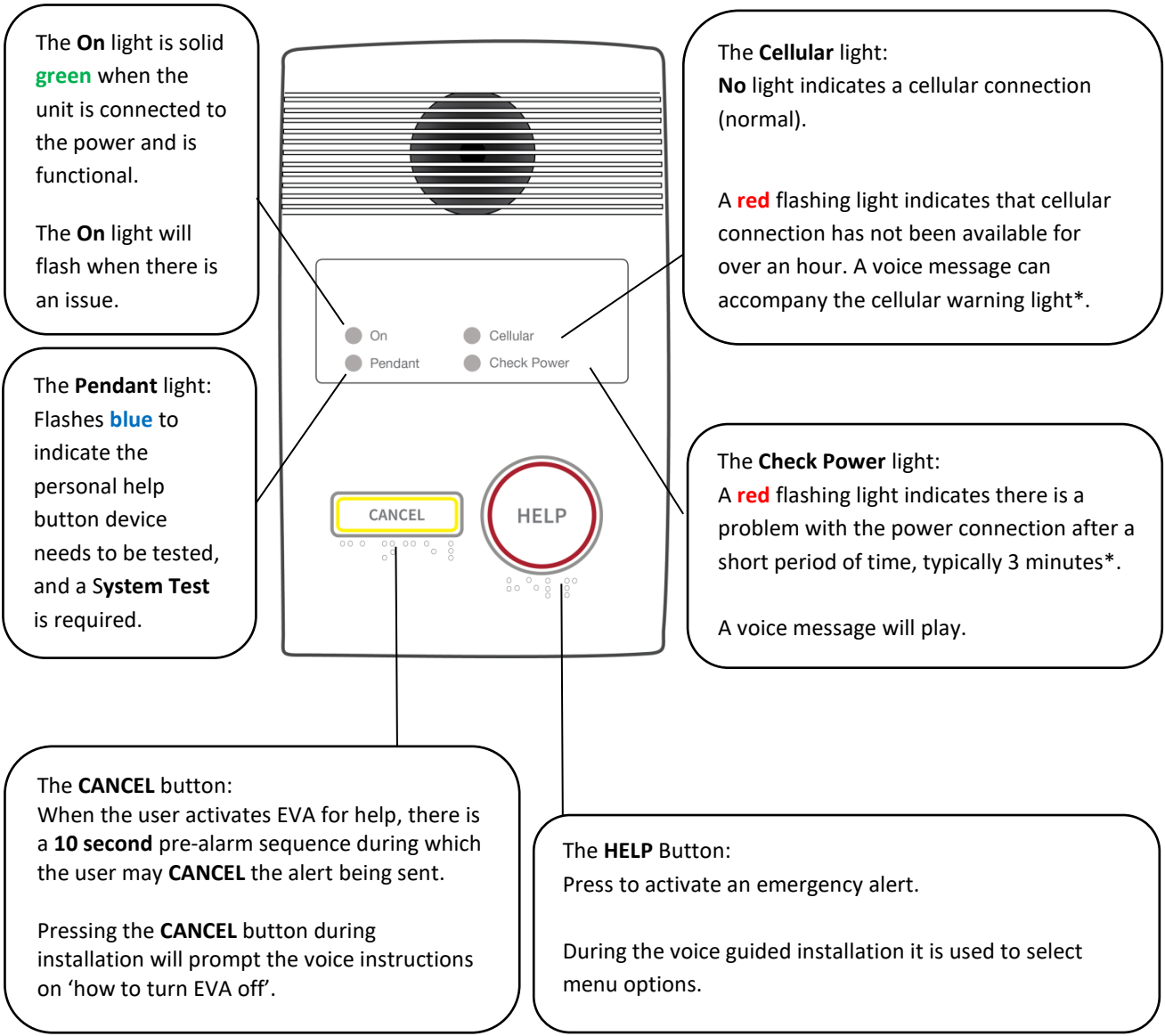
EVA represents the digital future, with a step by step voice guided installation to ensure correct operation when needed in an emergency.



Safety Features	EVA
Automated Personal Help Button Testing – RF tests are logged every 7 hours from the telecare devices learnt into EVA. Multiple missing RF tests are reported to the ARC or App and can be notified locally. This ensures a telecare peripheral is still in range and able to communicate with EVA. If the telecare device reports again, a restore report is sent. RF battery status is also reported to the ARC or Response App.	✓
Bi-directional – The personal help button transceiver sends an emergency alert to the base unit, and flashes red when EVA confirms back to the personal help button that it has received the activation.	✓
Exceptional Battery – Capable of running solely off its backup battery pack for up to 70 hours when fully charged to provide peace of mind in the event of a power outage.	✓
Mains Only – EVA can run solely off its DC plug pack, which means that in the event of the battery being discharged or removed, it is still fully functional.	✓
Multi Provisioned SIM – EVA uses a local network roaming SIM card that provides automatic failover to another available cellular network provider in the event of a network outage.	✓



Overview



User Features	EVA
Friendly user notifications – Status indicator lights are accompanied by voice messages during daytime hours to notify a user to a potential issue with the system. Voice messages do not repeat unnecessarily or play at night. All status indications are reported to monitoring.	✓
Pearl – The pendant and watch variants are IP68 and Pearl Advanced IP67. All are hot waterproof and should be worn at all times, including in the shower or bath.	✓
Large tactile buttons – The large Help button on the base unit is backlit, making it easy to find in the dark, and it has help printed in braille below the button.	✓
Braille – Moulded in the plastic below the Help and Cancel buttons to assist in identifying button functions for those who might be vision impaired.	✓

Installer Features	EVA
<p>Learn Mode – Up to 16 Pearl or other telecare devices can be paired with an EVA. The learn mode optimises safety by adding personal help buttons to an ‘active’ list when paired within a learn session. Previous personal help buttons learned will be ‘inactive’, but if they are found and used at a later date, they can still activate the base unit, and will resume testing (active). Personal help buttons are not deleted through Learn Mode, but ‘inactive’ devices can be over written when the list is full.</p>	✓
<p>Test Mode – Enabled for 10 minutes* before automatically timing out. This mode displays the cellular coverage via lights under the Help button, and provides range testing to the telecare devices and personal help button(s), with no reports to monitoring. The personal help button flashes red when within range of the base unit, which also announces the number of activations received.</p>	✓
<p>Installer Mode – The Setup button on the underside of EVA provides access to a voice based menu system where installers can adjust features such as the volume, button brightness, or automated testing requests*.</p> <p>Please note: Installer mode is not available* if EVA is being monitored by family and friends using the Response App.</p>	✓

Compatible Products



Chiptech GO



Pearl Pendant



Pearl Watch



Pearl Advanced
Fall Detector



Pearl Brooch



Pearl with Easy Press
Sleeve



Pearl Wall Mount



Wall Mounted
Help Button



Compatible Software



Chiptech Wizard



SmartCare Cloud



Chiptech Response App

Monitoring Features	EVA
Half Duplex Speaker System – Volume from the responder’s side takes priority over volume on the user’s side, so the responder can speak over any loud sounds that may be coming from the user’s home.	✓
Comprehensive Reporting – Fail and restore signals are sent for battery capacity and battery removal, mains power, and communication changes.	✓
System log – Problem solving is made easy with the ability to pull a log of approximately 1200 events from the base unit over the cellular network, using the Chiptech Wizard software.	✓
Cloud Management – Connection to SmartCare Cloud enables an overview of all Chiptech data connected products, and the ability to globally update a fleet of EVA base units to ensure optimal operation.	✓
Keeping Time – The base unit automatically updates to changes in time zone and daylight saving using the cellular network time.	✓
Chiptech Response App – Reporting with the App allows family, friends or caregivers to be able to respond to alerts for help, with the option of failing over to the ARC if no responders have actioned the alert for help.	✓
Digital Reporting – EVA reports using the Contact ID protocol in CSV format with TCP over cellular data, and this is the only format when reporting to the Response App. Alternatively SCAIP over cellular data can be used when reporting directly to an ARC.	✓

Technical Details

- System:** EVA is supplied with Pearl Pendant or Watch, a plug pack, rechargeable battery pack, and user guide, custom packaged in recyclable cardboard. Micro SIM card is fitted at factory.
- Dimension:** 200 x 125 x 50 mm (L x W x H) and weighs 0.41kg.
- Packaged:** 215 x 175 x 55mm (L x W x H) and weighs 0.65kg with all components included.
- Environment:** Operating temperature of 0 - 40°C, 90% humidity (non-condensating).
- Mounting Options:** Table top or vertically wall mounted via screw slots or adhesive pads.

Radio

- Frequency:** 869MHz European Social Alarm frequency.
- Range:** 300 metres+ typical in open air with Pearl – personal help button transceiver.

Battery and Power

- Power:** High efficiency 6W plug pack.
Mains fail reporting after random 1-4 hour delay with restore signal.
- Battery:** Backup NiMH battery packs, providing up to 70 hours backup capacity when new and fully charged (using recommended configuration).
Fully charged in under 24 hours.
Regular battery maintenance (every 90 days) ensures high capacity and life of battery (typically 5 years).
Low capacity battery pack is detected and reported. A missing or non-functioning battery pack is reported.
Low battery warning following mains failure at approximately 20% of capacity remaining.

Communication/Protocols

- Cellular Module:** Quad-Band 3G module (UMTS/HSPA), failover to 2G network if 3G is unavailable.
ES-calling to open a voice channel to emergency services.
- Digital reports:** Contact ID in CSV format TCP over cellular data.
SCAIP over cellular data.

Product codes

Code:	Description:
EVA-3G	EVA base unit with voice guided installation and ES-calling, supplied with Pearl.

Due to continual product development this product specification may change without notice. Chiptech does not accept responsibility for any errors or omissions contained within this document.

Standards

EVA complies with:
EN 55032
EN 50130-4
EN 301489 (-1,-3,-7,-24,-52)
EN 62368:2018
EN 300 220-3-1
EN 60529 (IP32)
EN 50134-1
EN50134-2

ROHS: Compliant
Radio Equipment Directive (RED): Compliant
CE: Compliant

Manufacturing Quality Assurance:
ISO 9001:2015