

## User Guide Oysta Pearl+

(For use with personal safety mobile Pearl+)

Prepared By

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### Oysta Technology Service User Guide - Version Control

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1.1	31/08/2012	Sam Taylor	Updated Amber alert
1.2	04/12/2012	Thomas White	Added non-movement, welfare and emergency protocol to section 7
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### Revision Schedule

	05/03/2013	Thomas White	Revise QMS
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## Introduction

The Oysta Pearl+ is the most powerful personal safety device available which is small in size and lightweight. Combining the latest GPS technology with widely available GSM standards. The Oysta Pearl+ is a GPS location device which is designed for personal security and has an inbuilt emergency button as well as a motion sensor.

The Oysta Pearl+ is a quad band device and will work on the GSM 850, 900, 1800 and 1900 networks.

## Precautions and Compliance

### Precautions

Please read these safety instructions to ensure you use your handset correctly.

- Turn your Oysta Pearl+ off in a potentially explosive atmosphere.
- Turn your Oysta Pearl+ off during a flight.
- Do not use your Oysta Pearl+ whilst driving.
- Be aware of the details of electromagnetic waves of your Oysta Pearl+.
- Do not touch your Oysta Pearl+, or its power plug with a wet hand.
- Do not remodel, disassemble, or repair your Oysta Pearl+ on your own.
- Use only approved batteries and accessories.
- Use the standard charger acquired with a TTA certified mark.
- Do not keep your Oysta Pearl+ in or near a source of heating, like a stove or microwave oven.

### Compliance

This equipment is designed to comply with the local legislation in the country it is being sold. If you require any compliance documentation, please contact your local distributor.

# 1 Features

## Key features

### Fixed Time Reporting

Set service start/end time and tracking interval (cycles) and the Oysta Pearl+ automatically reports its position to the MyOysta platform.

### Emergency button

Pressing the emergency button will contact a pre-defined number, and send location information to the emergency contact.

### Fall sensor

Oysta Pearl+ is equipped with a motion sensor, which immediately alerts in case of a fall. The Pearl+ can open a voice call to the emergency contact while sending the location and user data. False falls can be cancelled.

### Power Status

Sends out alert information when the Oysta Pearl+ is switched on or off; and when the battery power is low or charging.

### Programmable buttons

Ability to program up to four (4) speed dial numbers through the secure website.

### Speed Sensor

Sends out alert information when activated and speed threshold is met.

### Geo-fencing

The possibility to create and modify 4 Safety Zones (both in and out of zone alerts)

### Non-movement

The Oysta Pearl+ automatically detects when there is no movement and will stop sending its position to save battery power and data usage. As soon as it detects movement (based on settings) it will start cycling again.

### Position by Button

The Oysta Pearl allows the user to send a current GPS location before entering a building or if creating a time and location report for payroll.

### Amber Alert

Set a timer on the Pearl+ between 1 minute and 60 minutes. Should the timer get to zero (0) and the user does not close down or extend the timer the device will create an alarm and open a 2 way voice channel with chosen contact.

### Reminders

Using the Oysta secure web site you can set reminders for the Pearl+ user. These reminders will appear on the Pearl+ at time of day set.

## 2 Components

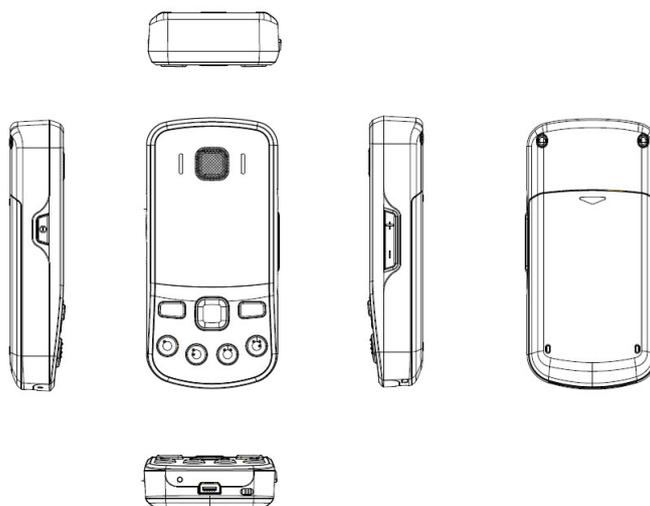
The Oysta Pearl+ comes in a complete retail package:

Handset  
Travel Charger  
1000 mAh battery (Li-ion)  
Hands free headset  
User guide

Always use an approved Oysta Pearl+ charger and battery.

Do not use non-genuine parts as it could damage the battery or cause an explosion.

### 3 The Oysta Pearl+



#### Keypad Description

Keypad Function description	
Power Key	<ul style="list-style-type: none"> <li>● Hold down this key to turn on / turn off the Oysta Pearl+</li> <li>● When in the standby mode, press this key to lock/unlock the keypad.</li> </ul>
Volume +/-Key	<ul style="list-style-type: none"> <li>● When in the standby mode, press this key to increase or decrease the keypad volume;</li> <li>● When in a call, press this key to Increase or decrease the voice volume.</li> <li>● When in the menu, press this key to navigate up or down.</li> <li>● Use this key to set an alarm time.</li> </ul>
Left soft key	<ul style="list-style-type: none"> <li>● When in the standby mode, press this key to enter the main menu.</li> <li>● The left soft key can be used to perform the action displayed in the lower left corner of the screen.</li> <li>● Select a contact and then press this key to make a call.</li> <li>● In case of an incoming call, press this key to answer the call.</li> </ul>
Right soft key	<ul style="list-style-type: none"> <li>● The right soft key can be used to perform the action displayed in the lower right corner of the screen.</li> <li>● Press this key to end a call.</li> <li>● In case of an incoming call, press this key to reject the call.</li> <li>● On standby, hold down this key to switch the device to silent mode (or normal mode)</li> </ul>
Speed dial (1, 2, 3, 4) key	<ul style="list-style-type: none"> <li>● When in the standby mode, press this key to show the pre-programmed contact(s).</li> <li>● When in a (sub) menu, press Speed dial 1 or 3 key to navigate up or down.</li> <li>● Press Speed dial 2 key to return the previous menu; press Speed dial 4 key to open the next menu.</li> </ul>
SOS key	<ul style="list-style-type: none"> <li>● Hold down this key to dial the SOS number.</li> <li>● Even when the keypad is locked the user can still press the SOS key.</li> </ul>

## MINI USB Interface Description

MINI USB Interface Description	
Mini USB Interface	<ul style="list-style-type: none"> <li>● Plug in the AC power adapter to this interface for charging the battery.</li> <li>● This interface is also used for the hands free headset.</li> </ul>

## 4 Getting started

### 4.1 Installing the SIM card

Remove the charger if connected and turn the phone off. Open the back cover of the Oysta Pearl+ and remove the battery. Insert the SIM card as shown below, ensuring the gold-coloured contact area of the SIM card is facing downward on the device.



Close the SIM card holder and move it to the right to lock. Slide the battery back in and push it down to lock it into position. Next, place the back cover back in place.

### 4.2 Charging the battery

First connect the charger to the interface on the bottom of the device as shown below.



Next, connect the charger to an AC wall socket. A message on the screen will confirm that the charger is connected. The battery charge level indicator at the top right of the screen will indicate the Oysta Pearl+ is charging.

**Please note that you can use the Oysta Pearl+ while it is charging.**

If the Oysta Pearl+ is not switched on when you are charging it the battery charge level indicator will still be visible on the screen. When the battery charge level Indicator is full and has stopped flashing, the charging process is complete and the charger can be disconnected. Charging the battery usually takes between 1 and 2.5 hours depending on the state of the battery.

## 5 Screen icons

Icon	Description	Display Place
	Network coverage level	icon area
	GPRS connect(ed)	icon area
	Keyboard is locked	icon area
	Silent mode activated	icon area
	headset mode activated	icon area
	Ring mode	icon area
	Vibration mode	icon area
	Text message	icon area
	Start-up alarm	icon area
	Display battery level	icon area
	Missed calls	icon area

## 6 Function menus

### Menu Structure

1. Dial 999
2. Main Messages
  - 2.1 inbox
  - 2.2 Delete inbox
3. Alarm Check
4. Call History
  - 4.1 Missed Calls
  - 4.2 Dialed Calls
  - 4.3 Received Calls
  - 4.4 Delete call logs
5. Sounds
  - 5.1 Ring Volume
  - 5.2 Keypad Volume
  - 5.3 Ring Tone
  - 5.4 Message Tone
6. Settings
  - 6.1 Language
  - 6.2 LCD Backlight
  - 6.3 LCD Contrast
  - 6.4 Auto Keypad Lock
  - 6.5 Auto Answer
  - 6.6 SIM lock
  - 6.7 Version
6. Alarm Clock
  - 6.1 Alarm Clock
7. Contact(s)
  - 7.1 Speed Dial
8. SIM

### 6.1 Dial SOS

### 6.2 Messages

In the main menu select 'Messages'. Press the left soft key (Ok) to enter the 'Messages' Submenu.

The available options are:

1. Inbox
2. Delete Inbox

When receiving a message, the GT300 will vibrate or ring. In case you don't read the message immediately the 'text message' icon appears on the screen. If there is not enough memory to store your message, you will see the glittering icon of the new message on the screen.

Press the 'Left soft key' to read the details of the message in the message list. If you want to delete this message, press the 'Left soft key' to delete and confirm this by pressing the 'Left soft key' again.

Note: The Inbox limit is 200 SMS messages.

## 6.3 Alarm Check

It is possible check which emergency features are set on the device

- SOS is activated
- Fall is activated

## 6.4 Call History

By pressing the left soft key you can go to the main menu, then by using the volume key on the right hand side of the Pearl you can scroll to call history.

1. Available Options are
2. Missed calls
3. Dialed Calls
4. Received calls Delete call logs

By using the left and right soft keys you are able to delete or save the data.

## 6.5 Sound

In the main menu select 'Sound'. Press the left soft key (Ok) to enter the 'Sound' submenu.

The available options are:

1. Ring volume (level 1-7)
2. Keypad volume (level 1-7)
3. Ring Tone (1-20) options
4. Message Tone (1-10)

## 6.6 Settings

In the main menu select 'Settings'. Press the left soft key (Ok) to enter the 'Settings' submenu.

The available options are:

1. Language: (To select the menu language)
2. LCD Backlight (Set Backlight level)
3. LCD Contrast (Set Contrast level)
4. Auto Keypad Lock: (Select off, 5 sec, 30sec, 1min or 5min)
5. Auto Answer:
  - 1 Normal Auto Answer: Select on/off.
  - 2 Silent Auto Answer: Select on/off.

When these functions are activated all incoming calls will be answered automatically.

6. Version. See what software version your device supports

## 6.7 Contacts

In the main menu select 'Contact(s)'. Press the left soft key (Ok) to view the 'Contacts'

The available options are:

1. Speed Dial (shows the speed dial key numbers for button 1 to 4)

## 7 Operating your Oysta Pearl+

### 7.1 Switching your Oysta Pearl+ on/off

To turn the Oysta Pearl+ on:

Press the Power button on the left side of the device until the device powers up.

The Oysta Pearl+ will then automatically test whether a SIM Card is inserted. If your SIM card has a PIN code the Oysta Pearl+ will ask you to enter the correct PIN code to unlock the SIM card.

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In case of a PIN code you can unlock the SIM card by using the volume key to select the correct numbers and the SOS key to confirm a specific number. If the correct Pin number has been entered, you will see a Code accepted message displayed on the screen.

To turn the Oysta Pearl+ off:

Press the Power button on the left side of the device until it reads Power off.

### 7.2 Call/Answer

Press the Call/Answer button to answer an incoming call. This is the green button on the left side of the device. When you answer a call you have the possibility to set the Oysta Pearl+ to hands free, put the call on hold and you can check your text messages during the call.

### 7.3 Adjust the volume

Whilst on a call, press the upper part of the volume button on the right side of the device to increase the volume, and press the lower part of the volume button to decrease the volume.

### 7.4 Make a phone call

Using the Oysta Pearl+ you can make calls to a maximum of 4 different numbers. The numbers are programmed via a web interface.

When you want to make a phone call press the speed dial key of the number you want to call and press the 'left soft key' to start calling this number.

### 7.5 Position by Button

The device can manually update its position with the Oysta platform, and confirm the number of the button that was pressed.

To activate, hold down one of the number buttons until confirmation appears on screen to send its location.

## 7.6 Power Status

When activated, this will allow you to see if the device is switched on or off when in either the “Location” or “Route History” screens. This is shown against “status”.

## 7.7 Motion Sensor

When you activate this feature, an alarm will be sent when the motion sensor is triggered. The motion sensor is triggered when the handset is dropped. You have a choice of sensitivity levels (ranked from least to most sensitive):

1. Man down - Low
2. Man down - Medium
3. Man down - High
4. Impact

You can also confirm a phone number for the device to contact in the event of a fall, independent of the emergency button.

## 7.8 Non-movement Sensor

When you activate this feature you will receive an alarm when no movement is detected by the device for the pre-set timeframe. You can choose a start and end time for the device to detect the non-movement, and the phone number to be dialed (if required). You have a choice of sensitivity (threshold) levels (ranked from least to most sensitive):

1. Man down - Low
2. Man down - Medium
3. Man down - High

You can also use the non-movement feature for the ‘power save mode’. If the device is not moving, it will refrain from sending the location data until it detects movement.

## 7.9 Emergency Protocol

The Emergency Protocol feature enables a control room or pre-defined phone number to discreetly dial into the device, and listen to the users’ situation and decide on course of action. For the audio to be transmitted from the device, you will need to enable the below options:

- Speaker: Audio from the ARC will be heard in the speaker.
- Handsfree: Audio from the ARC will be heard in the loudspeaker.
- Microphone: This needs to be enabled for the ARC to hear audio from the user.
- Vibrate: The device will discreetly make the user aware that the ARC is connected to the device.
- Rings before auto-answer: selecting 0 will enable to the ARC to dial in without any delay.

## 7.10 Speed Alert

You can set a maximum speed level. When this option is activated, alerts will be sent when the speed limit is exceeded.

## 7.11 One touch SOS

When activated, the Oysta Pearl+ SOS button will immediately call and send its location information to the nominated emergency telephone number or control centre.

To make the SOS call hold down the SOS key until it vibrates, beeps or displays a pop up message. The device will now send its location information and will set the emergency call up. You can still cancel the call by pressing the 'right soft key'.

## 7.12 Amber Alert

The device can be manually configured to initiate a countdown timer, which will send an alarm and call the control room when the countdown reaches 0 and it is not cancelled.

To set the countdown timer, hold down the menu button for 3 seconds and the 'AMB Timer Setting' screen will pop up. Press the 1 key to increase the number of minutes for the countdown, and press the 3 key to reduce the number of minutes. Pressing the 2 key will start the countdown.

To cancel the countdown timer, hold down the right key for 3 seconds.

## 7.13 Welfare Check

The device can be remotely configured to display a message at pre-set intervals. If the user does not confirm the message in the screen that says 'Are you OK?', an alert will be sent to the platform.

## Technical Specifications

### General

Dimension (mm - H/W/D)	92 x 44 x 17.9mm
Weight (g)	74g

### Hardware

GPS Baseband	SIRF GSC3F
Band	Quad band GSM 850/900/1800/1900
Receiver	20 x 11 mm
Speaker	20 x 11 mm
Screen	1.3" white OLED display
Keyboard backlight	LED - Navy blue
Vibrate Mode	Yes
Bluetooth	Yes
GSM Antenna	Internal antenna
GPS Antenna	Internal antenna
System Interface	Proprietary
Earphone Interface	Yes
RF Test Interface	For use by mobile network operators for RF network testing.
Temperature	Normal working conditions: -10 to 55 °C Limited working conditions: 55 to 65 °C

### Software

Ring tone	16 channel polyphonic MIDI for incoming calls, 25 different ring tones.
Voice Codec	FR, EFR, HR, AMR
Two path audio	Earphone and Receiver
Phonebook	20 numbers
SMS	Possibility to receive text messages
GPS	<ul style="list-style-type: none"> <li>• UBlox All-in-one GPS receiver</li> <li>• GPS accuracy 2.5m - 5m</li> <li>• Acquisition rate (TTFF defined at 95% of first position local station)</li> </ul> Standard GPS mode: <ul style="list-style-type: none"> <li>□ Hot start 1 second, average in open sky</li> <li>□ Warm start &lt;30 seconds, average in open sky</li> <li>□ Cold start 30 seconds, average in open sky</li> </ul>
OTA	Over the air command settings from the MyOysta server using the MyOysta proprietary protocol.
Motion Sensor	Sends out alert information when activated and shock is detected.
Speed Sensor	Sends out alert information when activated and speed threshold is met.

## 8 Troubleshooting and Safety info

Problem	Reason	Solution
The location of the Oysta Pearl+ mobile cannot be found.	The Oysta Pearl+ mobile is not in satellite coverage.	Move the Oysta Pearl+ mobile to a place where it has satellite coverage, e.g. outdoors and away from tall buildings.
The Oysta Pearl+ mobile cannot be switched on.	The battery is not charged or The Power button was not pressed long enough.	Make sure the charger is connected correctly at both the mains and the Oysta Pearl+ mobile.  Make sure the battery is fitted correctly.  Press the Power button for at least 3 seconds in order for the Oysta Pearl+ to switch on.
Unable to charge the Oysta Pearl+	The battery or charger is damaged or the charger is not connected correctly	Check if the charger is properly connected. If this doesn't resolve the issue contact your service provider to replace the battery or charger.
Unable to connect to the mobile network	You are not in GSM coverage or the SIM card is expired or blocked	Please move to a place with a better signal and try again. Contact your mobile operator if the problem remains the same.
SIM card malfunctioning	SIM card is damaged or not properly inserted.	Confirm SIM card is properly inserted or contact your mobile operator.

## Safety Information

- Please do not remove the battery when the Oysta Pearl+ mobile is charging.
- To avoid damage to your ear from the ring tone, when the Oysta Pearl+ mobile rings, first press the answer button and then move the Oysta Pearl+ mobile to your ear.
- Do not allow the Oysta Pearl+ mobile to overheat.
- Do not keep your Oysta Pearl+ mobile in a humid place.
- Do not expose the Oysta Pearl+ mobile to direct sunlight.
- Switch off the Oysta Pearl+ mobile when in aircraft.
- Switch off the Oysta Pearl+ mobile if near medical equipment.

## 9 Warranty conditions

Oysta Technology (and/or its authorized distributor) warrants this product as free of defects in material, design and workmanship for a 12 month period from the original date of purchase.

If, during the period of warranty, this product proves defective under normal use and service please contact Oysta Technology and/or its authorized distributor and one of our customer services team will be able to assist you. The liability of Oysta Technology and its authorised service distributor is limited to the cost of repair and/or replacement of the unit under warranty

1. The warranty is only valid upon presentation of the original invoice or sales slip giving the date of purchase, where purchased from, model, serial/IMEI number and product number. Oysta Technology reserves the right to refuse warranty service if this information has been removed or changed after the original purchase of the product.

2. Oysta Technology's obligations are limited to the repair of the defective part and, at its discretion, replacement of the product.

3. The warranty will not cover any repairs carried out by non Oysta Technology centres or damage caused by such repairs.

4. Repair or replacement under the terms of this warranty does not give right to extension to or a re-start of the period of warranty. Repair or direct replacement under the terms of this warranty may be carried out using parts or units with equivalent functionality but not necessarily identical ones.

5. The warranty is not applicable in cases other than defects in material, design and workmanship. The warranty does not cover the following:

- Periodic checks, maintenance, repair and replacement of parts due to normal wear and tear.
- Abuse or misuse, including but not solely limited to, the failure to use this product for its normal purposes or in accordance with Oysta Technology's instructions, usage and maintenance.
- Upgrading of software due to changes in network parameters.
- The product has been used with accessories not approved by Oysta Technology for use with this product.
- Failure of the product arising from incorrect installation or use not consistent with technical or safety standards in current force or failure to comply with product manual instructions.
- Accidents, acts of God or any cause beyond the control of Oysta Technology caused by lightning, water, fire, public disturbances and improper ventilation.

- Unauthorised modifications carried out on the product to comply with local or national technical standards in countries where the Oysta Technology product was not originally designed to be used.
- Damage of the battery caused by overcharging or failure to use in accordance with the specific instructions of care outlined in the product user guide.
- Repairs performed by non-authorized service centres such as opening of the product by a non-authorized person.
- The model, serial/IMEI number and product number on the product has been altered, deleted, removed or made illegible.
- The battery has been charged using an unapproved battery charger.
- Any of the seals on the battery enclosure or cells are broken or show evidence of tampering.

6. This warranty does not affect the consumer's statutory rights nor the consumer's rights against the vendor from their purchase/sales agreement.

This warranty will be the purchaser's sole and exclusive remedy and neither Oysta Technology nor its subsidiaries or distributors, retailers or dealers shall be liable for any incidental or consequential damages for breach of any express or implied warranty to this product.