USER MANUAL

Pebbell® v2

STARTING PEBBELL™ v2

Thank you for purchasing PEBBELL v2 GPS. PEBBELL v2 is especially built for real time monitoring and can be used in all areas of life from travelling and lone worker protection to specialized care and security services. It is suitable for children, the elderly, people suffering from dementia, patients but also outdoorsmen, sportsmen etc.

Using latest advanced GPS and wireless technology combined with IPX6 waterproofness and an innovative miniature size, it increases safety and reduces stress.

When needed, you can, communicate your PEBBELL's exact position. You can request location, set tracking and area tracking of the device(s), and view your PEBBELL's position on the map. PEBBELL can be used with any smartphone and you do not need to install any applications**. The device is designed for use on the 850/900/1800/1900 MHz mobile networks. You can use it also in all countries worldwide where HoIP Telecom has a SIM roaming contract.

(**exception: Live Tracking Android and IOS Mobile Client).

Information in this User manual is subject to change without notice.

HoIP Telecom reserves the right to change or improve their products and make changes in the content without obligation to notify any person or any organization of such changes or improvements. HoIP Telecom is not responsible for any loss of data, income or any consequential damage whatsoever caused.

Some of the features described in this User Manual may be optional and intended to be purchased separately. For details, please contact HoIP Telecom or your local reseller.

For more information, details and descriptions, including device configuration and assortment of chargers and accessories, please visit the web site: http://www.pebbell-gps.com, or contact your PEBBELL country dealer.

HoIP Telecom warrants its products to be free of defects in material or workmanship when leaving the factory. For details, see the warranty terms at: http://www.pebbell-gps.com/warranty-terms.

PEBBELL™ is a registered trademark of HoIP Telecom.

Correct disposal of this product: The PEBBELL device(s) should not be disposed with household or other commercial waste. Remove the battery from the device and dispose it according to local battery recycling laws.

Please read this document before using the product. Neglecting the rules may be dangerous or illegal. Further detailed information is given in this manual.

- Do not switch on the product when wireless phone use is prohibited or may cause interference or danger.

- Do not use the product in hospitals. Follow the hospital regulations or rules. Switch off the product near medical equipment.

- Do not use the product on aircrafts. Wireless devices can cause interference in aircraft.

- Do not use the product at a refuelling point. Do not use the product near fuel or chemicals.

- Do not use the product where blasting is in progress. Observe restrictions and follow any regulations or rules.

Never try to disassemble or service the product. Only qualified personnel may repair the product.

Use only approved accessories and batteries. Do not connect incompatible battery charger or charge other devices with the PEBBELL GPS charger. A wrong charger may damage the device.

-We wish you enjoyable moments with PEBBELL v2-

RECOMMENDED PACKAGE CONTENT IN UK

AC Charger Adapter

PEBBELL v2

Desktop Docking Charger

USB Charging Cable

① GETTING TO KNOW YOUR DEVICE

right

back

SPEAKER

P
E
B
B
E
L
L

front

lift

ON / OFF

LEDS

MICRO USB

62 mm

DESKTOP CHARGING CONTACTS

|—45mm—|

SOS BUTTON

MIC

|—17mm—|

top

bottom

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② DEVICE CHARGING

The PEBBELL v2 device is equipped with an internal rechargeable battery. The autonomy of the battery may vary depending on the GPS and GSM activity and the use of the device.

When charging for the first time use, please fully charge the battery for around 2-3 hours, using the USB charger or the docking station.

- o Place the device on the docking station.

- o Connect the Micro USB side of the cable to the docking station port and connect the other end of the cable to the designated AC power source (USB/AC adaptor).

- o When charging, the RED LED (on the docking station) will be blinking. After the device has been fully charged, the RED LED WILL BE SOLID DIM.

NOTE: A wrong charger may damage the device. Use only the original PEBBELL charger. The ideal temperature range for charging is between +10°C and +30°C. The battery life might be shortened if charging the battery outside of this temperature range.

LOW BATTERY ALARM

When the unit's battery is less than 15%, it will send an SMS alarm "BAT: LOW!" to all authorized numbers. If the battery is less than 15%, the blue light will flash rapidly to advise the user to charge the device as soon as possible.
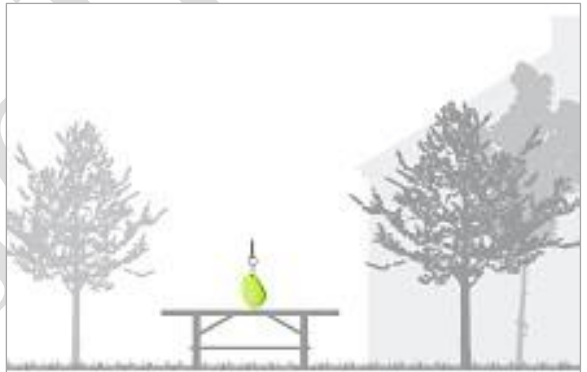
③ SWITCHING ON THE DEVICE

<u>To turn on the device</u>: Press the side power button for 1 second, all the LEDs will flash rapidly.

Device can also be turned on automatically by charging via USB or placing in on the docking station.

To get an initial first location, stay outdoors or near a window so the device can fix itself onto the satellites.

④ SWITHCING OFF THE DEVICE

<u>To turn off the device:</u> Press and hold the side button and SOS button together for 1 second until the LEDs turn off

⑤ WHAT DO THE LIGHTS MEAN?

POWER STATUS - LED

LED	Blue ON (solid)	Blue blinking quickly	Blue OFF or blinking slowly
STATE	The device is charging	Battery power is lower than 15%	Device has been fully charged or it's not charging

GSM LED – GREEN

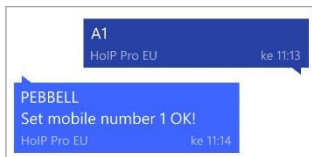| LED	Light shows a rapid single flash every 3 seconds	Light shows a rapid double flash every 3 seconds	Light shows a slow flash every 3 seconds	Light solid (not flashing)
STATE	The device is connected to the GSM network	The device is registered to the GPRS network	The device is connecting to the GSM network	No SIM card is detected

GPS LED - BLUE

LED	Light shows a rapid single flash every 3 seconds	Light shows a slow flash every 3 seconds (1 second ON and 3 seconds OFF)	Blue OFF (when device not charging)
STATE	The device has a GPS positioning fix	The device has NO GPS position fix	The GPS chip is sleeping

⑥ SETTING THE AUTHORIZED NUMBERS (A, B and C)

① Send SMS command: **A1**

NOTE: No spaces in the text, case-insensitive.

❖ Using your mobile phone, send SMS with a text **A1** to the phone number of the device. It will reply: "**Set mobile number 1 OK!**"

To delete this number, send command **A0** to the Pebbell.
NOTE: **It is not mandatory for all three of the authorized numbers to be set,** however a minimum of one must always be set.

②Send SMS command: **B1,phone number** (Example: B1, +447624123456)

❖ Using your mobile phone, example send **B1,+**447624123456 to the phone number of the device. It will reply: "**Set mobile number 2 OK!**"
To delete this number, *send* command **B0** to the PEBBELL

③Send SMS command: **C1,phone number** (Example: C1, +447624987654)

❖ Using your mobile phone, example send **C1,+**447624987654 to the phone number of the device. It will reply: "**Set mobile number 3 OK!**"
To delete this number, send command *C0* to the PEBBELL

⑦ ACTIVATING THE SOS "BUDDY" ALARM

Press and hold the SOS button for 3 seconds until the device vibrates, after which the green light will start flashing rapidly to confirm the request. Following this, an SOS alarm "Help me" –an SMS message with location coordinates– is sent to all authorized phone numbers. The device will also dial the 3 authorized numbers in sequence. If it fails to connect to the first number (A1), it will call the second one (B1). In case the second number fails to be connected as well, the device will call to the third number (C1). If the device fails to dial all 3 numbers, it will start dialling the numbers again after 5 minutes. This will continue until one of the phone numbers answers the call.

To end the call, press the SOS button.

⑧ MAKING A NORMAL PHONE CALL

To make a normal call, press and hold the side button for 3 seconds and you will hear a beep. The green light will flash rapidly to confirm the request after which the device dials the call to number C1.

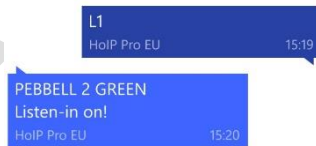To end the call, press the SOS button.

⑨ RECEIVING A NORMAL PHONE CALL

To receive a normal call (only from authorized A1, B1 or C1 numbers), PEBBELL will vibrate.In order to start the call press SOS button. **To end the call, press the SOS button**.

⑩ LISTEN-IN (Voice wiretapping)

Send SMS command: **L1** (Default L0)

A1, B1 and C1 can make a silent call to the device. PEBBELL answers the call automatically and allows the caller to hear what is happening around the device. There is no voice indication that the call is in progress.

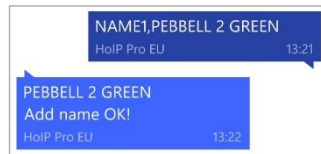To turn off this function, send command **L0** to the device.

⑪ USER-DEFINED NAME IN PEBBELL SMS CONTENT

Send SMS command: **NAME1,user name** (Default PEBBELL)

Example: NAME1,PEBBELL, PEBBELL will reply "Add name OK!"

To delete the name send command **NAME0** to the device

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⑫ TURNING OFF THE LEDs

Send SMS command: **LED1**

The device will reply "LEDs OFF!" and after a short while the LEDs will stop flashing, but the device is actually on.

To turn off this function, send command **LED0** to the device
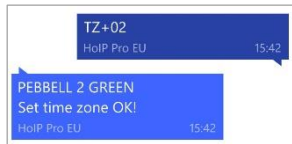
⑬ MODIFYING THE TIME ZONE

Send SMS command: **TZ+00/-00**

NOTE: UTC time has been set as default time.

NOTE: The time must be given in 2 digits with the maximum of 23 hours in value. The symbol "+" in the "time zone" portion of the text indicates east. The symbol "-" indicates west.

Example:
- TZ+02: The system will add 2 hours based on the UTC time (CET Time Zone)
- TZ-02: The system will reduce 2 hours based on the UTC time.

⑭ REGUESTING A SINGLE LOCATION

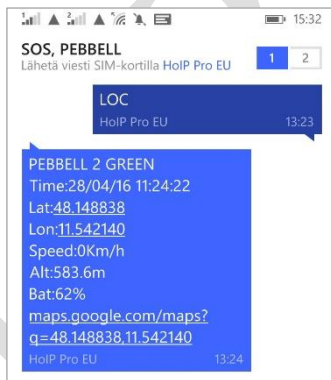1. Reply with coordinates and web link Send SMS Command: **LOC**

The device will reply.

"Time: xxxxx; Lat: xxxx; Lon: xxxx; Spd: xxxxx; Altitude:xxxx Bat: xxx" and a link to Google Maps:

maps.google.com/maps?q=48.148838,11.542140

By clicking on the link, the location will be shown directly on Google Maps on your mobile phone (mobile phone needs to be connected to Internet).

 NOTE: Always check the time stamp of received reply. If the time stamp is not correct, the device has sent back a non-valid old location. In this case, please repeat the LOC command.

2. Reply with Address (not in standard usage)

Send SMS command: add

The device will reply with an address, e.g. "Add: Coombe Lane, Awbridge, SO51 0HN Hampshire, UK"

NOTE: This function needs DATA server function support to activate, for which please contact: sales@hoip-telecom.co.uk.
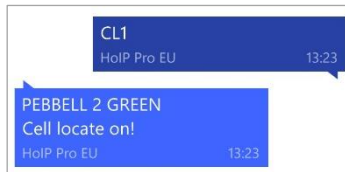
⑮ LOCATING THE CELL

If the GPS signal is not available, the unit can be tracked by a GSM base station tower. However, as compared to a GPS satellite, GSM accuracy is proven to be worse with some regional areas having errors of 300m–5km.

Send SMS Command: **CL1**
The device will reply "Cell locate on!"

To turn off this function, send command **CL0** to the device

⑯ OVER-SPEED ALARM

Send SMS command: **SPEED1,speed** (Default SPEED0)

NOTE: The speed must be given in km/h in 2 or 3 digits (01-255 km/h).

Example: SPEED1,100

Suppose the overspeed alarm we want to set is 100 km/h. When the device exceeds 100 km/h, it will send the message "Overspeed! + GPS info" to all preset authorized numbers.

To turn off this function, send SMS command **SPEED0** to the device.

⑰ GEO-FENCE ALARM

Send SMS Command: **GX,Y,Z,xxxM/KM** (Default G0)

Example**: G1,1,1,100M** Notes: No spaces in between.

- **X=**No. of Geo-fences (1~3), user can set 3 Geo-fences
- **Y=0**; turn off the function
- **Y=1**; turn on the function
- **Z=1**; set alarm when the PEBBELL enters the preset area
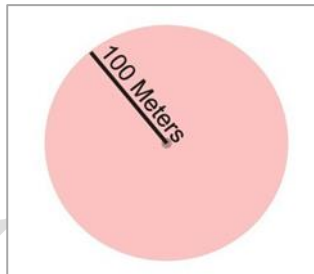- **Z=0**; set alarm when the tracker breaches the district

- **xxx** is the preset distance to PEBBELL's original place, and it must be given in 3 digits. M stands for meters, KM stands for kilometres.

The device will send the message to the authorized numbers as "Geo fence alarm!+GPS info" when it enters the set area (user must set this function when the blue light is flashing rapidly).

<u>To turn off this function</u>, send SMS command G1,0 or G2,0 or G3,0 to the device.

The minimum setting is 100 meters, and it works only on Power Save OFF mode or LIVE Tracking mode.

⑱ MOVEMENT ALERT

Send SMS command: **M1, xxxM/xxxKM** (Default M0,0)

NOTE: **xxx** must be given in 3 digits. M stands for meters, KM stands for kilometres.

PEBBELL must be stationary when setting this function.

Example: **M1,100M**

When PEBBELL moves beyond 100 meters, it will send an SMS alarm to the preset numbers.

To turn off this function, send command **M0** to the device. The minimum setting is 100 meters.

⑲ MOTION ALARM

Send SMS command: **V1,xx S/M/H** (Default V0)

NOTE: No spaces in between, S stands for seconds, M stands for minutes, H stands for hours, xx stands for the time you set and must be given in two digits.

Example: **V1,05M**

If the user turns on this function, the device will detect motion every 5 minutes and will send an SMS warning alarm to all registered phone numbers.

To turn off this function, send command V0 to the device.

⑳ FALL DETECTION

Send SMS command: **FL1** (Default FL0)

The device must sense both the impact and the angle of the fall, after which it must remain in a lying position for at least 10 seconds. After this, the device will raise alarm. A simple fall may cause harm, but the fall sensor might support you to get immediate help without missing any important moment.
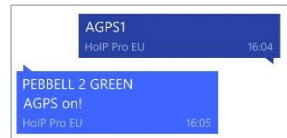
To turn off this function, send command **FL0** to the device.

②① A-GPS

Send SMS Command: **AGPS1** (Default on)

A-GPS serves for accelerated positioning and helping position a device when GPS signals are weak or not available. GPS satellite signals may be impeded by tall buildings and do not penetrate building interiors well. A-GPS uses proximity to cellular towers to calculate position when GPS signals are not available.

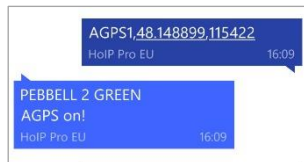To turn off this function, send command **AGPS0** to the device

②② A-GPS WITH KNOWN POSITION

Send command: **AGPS1,latitude,longitude**

Example: AGPS1,48.148899,11.542254

To turn off this function, send command **AGPS0** to the device
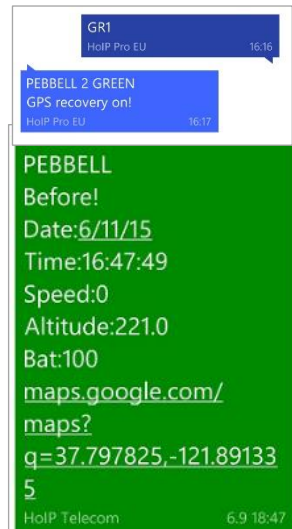
②③ GPS SIGNAL LOST AND RECOVERY ALERT

Send SMS command: **GR1** (Default GR0)

The device will automatically send the latest available GPS information to the preset numbers when it enters an area without GPS signal. If the user goes into an area that does not have a GPS signal, such as a tunnel, cave, parking garage etc., the device will know where the user was 10 minutes before they entered such an area. This is critical! If a child goes missing, you'll be able to know the closest possible location before the GPS signal was lost.

For any SMS sent during the period lacking GPS signal, the device will reply GPS information to preset numbers soonest as the GPS signal is recovered.

To turn off this function, send command **GR0** to the device.

NOTE: This can generate many SMS messages.

GR1
HoIP Pro EU   16:16

PEBBELL 2 GREEN
GPS recovery on!
HoIP Pro EU   16:17

PEBBELL
Before!
Date:6/11/15
Time:16:47:49
Speed:0
Altitude:221.0
Bat:100
maps.google.com/
maps?
q=37.797825,-121.89133
5
HoIP Telecom   6.9 18:47

②④ CHECKING THE SETTINGS

Send command: **STATUS**

The device will reply e.g. "A+44xxxxxxxxxx B+44xxxxxxxxxx C+44xxxxxxxxxx; Speed: 0,110km/h; GEO: 0,0,0; VB: 0,0S; MV: 0,0; LBS: 1; LED: 0; Z:0; TZ: 2.0; LI: 0; PS: 1; DS: 0,15M; FL: 1; Bat: 61%; SMS: 1; LOCK: 0"

The meaning of "0" & "1":

The number "0" implies that the function is turned off, while "1" indicates that the function is turned on.
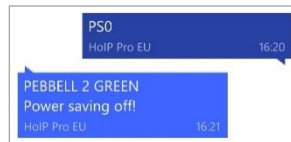
② ⑤ DEVICE POWER MODES

1. No Power Saving Mode

Send command: **PS0**

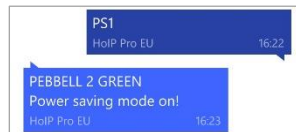In this mode, both GSM and GPS are on, battery can last 18~36 hours.

2. Smart Power Saving mode

Send SMS command: **PS1** (Default mode)

In this mode, the GSM chip is working and receives calls as well as SMS and transmits location. The GPS chip is activated by motion, incoming calls and SMS. The GPS chip is off when there is no movement or phone usage. Battery life is not consumed when the device isn't moving.

In normal use, the battery can last 4 ~ 8 days.

3. Deep Sleep Mode

Send SMS command: **DS1**

The device can be only activated by movement. Once movement is detected, it will run for the set time (15 minutes) and sleep again if no movement is detected.

The battery can last 40 days if there is no movement at all.

To turn off this function, send command **DS0** to the device.

② ⑥ REBOOT DEVICE

Send SMS command: **REBOOT**
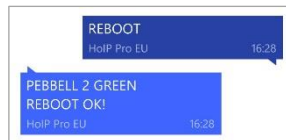
The device will reply: "**REBOOT OK!"**

NOTE:: The device will restart itself without changing any settings.

② ⑦ INITIALIZATION

Send SMS command: **RESET!**

The device will reply: "**RESET OK!"**
NOTE: This will restore all settings to the factory default.

②⑧ BUILT –IN MEMORY

The device has a built-in 8MB flash memory. It will store the GPS information when there is no GSM network coverage (e.g. very low population density areas, mountainous terrain, and underground areas). The device will transmit GPS locations to the web server automatically once the GSM network is recovered.

②⑨ DELETE STORED TRACKING HISTORY DATA

Send SMS command: **flush**

The device will stop sending the stored tracking history data to the tracking platform

HARDWARE SPECIFICATION

Content	Specs.
Mainframe Dimension	65 x 35 x 16 mm
Weight	35g
GSM Frequencies	900/180/850/1900Mhz
GPS Chip	U-blox 7 (Support AGPS)
GPS Sensitivity	Cold start: -148dBm, Hot start: -162dBm
GPS Accuracy	<2.5m

STARTING PEBBELL 2

Time to First Fix	Cold start 32s, Warm start 11s, Hot start 1s
Charging Voltage	5V DC
Battery	Chargeable 3.7V 800mAh
Standby Current	≤2mAh
Storage Temperature	-40°C to +85°C
Operation Temperature	-20°C to +80°C
Humidity	5%-95% non-condensing

ORIGINAL PEBBELL™ v2 WARRANTY

The purchaser of the PEBBELL GPS device and its accessories, included in the box as sold, has a limited warranty.

HoIP Telecom undertakes that during the period covered by the limited warranty, any defects in the materials, design or manufacture of the PEBBELL GPS device and its accessories will be corrected by HoIP Telecom or one of its approved after-sales companies, free of charge and within a satisfactory time-frame. This correction shall cover the repair of the PEBBELL GPS device and its accessories, or, if HoIP Telecom considers it necessary, at its sole discretion, its replacement free of charge under the stipulations of this limited warranty. This limited warranty does not affect your rights under the laws in force in your country or your rights against the vendor of the PEBBELL GPS device and its accessories.

Warranty Period

The warranty period starts at the time of the product's original purchase by the first end-user. The product may consist of several different parts and different parts may be covered by a different warranty period (hereinafter "Warranty Period"). The different Warranty Periods are:

1. Twelve (12) months for PEBBELL device and three (3) months for accessories (whether included in the device sales package or sold separately). Other than the consumable parts and accessories as listed in "2." below:

2. Three (3) months for the following consumable parts and accessories: batteries and chargers

As far as your national laws permit, the Warranty Period will not be extended or renewed or otherwise affected due to subsequent resale or a HoIP Telecom authorized repair or replacement of the product. However, part(s) repaired or product(s) replaced during the Warranty Period will be warranted for the remainder of the original Warranty Period or for sixty (60) days from the date of repair or replacement, whichever is longer.

How to use the warranty service

To be able to use this limited warranty, kindly return the following items to the after-sales service company approved by HoIP Telecom:

a) The PEBBELL GPS device or the item in question, carefully protected in its original packaging, by registered mail with proof of delivery. HoIP Telecom informs the purchaser that it is not liable for the loss of the device and does not repair damage occurring during transport.

b) The original proof of purchase and a copy of the contract subscribing to the PEBBELL LIVE Services, indicating clearly the name and address of the vendor as well as the date and place of purchase.

c) The standard repair form available on the internet site http://www.pebbell-gps.com, dated and signed, or a letter on ordinary paper giving your details and identifying the product and its accessories (kindly attach the self-adhesive tab with the product number or write it clearly, giving the IMEI number which you can obtain simply by contacting support@pebbell-gps.co.uk and describing the symptoms of the fault).

For further details on how to take advantage of this limited warranty, please check the website http://www.pebbell-gps.com or contact support@pebbell-gps.co.uk.

When you file a claim under the limited warranty, you must notify support@pebbell-gps.co.uk of the alleged fault within a reasonable period of having discovered it, and, in any case, by the expiry date of the warranty period at the latest.

HoIP Telecom may use new or "as-new" parts or products or others equivalent to new parts or products to repair or replace the PEBBELL GPS device and its accessories.

All parts of the PEBBELL GPS device and its accessories, or any other item replaced by HoIP Telecom shall remain the property of HoIP Telecom.

Warranty exclusions

1 – This limited warranty does not cover the user manuals included in the box as sold with the PEBBELL GPS device.

2 – This limited warranty does not cover:

• normal wear and tear

• faults due to misuse (including those caused by sharp objects, bending, crushing, falls, etc.)

• faults and damages due to misuse of the PEBBELL GPS device and its accessories, in particular using it in other ways than as per the instructions provided by HoIP Telecom (among others those stipulated in the PEBBELL GPS device user manual)

• other acts beyond the control of HoIP Telecom

3 – This limited warranty does not cover effective or alleged faults caused because the PEBBELL GPS device has been used with, or connected to, a product, accessory or service not manufactured or supplied by HoIP Telecom or it has been used for purposes other than those for which the PEBBELL GPS device has been designed.

4 – This limited warranty is not applicable if the PEBBELL GPS device and its accessories have been opened, damaged, used with equipment other than that for which they were designed (battery and SIM card), modified or repaired by anyone other than a HoIP Telecom -approved servicing centre, if they have been repaired using non-approved swapped parts or if the serial number of the PEBBELL GPS and its accessories or the IMEI number has been removed, deleted, degraded, modified or made illegible in any way. Such removal, deletion etc. is to be determined solely by HoIP Telecom.

5 – This limited warranty is not applicable if the socket for charging the PEBBELL GPS device is rusty because the protective rubber cover has not been properly closed.

6 – This warranty is not applicable if the PEBBELL GPS device and its accessories have been exposed to extreme temperatures or environments, to corrosion, to rusting or to the action of chemical products.

Outside the warranty period or conditions of application of the warranty:

An estimate will be provided, on request, if the PEBBELL GPS device and its accessories are no longer under warranty or do not comply with the conditions of application of the warranty.

To send a request for an estimate for repairs outside the warranty period or where the warranty does not apply, kindly return the following items to the after-sales service company approved by HoIP Telecom:

a) The PEBBELL GPS device or item in question, carefully protected in its original packaging, by registered mail with proof of delivery. HoIP Telecom informs the purchaser that it is not liable for the loss of the device and does not repair damage occurring during transport.

b) The original proof of purchase and a copy of the form subscribing to the PEBBELL Services, indicating clearly the name and address of the vendor as well as the date and place of purchase.

c) Either the standard repair form available on the internet site http://www.pebbell-gps.com, dated and signed, or a letter on ordinary paper giving your details and identifying the product and its accessories (kindly attach the self-adhesive tab with the product number or write it clearly, giving the IMEI number which you can obtain simply by contacting: support@pebbell-gps.co.uk and describing the symptoms of the fault).

The estimate issued by HoIP Telecom at your request will be valid for one (1) month.

Should you accept the estimate, the repair indicated on the estimate will be performed as soon as possible and the estimate will be free of charge.

The invoice corresponding to the estimate including dispatch costs, which are borne by you, will be issued at the same time as the repaired PEBBELL GPS device and accessories will be sent to you.

If you do not accept the estimate or fail to reply in the time-frame of one (1) month, the PEBBELL GPS device and its accessories will be returned to you without repairing and the cost of the estimate as well as ~~the cost of~~ dispatching the PEBBELL GPS device and its accessories will be invoiced as a global and lump sum of fifteen (15) GBP, including tax.

The invoice corresponding to the estimate and dispatch costs will be sent to you at the same time as the repaired PEBBELL GPS device and accessories.

Limitation of liability

This limited warranty is your only recourse against HoIP Telecom and the only liability accepted by HoIP Telecom with regard to possible faults in the PEBBELL GPS device and its accessories.

However this limited warranty shall not, under any circumstances, exclude or limit your rights under the laws in force in your country or your rights against the vendor of the PEBBELL GPS device and its accessories.

Within the limits authorised under current legislation, HoIP Telecom waives all liability with regard to loss of profits, a loss of enjoyment of the PEBBELL GPS device and its accessories or their functions, commercial loss, loss of contract, loss of invoicing or expected savings, increase in costs or expenditure or even indirect, consecutive or special loss and damages.

Within the limits authorised under current legislation, HoIP Telecom's liability is limited to the purchase price of the PEBBELL GPS device and its accessories. The above limits are not applicable in case of a serious or intentional fault of HoIP Telecom, or in case of death or injury resulting from a serious fault attributable to HoIP Telecom.

CAUTIONS

Please comply with the instructions to extend the unit life:

1. Keep the unit dry. Any liquid may destroy or damage the inside circuitry.

2. Don't use or store the unit in dusty places.

3. Don't place the unit in overheated or overcooled places.

4. Clean the unit with a piece of dry cloth. Don't clean with chemicals or detergent.

5. Don't disassemble or refit the unit.

6. Don't use other batteries, since that will cause problems.

REAL TIME TRACKING at http://tracking.pebbell.com/

Our web-based tracking system incorporates the TCP/IP protocol and allows users to monitor it in real time over the Internet.

If you have a web tracking license, please register your PEBBELL LIVE license at: http://www.pebbell-gps.com/live-registration-2.

If you do not have a web tracking license, you can purchase one at:

http://www.pebbell-gps.com/apps/webstore/products/show/6670029.

FAQ can be found at: http://www.pebbell-gps.com/apps/blog/