



#### STARTING PFT PFBBFI I™

Thank you for purchasing GPS pet tracking system. PET PEBBELL is especially built for real time monitoring and viewing your 'dogs, cats or other pets' movement and position. PET PEBBELL has been designed to meet the exact needs of pet owner and can be the difference between successful day out and wandering aimlessly around the forest.

Using latest advanced GPS and wireless technology combined with IPX6 Waterproofness and an innovative miniature size will create less stress with your beloved pet(s)

PET PEBBELL brings safety for both Pet Owner and Pet. You can, in case of need, communicate your pet(s) exact position where it is or where it can be found. You can request position, set tracking and area tracking of the pet(s), and view your pet(s) position on map. PET PEBBELL can be used with any Smartphones and you do not need to install any applications.

- The device is designed for use on the 900/180/850/1900 MHZ networks. You can use the
  device in all countries where the GSM network operators have a roaming contract with
  your network operator.
- The device also includes integrated high-performance GPS receiver.
- Information in this User's manual is subject to change without notice.
- HoIP Telecom reserves the right to change or improve their products and to make changes in the content without obligation to notify any person or 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 guide may be optional and intended to be purchased separately. For details, please contact HoIP Telecom or your local country dealer.
- Finland For more information, details and descriptions, including device configuration and assortment of chargers and accessories, please visit the web site: <a href="www.mobicare.fi">www.mobicare.fi</a>
- 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 end of this User Manual
- Pebbell™ is a registered trademark of HoIP Telecom.
- Correct disposal of this product: The PET PEBBELL device(s) should not be disposed with household or other commercial wastes. 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 the product on when wireless phone use is prohibited or when it 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 refueling 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 Pet Pebbell-

# **PACKAGE CONTENTS**



1 GPS Device



1 AC Adapter



1 User Manual



1 USP Charging Cable

# **GETTING TO KNOW YOUR DEVICE**



## **GETTING STARTED**

The Pet Pebbell 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 5~6 hours, using the USB charger. Thus the maximum capacity and lifecycle of the battery is ensured
- When charging, the BLUE LED will be on (solid). After fully charging, the BLUE LED will go to Signal Mode. Close the USB port carefully!!

Note: A wrong charger may damage the device. Use only the original Pebbell GPS charger. The ideal temperature range for charging is between  $+10^{\circ}$  C and  $+30^{\circ}$  C. The battery life might be shortened if charging the battery below or above those temperatures.

# Switching the device ON

- To turn on the device: Plug the device to a charging Micro USB cable.
- To get an initial location, use outdoors or near a window so the device may fix onto the satellites.



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# Switching the device OFF

• To turn off the device: Send SMS: **OFF** >> to the device, after you hear the beep, the device is turned off.

## WHAT DO THE LIGHTS MEAN?

#### GSM LED-GREEN

Light shows a single flash rapidly every 3 seconds	The device is connected to GSM network
Light shows a double flash rapidly every 3 seconds	The device is registered to GPRS network
Light shows a slow flash every 3 seconds	The device is connecting to GSM network
Light Solid (not flashing)	No SIM Card detected

#### GSM LED-BLUE

Light shows a single flash rapidly every 3 seconds	The device has GPS positioning fix
Light shows a slow flash every 3 seconds (every 1 second on and 3 seconds off)	The device has no GPS fix
No flashing	GPS chip is sleeping

# 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 battery is less than 15%, the blue light will flash rapidly to warn the user to charge the device as soon as possible.

- Command: Low1 (Default)
  - To turn off this function, please send Low0 the device.

## CONFIGURATION AND OPERATION BY SMS

- 1. Set the Authorized Number
- ① Command: **A1** or A1, phone number (Example: A1, +441234567890)
- Note: With no spaces in the text, case-insensitive.
  - Using your mobile phone, send A1 to the phone number of the device, it will reply: Set mobile number 1 OK!



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

- (2) Command: **B1** or B1, phone number (Example: B1, +441234567890)
  - The device will reply: Set mobile number 2 OK! To delete this number, you can send BO
- (3) Command: C1 or C1, phone number (Example: C1, +441234567890)
  - The device will reply: Set mobile number 3 OK! To delete this number, you can send CO

#### 2. Modify the time zone

Command: TZ+ +00/-00

Note: UTC time has been set as default time.

Note: The time must be amounts in 2 digits and at maximum 23 hours in value. "+"in the "time zone" portion of the text indicates east. The symbol "-"in the "time zone" indicates west.

#### Example:

- TZ+02, the system will add 2 hours based on the UTC time (CET Time Zone)
- TZ-02, the system will minus 2 hours based on the UTC time.



#### 3. User defined name in SMS content

Command: name1, user name

Example: name1, PET PLUG, the tracker will reply "Add name ok!"

To delete name send name0



## **LOCATION REQUEST**

#### 1. Reply with coordinates and web link

Command: loc

The device will reply "GPS Info! Time: xxxxx; Lat: xxxx; Lon: xxxx; Spd: xxxxx, Altitude:xxxx Bt: xxx and a link to google map:

maps.google.com/maps?q=loc:48.14886,11.542431

By clicking on the link the location will be shown directly on Google Map on your mobile phone (Mobile phone needs to be connected to internet)





#### 2. Reply with Address

Command: add

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

Notes: This function needs GPRS function support.

### **GEO-FENCE ALARM**

Command: G+X, Y, Z, xxxM/KM (Default G0)

Example: G1,1,1,100M

Notes: No spaces in between.

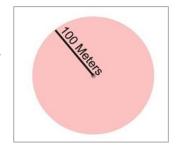
- X=No. of Geo fence (1~3), user can set 3 Geo fences
- Y=0 means to turn off the function
- Y=1 means to turn on the function
- Z=1 means to set alarm when the tracker enters the preset area
- Z=0 means to set alarm when the tracker breaches the district



xxx is the preset distance to the tracker's original place, must be 3 digitals. M means meters, KM means kilometers

The device will send the message to the authorized numbers as "Geo fence alarm!+GPS info" when it enter the area you set. (User must set this function when the device has GPS fixed.)

To turn off this function, please send **G1,0 or G2,0 or G3,**0 The settings must be at least 100 meters



## MOVEMENT ALERT

Command: M1, xxxM/KM (Default M0, 0)

Notes: xxx must be 3 digitals. M means meters, KM means kilometers

The tracker must be stationary when setting this function

Example: M1, 100m

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

To turn off this function, please send M0 to the device. (The settings must be at least 100 meters)

# LISTEN-IN (Voice wiretapping)

Command: L1

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

To turn off this function, please send **LO** to the device.

## MOTION ALARM

Command: V1, xx S/M/H

Note: No spaces in between, S means seconds, M means minutes, H means hours, xx means the time you set and must be two digitals.

Example: V1, 05M

If 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, please send **VO** 

#### SHUT DOWN LFD

Command: LED1

The device will reply "LED off" and later LEDs will stop flashing, but the device is actually on.

To turn off this function, please send **LED0** 



## **AGPS**

Command: AGPS1

A-GPS is 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, please send AGPS0



# AGPS with known position

Command: AGPS1, latitude, longitude

Example: AGPS1,48.148899,11.542254

To turn off this function, please send AGPS0



## GPS SIGNAL LOST AND RECOVERY ALERT

Command: GR1

The device will automatically send the latest available GPS information to the preset numbers when it enters into the area without GPS signal. If 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 user was 10 minutes before they went into 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.

PEBELL
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

With any SMS sent during the period without GPS signal, the device will reply GPS information to preset numbers soonest as the GPS signal is covered.

To turn off this function, please send GRO

## CELL LOCATE

Command: CL1

The device will reply "Cell locate on!

To turn off this function, please send CLO

The unit can be tracked by GSM base station tower, If GPS signal is not available for example in room or underground, and then user can be located by GSM tower.



However, as compared to GPS satellite, GSM accuracy is proven to be worse than that of GPS. GSM provider utilizes triangulation techniques to try to pinpoint the location of the device, and GSM base station is further affected by factors similar to GPS in the sense of the barriers affecting signal quality and the density of GSM towers to assist in the triangulation effort, with some regional areas having errors of 100M-2KM!

## **CHECK SETTINGS**

Command: STATUS

The device will reply E.g. A+8613812345678 B13912345678 C13712345678; Speed: 0,110km/h; GEO:0,0,0; VB:,0S; MV:0,0;

LBS.1,LED:0; TZ:2.0; LI: 0; PS:1; DS:0,3M; FL:0; Bat: 66

To recognize the meaning of "0"& "1"

The number "0" implies that the function is turned off; while "1" indicates that the function is turned on.

## TURN OFF DEVICE

Command: OFF

The device will reply "Shutdown OK" and then device shut down.





## **DEVICE POWER MODES**

#### 1. No Power saving mode

Command: PS0

In this mode, both GSM and GPS are on, battery can last  $18{\sim}24$ 

hours.



#### 2. Smart Power saving mode (default mode)

Command: PS1

In this mode, the GSM chip is working and receives calls, 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 no phone usage. Battery life is not wasted when the device isn't moving.

Under normal use, battery can last 4 ~ 10 days.



#### 3. Deep Sleeping mode

Command: DS1

Both GSM and GPS chip will shut down to save power, the device is unable to receive calls or SMS.

It can be only activated by movement. Once movement is detected, it will run for the set time and sleep again if no movement is detected.

Battery can last 40 days if no movement at all.

To turn off this function, send **DS0** 

## REBOOT DEVICE

Command: REBOOT

The device will restart itself without changing any settings.

## INITIALIZATION

Command: RESET!

Note: This is to make all settings back to the factory default.

# 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
Time to First Fix	Cold start 32s, Warm start 11s, Hot start 1s
Charging Voltage	5V DC
Battery	Chargeable 3.7V 900mAh
Standby Current	≤2mAh
Storage Temperature	-40°C to +85°C
Operation Temperature	-20°C to +80°C
Humidity	5%-95% non-condensing

# HoIP Telecom – ORIGINAL PET PEBBELL GSM/GPS WARRANTY

Manufacture's limited warranty HoIP Telecom warrants to the original retail purchaser ("Consumer" or "You") that this HoIP Telecom PET PEBBELL device and all accessories originally provided by HoIP Telecom in the sales package ("Product") are free from defects in materials, design and workmanship under normal use in accordance with the operating instructions and pursuant to the following terms and conditions. HoIP Telecom warrants to you that during the warranty period HoIP Telecom or a HoIP Telecom authorized service company will in a commercially reasonable time remedy defects in materials, design and workmanship free of charge by repairing or, should HoIP Telecom in its discretion deem it necessary, replacing the Product in accordance with this Limited Warranty (unless otherwise required by law). Some limitations to the warranty service may apply because of country specific elements in the Products. This limited warranty extends only to the Consumer for Products purchased and used in the original country of purchase. The limited warranty is valid only in HoIP Telecom intended country of sales of the product.

#### Warranty Period

The warranty period starts at the time of 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 HoIP Telecom Pet 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 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, HoIP Telecom authorized repair or replacement of the Product. However, part(s) repaired or replacement product 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.

## **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 & store the unit in dusty places
- 3. Don't put the unit in overheated or overcooled places
- 4. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent
- 5. Don't disassemble or refit the unit
- 6. Using other batteries will cause problems

# Real time tracking on www.smart-tracking.com

Our web based tracking system incorporates the TCP/IP protocol and allows users to monitor it in real time over the internet or sends an e-mail to the predefined e-mail address.

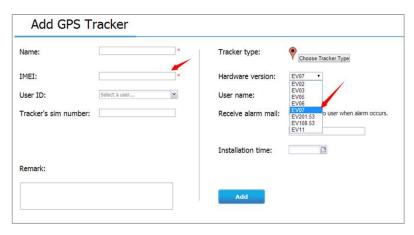
# How to connect device to the platform for real time tracking via GPRS

1. Get IMEI number

#### Command VERSION

The device will reply" IMEI: 123456789123456; GSM CSQ:xxxx; Soft:V07.20.10.1345"

- 2. Go to the website www.smart-tracking.com and login with your account.
- 3. On the left side, click "Manage→Add GPS tracker"



## Note:

- Hardware Version: Please choose EV07
- Type the name and the IMEI number. Please make sure IMEI numbers are correct.

## **GPRS SETTING**

In order to use the GPRS function, the user needs to setup the APN by sending SMS command.

APN stands for Access point name (APN) and is the name used to identify a general packet radio service (GPRS) bearer service in the GSM mobile network. The APN defines the type of service that is provided in the packet data connection.

Before getting started make sure that the SIM card in the tracker supports the GPRS function. The APN can be acquired from your local GSM operators.

Send the command S1, APN, user name, password

Notes: Some access point name without user name and password, so please leave it blank.

Example: S1,internet

"internet" is the APN from the SIM card provider; therefore the user must set their particular APN for their own country which the unit resides.

After sending the command, the device will reply "Set APN OK! GPRS connecting"

After send S1,APN, wait for a while then you will see device is online.

# SET GPRS TIME INTERVAL by SMS (this can be also set from platform)

#### Send the command TIxxS/M/H

The setting must be in 2 digitals, the maximum value is 99, which means 01~99.

#### The meaning of "xx":

- xxS is the time interval in second with range(30~99)
- xxM is the time interval in minute with range(01~99)
- xxH is the time interval in hour with range(01~99)

#### Example: TI01M

The device will reply "Set updating time interval OK!" and then device will update the time by every 1 minute on the website.

#### **DISABLE GPRS:**

Send the command **SO** 

The device will reply "GPRS OFF"

## RECONNECT GPRS

Reconnect the website via GPRS for real time tracking, please send the command S2

## CHECK APN & IP, Port

Send the command G1

The device will reply "APN: internet; Name: xxx; Password: xxxx; Port: 5050; IP:www.smart-tracking.com"

## CHANGE IP AND PORT

Send the command IP1,IP/domain name,port

Example: IP1,103.21.211.11,5050 or IP1,www.smart-tracking.com,5050

### REBOOT DEVICE

Send the command reboot

The device will restart itself without changing any settings.

### INITIALIZATION

Send the command RESET!

Note: This is to make all settings back to the factory default.

## **BUILT-IN MEMORY**

The device built in 8MB flash memory inside. It will store the GPS information when do not have GSM network coverage (i.e., very low population density areas, some mountainous terrain, underground areas etc). The device will transmit GPS locations to the WEB server automatically once the GSM network is recovered.

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