PawTrax GPS Pet Tracker

including KidTrax and PeopleTrax

user manual

Introduction

The PawTrax Micro is a small and powerful tracking device, developed for cats and small dogs. On request it will send its location to the user's mobile phone or our mapping platform at www.gpstrackingmap.com. The device has been designed in such a way that it can be used for other applications such as KidTrax, PeopleTrax and AssetTrax. It can be attached to a key ring or lanyard or covertly hidden in an asset.

Main Features – some are more applicable to certain applications

Locate and Track via SMS and GPRS
Listen in function
SOS alert button
Geo-fence alarm
Speeding alert
Low battery alert
Intelligent sleep mode – under GPRS will go into sleep mode if not moving or no GPS signal to conserve power

Specification

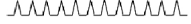|	
Dimension	58.2mm x 23.0mm x 11.2mm
Weight	23g
Network	GSM/GPRS
Band	850/900Mhz coming soon 850/900/1800/1900Mhz
GPS chip	SIRF3 chip
GPS sensitivity	-159dBm
GPS accuracy	5m
Cold start	42 sec.
Warm starts	38 sec.
Hot start	1 sec.
Operation temperature	-20°C to +55°C
Humidity	5%--95% non-condensing

Getting Started
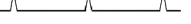
Charge the battery for 8 -12 hours for the first three times. After the first three times, the battery can be charged fully in 3-5hours. In order to protect the device please use the battery and charger provided.

SIM CARD: Please be sure that there is call display but no call transfer, and PIN code is off.
Switch on: Take the unit outdoors or place near a window. The device will be switched on after inserting the SIM card. To switch off: Take out the SIM card.
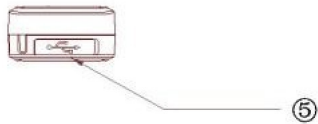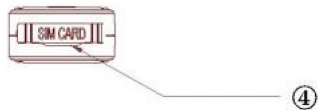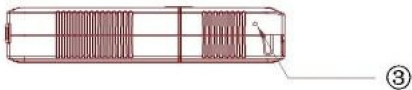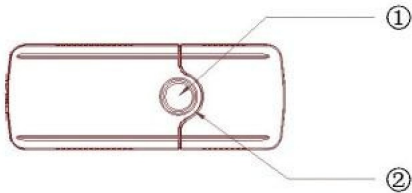
1. SOS Button
2. LED
3. Microphone
4. SIM card Slot
5. USB Connector

Yellow LED	Flash every 0.1 seconds	Start up sequence
Blue LED	constant light	
Yellow LED(GSM)	Blink like	Working in GSM mode
Yellow LED (GSM)	Blink like	Connecting GPRS now
Yellow LED (GSM)	Blink like	Connected to GPRS
Yellow LED (GSM)	Flash every 0.1 seconds	SOS Button Pressed
Blue LED (GPS)	Flash every 0.1 seconds	
Blue LED (GPS)	Blink like	Got GPS signal
Red LED (power)	constant light	Charging

Set the authorized number.

Send SMS"**123456A1,phone number**" to set the first SOS number. At least 1 authorized number must be set as an SOS number
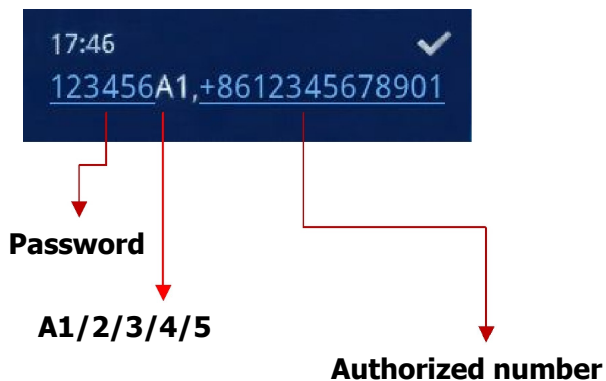
Command SMS

Reply SMS

Send SMS "123456A1,phone number" to set the first SOS number.
This number will also receive low battery warning SMS
Send SMS "123456A2,phone number" to set the second SOS number.
Send SMS "123456A3,phone number" to set the third SOS number.
Send SMS "123456A4,phone number" to set the fourth authorized number.
Send SMS "123456A5,phone number" to set the fifth authorized number.

All numbers will receive the location message when requested

Note: 123456 is the default password. 'A' must be in upper case and make sure there is no space in the command. Phone number must include the country code

E.g. send SMS "123456A1,+4413812345678" to set +4413812345678 as the first SOS number.
  +44 is the country code of UK. Please do not use 00 instead of +.

All of the five authorized numbers do not have be set, but you must set at least one authorized number. The device will only accept SMS commands from the authorized numbers.

Delete authorized number.

Send SMS"123456A1,D" to delete the first SOS number.
Send SMS"123456A2,D" to delete the second SOS number.
Send SMS"123456A3,D" to delete the third SOS number.
Send SMS"123456A4,D" to delete the fourth authorized number.
Send SMS"123456A5,D" to delete the fifth authorized number.

E.g. send "123456A1,D" to delete the first SOS number.

Modify the password

Send SMS "123456H******" to change the password.
Note: ****** is the New password. H must be upper case, send it to tracker to modify the password. (Default password: 123456)
E.g. send "123456H456789" means change the password 123456 to 456789
The password won't be erased by changing SIM card.
Be sure to keep the password safe, otherwise it will have to be returned for resetting.
The password must be 6 numbers, If not the tracker cannot recognize the password.

Get position

Send SMS "123456F" to the device and it will reply its position by SMS. Only the authorized number can get the reply. Note: F must be in uppercase.
E.g. send "123456F" to the unit. It will reply its position.

Command SMS

00:51
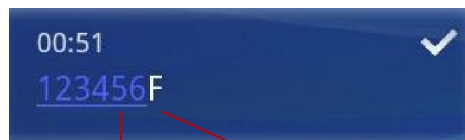
123456F

Password

Command

Reply SMS

00:53
http://maps.google.com/maps?
f=q&hl=en&q=22.7640266,114.3975883&ie=U
TF8&z=16&iwloc=addr&om=1speed:
000.0,&imei=012207006112897

Continuous tracking function

Send SMS "123456M0/M1,xxxS/M/H" to the unit, the tracker will send the location message according to the time interval. Note: M must be upper case
M0 means turn off, M1 means turn on
xxx means time interval and must be three numbers,030S means 30S.
S means second, M means minute, H means hour
H should be≤90, S,M should be <255
E.g. send"123456M1,030S" to the tracker means every 30 seconds send back a position coordinate to the A1 number. Send"123456M0,030S" to the tracker means stop the continuous tracking.

This function is also used to set the update time to the mapping platform if used. In this case it will report via GPRS to the platform and not to the mobile numbers.

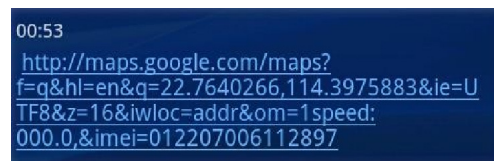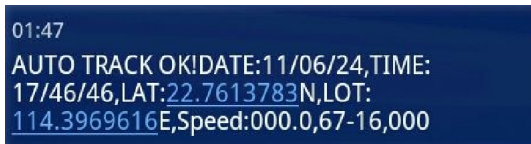|	
01:47 123456**M1,003M**	Command SMS
01:47 AUTO TRACK OK!DATE:11/06/24,TIME: 17/46/46,LAT:22.7613783N,LOT: 114.3969616E,Speed:000.0,67-16,000	Reply SMS
01:54 AUTO-DATE:11/06/24,TIME:17/53/18,LAT: 22.7611383N,LOT:114.3967816E,Speed: 000.0,67-16,000 01:57 AUTO-DATE:11/06/24,TIME:17/56/25,LAT: 22.7615833N,LOT:114.3968800E,Speed: 000.0,67-16,000	Tracking data

SOS function

Press and hold the SOS button for approx 3 seconds and it will send SOS Alert to A1, A2, A3 authorized numbers. In addition the device will call authorized numbers in turn, open up the microphone, allowing the authorized number to listen in to the sound around the tracker.

SOS function can also be set up via the GPRS web platform enabling alerts to be sent via email.

Listen in function

The numbers that can listen in need to be programmed into the PawTrax by sending the following sms. Up to 3 numbers can be programmed

123456A6,phonenumber
123456A7,phonenumber
123456A8,phonenumber

The number needs to be in the format +4401234567899.

If an authorized number calls the tracker and waits for the tracker to pick up the call, the caller will be able to hear the sounds around the tracker. This may not work well in the PawTrax application if it is inside the pouch

Please make sure that voicemail is deactivated on the sim

Speeding alert

Send SMS "123456J0/J1,speed" to set the Speeding alert
function. Note: J must be uppercase
J0 means turn off the over speed alert function; J1 means turn on the speeding alert function. Speed should be
<250 and must 3 numbers, e.g. 080= 80 km/h.
For example, send "123456J1,080" to tracker. When the object exceeds 80 km/h, the unit will send SMS as "Over
speed! +GPS info" to the A1,A2,A3 number. Send "123456J0,080" to tracker means turn off the speeding alert
function.

Command SMS

Reply SMS

Speeding alert function can also be set up via the GPRS web platform enabling alerts to be sent via email.

GEO-FENCE

Send SMS "123456Ixyz,aabbccddefffgghhiijkkllmmnneppp qqrrssj" to set up the geo-fence for the device to restrict
its movement within an area. The device will send the message to the A1, A2, A3 numbers as "Stockade +geo info"
when it breaches the district.
There are 5 GEO-FENCES can be set for the tracker.

Note: It must be English in capital.
x=NO. of the GENFENCE(1-5)
y=1 means turn on, y=0 means turn off
z=0 means go into, z=1 means go out
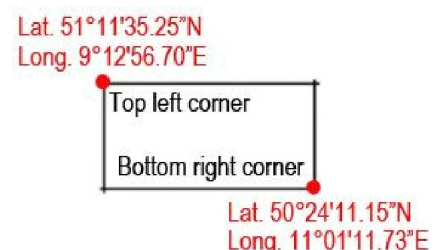e=N means north latitude, e=S means south latitude
j=E means east longitude, j=W means west longitude
aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means
3. fff,ppp must be 3 numbers.011 means 11.

E.g. The first Lat.51º11'35.25"N, Long.9º12'56.70"E
The second Lat.50º24'11.15"N, Long.:11º01'11.73"E

So the SMS command should be
"123456I1,1,1,51113525N009125670E50241115N011011173E"

123456I1,1,1,+first Latitude Longitude+ second Latitude Longitude

17:07 ✓ 123456I1,1,0,22455549N114234686E224547 40N114235499E	Command SMS
17:07 SET GEO OK!DATE:11/06/27,TIME: 09/03/33,LAT:22.7646216N,LOT: 114.3976250E,Speed:000.0,0-0-1-1-54-27,000	Reply SMS
17:14 Stockade!1-IN!DATE:11/06/27,TIME: 09/13/38,LAT:22.7646216N,LOT: 114.3976250E,Speed:000.0,0-0-1-1-54-25,000	Gen-fence Alarm

To obtain the co-ordinates for your specific area visit
www.Googlemaps.com , right click on the desired point,
select "What's Here". The co-ordinates will be displayed in
the search box.

Geo Fences and Geo-Zones can more easily be configured
and set up using the GPRS web based platform

Low battery alert

Send SMS "123456(N0/N1),xx" to set the low-battery alert.
Note: N must be inuppercase N0 means turn off the low-battery alert function; N1 means turn on the low-battery alert function. xx should be <45 and must be 2 numbers.
E.g. send"123456N1,30" to the tracker means when the battery is lower than 30%,it will send a alert to the authorized number. Send"123456N0,30" to the tracker means turn off the low battery alert function.

00:57 ✓ 123456N1,25	Command SMS
00:57 OPEN LOW BAT OK!Before!DATE: 09/01/01,TIME:00/00/01,LAT: 22.7640266N,LOT:114.3975883E,Speed: 000.0,18-16,000,46000-2634-FF98	Reply SMS
04:33 BAT:Low!23!Before!DATE:11/06/24,TIME: 00/30/38,LAT:22.7614083N,LOT: 114.3966300E,Speed: 000.0,23-17,000,46000-2634-FF7B	Low battery Alarm

Low battery alert will be sent to the A1 authorized number

This function will also soon be available via the GPRS mapping platform

Set the local time

Send SMS "123456L+time zone" to set the local time
Note: L must be in upper case, "+" in the time zone means EAST, "-" in the time zone means WEST. Time zone must be 2 numbers. So BST time zone should be like this: +01, Los Angeles' time zone should be: -08
E.g. Send "123456L+01" to set the time to BST

Check tracker's parameters

Send command 123456G to check the parameters

The return SMS is as follow:
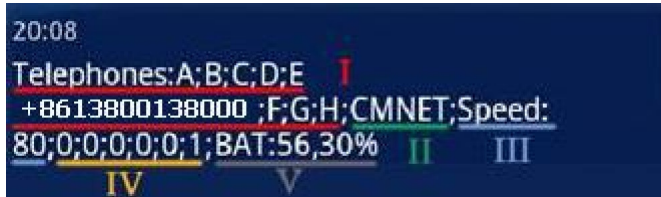
I Telophones:A; B; C; D; E (the phone number of A1; A2; A3; A4; A5) **II** CMNET is China mobile's APN
III Speed: 80 is over speed value
IV0;0;0;0;0;0;1 :Over speed alarm; auto-track*; auto-arm*; Move alarm*; Rrm*; Low battery alarm(0 is OFF, 1 is ON) **V** BAT: 56, 30%: 56 is the power value, 30% is low power alarm value

* Not used

GPRS setting

In order to use GPRS function, the PawTrax needs to be configured with the IP, Port and APN (access point name). Make sure that your SIM card supports the GPRS function. These settings may already be set up for you depending on the package ordered.

Send SMS "123456C$$$$,IP:Port" to set the APN, IP and port.
Note: C must be upper case. Please get APN from your local GSM operator and pay attention to the lower case or upper case of those letters.
E.g. send SMS "123456CGiffGaff.com,94.229.67.20:12002" GiffGaff.com is the APN of GiffGaff - IP and Port numbers are those of our tracking platform server.

Send SMS "123456O&&&&, @@@@" to set the username and password for GPRS, skip this step if there isn't username and password
Note:&&&& is the username and @@@@ is the password. O must be in uppercase. This setting depends on the providers. If the provider doesn't need username and password for the GPRS, you do not need to send this command.
E.g. send SMS "123456Ogiffgaff, username".

Send SMS "123456D" to turn on GPRS
Send SMS "123456E" to turn off GPRS
Note: D and E must be uppercase
To set up the update interval time
see Continuous Tracking function
earlier in the userguide

Displaying location on Google map

Go to http://maps.google.com and type in the latitude and longitude like this:
loc:22.7645801N,114.1975566E Click search button, then you can see the position.

Download Google earth software from http://earth.google.com/ and install it in to your computer.
Start the Google Earth software and type the latitude and longitude into the software like this:
loc:22.5640801N,113. 3375516E. Click search. Then you can see the position.

Displaying location on your mobile phone

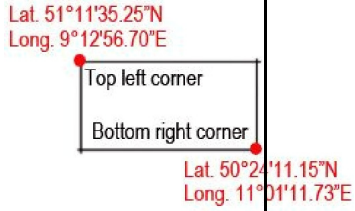The location sms sent will include a URL like this:

http://maps.google.com/maps?f=q&hl=en&q=loc:22.549039,
114.086004&ie=UTF8&z=16&iwloc=addr&om=1speed:000.0,&imei=012207006112897

Click the URL then you can see the location

All of the SMS commands list

name	Sentence content	Description
Set authorized numbers	123456A1,phone number 123456A2,phone number 123456A3,phone number 123456A4,phone number 123456A5,phone number	A1,A2,A3,A4,A5 is mobile phone numbers. Phone number must include the country code like +4413812345678. +44 is the country code of UK. Please do not use '00' instead of '+'
Sample of setting authorized numbers	123456A1,+8613812345678	Set +4413812345678 as the first SOS number (A1).
Delete authorized numbers	123456A1,D 123456A2,D 123456A3,D 123456A4,D 123456A5,D	
Get position by SMS	123456F	It will reply the latitude and longitude to the mobile phone, then you can go to the Google to search the Position or click the Google map link URL
Set continuous tracking	123456Mx,yyyz	x=1 means on, x=0 means off yyy means time interval. If z=S/M it should be <=255.if z=H, it should be<=090. It must be three numbers,030Smeans 30S Z means time unit，z=S means second, z=M means minute, z=H means hour
Sample of Setting continuous tracking	123456M1,030S	The tracker will reply the position according to the time interval you set (30 seconds).
Set the speeding alarm	123456Jx,yyy	x=1 means on, x=0 means off yyy means the alarm speed, it should be<250 and must three digital, e.g. 080=80km/h.
Sample of setting speeding alarm	123456J1,080	
Set GEO fence	123456Ix,y,z, aabbccddefffgghhiijkkllmmnnepppqqrrssj	x=NO. of the GEO-fence(1-5),5 GEO fence can be set y=1 means on, y=0 means off z=0 means go in, z=1 means go out e=N means the north latitude, e=S means the south latitude j=E means the east longitude, j=W means the west longitude aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means 3. fff,ppp must be 3 numbers.011 means 11

Example of setting GEO fence	123456I1,1,1,511135 25N009125670E 50241115N011011173E	The tracker will send an alarm if it is in/out the Area you set.
	Lat. 51°11'35.25"N Long. 9°12'56.70"E — Top left corner / Bottom right corner — Lat. 50°24'11.15"N Long. 11°01'11.73"E	
Set the time zone	123456Lxyy	x=+ means east x=- means west yy means the time zone, must be 2 numbers
Sample of setting the time zone	123456L+08	Set the +08 time zone
Set the low battery alarm	123456Nx,yy	x=1 means on, x=0 means off yy means battery lower then yy% then send the alarm. It must be<45 and 2 digits.
Sample of setting the low battery alarm	123456N1,40	The tracker will send a low battery alarm if the battery is lower then 40%
Modify the password	123456H456789	456789 is the new password, new password must be 6 numbers
Set the APN,IP and port	123456C$$$$,IP:Port	$$$$ is the APN, you can get the APN from your local GSM provider.
Sample of setting the APN	123456CCMNET, 119.122.101.91:7289	GiffGaff.com is the APN of GiffGaff mobile.
Set the username and password for APN	123456O&&&&, @@@@	&&&& is the username and @@@@ is the password. If the SIM card doesn't need username and password for the APN, you do not need to set it.
Sample of setting the username and password for APN	123456Ogiffgaff,password	The user name is giffgaff and the password is password.
Open GPRS	123456D	The tracker will report to platform by GPRS. It will send back an SMS to confirm after it has connected the server successfully.
Close GPRS	123456E	The tracker will close the connection with the server.
Check the setting	123456G	Check all parameters set in tracker
Factory reset	RESET!	Device reboot itself without any message reply