PT-X5.2 User Manual

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1. Introduction

Congratulations on your purchase of the PT-X5.2 asset tracking device! The PT-X5.2 is designed to be as easy to set up as it is to use. Hence, you can spend less time installation, and more time on the features you enjoy. There are no buttons, no controls and no inconvenience. Just charge the PT-X5.2 using the USB-to-Mini USB cable. The PT-X5.2 will send tracking data every 6 meters if the speed is less than 16km/h. If the speed is faster than 16km/h, then tracking data will be sent out every 10 seconds. This document is intended to guide you through the installation and firmware upgrade process.

2. Package Contents

When you open the package, please verify that you received the following items:

PT-X5.2 *1



3. Hardware

3.1. LED Indications

The following table describes LED states:

Power Mode	CALL	ON	GPS	BAT
	Yellow	Yellow	Yellow	Red
Hibernate	OFF	OFF	OFF	Low Battery, less than 20% Slow Blink 250mS/10Sec Low Battery, less than 5% OFF
Active / Battery	Blink when registering 500mS/1 Sec Blink for missed call 250mS/2 Sec Solid during call (incoming or initiated)	Slow blink 500mS/10Sec	Blink when locked 500mS/2 Sec	Low Battery, less than 20% Slow Blink 250mS/10Sec Low Battery, less than 5% OFF
Active / Aux	Same as above for Active / Battery	ON solid	Same as above for Active / Battery	Fast Blink, during charge 500mS/2 Sec OFF when charged

4. Firmware Upgrade

In this section, we are going to demonstrate how to do firmware upgrade on the PT-X5.2 over a USB connection. Before doing the upgrade, connect the USB cable between the Mini-USB port of the device and the USB port on your computer.

(1) Run HyperTerminal. Type a name for a new connection and click on the **[OK]** button.

New Connection - HyperTerminal	
File Edit View Call Transfer He	p
다 🗃 🕾 🗅 🌋 🍘 著	
	Connection Description New Connection Enter a name and choose an icon for the connection: Name: AT5 Icon: ICON: OK
Disconnected Auto detect	Auto detect SCROLL CAPS NUM Capture Print echo

ATS - HyperTerminal	
hie bdit View Call Transfer Help ጉራድ @ % ። በጉዳት ቀዋ	
Connect To AT5 Erter details for the phone number that you want to dial: Country/region: New Zealand (64) Area code: 343 Phone number: Connect using: COM14 TCP/IP (Winsock) Cancel	

(2) Select the correct COM port from the drop-down list and click on the [OK] button.

(3) Port Settings should be as follows. Click on the [Apply] button and then click on the [OK] button to close the Properties Window.

AT5 - HyperTerminal	4.0.5	
File Edit View Call Transfer Help		
□☞ @ ፨ □ 뇹 ☞		
	COM14 Properties	
	Bits per second: 57600 • Bits per second:	57600
	Data bits: 8 Data Bits:	8
	Parity: None Parity:	None
	Stop bits: 1 Stop Bits:	1
	Flow control: None	None
	Restore Defaults OK Cancel Apply	
Disconnected Auto detect Aut	o detect SCROLL CAPS NUM Capture Print echo	

(4) Click on [File] and select [Properties]

AT5 - HyperTerminal	
File Edit View Call Transfer Help	
New Connection	
Open	1
Save	
Save As	
Page Setup	
Print	
Properties	
Exit Alt+F4	

Click on [Settings] and click on the [ASCII Setup...] button.

File Edit View Call Transfer Help
ATS Properties

(7) Check the following options and type 500 for the Line delay. Click on the **[OK]** button to close the ASCII Setup window.

AT5 - HyperTerminal		
File Edit View Call Transfer Help		
D 🖨 💿 🕉 🗈 🎦 😭		
	AT5 Properties	
Connected 00:33:45 Auto detect Auto	detect SCRULL CAPS NUM Capture Prin	techo

Click on the **[OK]** button to close the Properties Window.

AT5 - HyperTerminal		
File Edit View Call Transfer Help		
다 🚔 👜 🔏 🗈 🎦 😭		
	ATS Properties	

(8) Power ON the device and the startup message will be displayed on the screen.

File Edit View Call Transfer Help				
<pre>\$\$Y\$M\$G: Bootloader V1.04RC \$\$Y\$M\$G: Startup AT5 Rev.5.00 \$\$Y\$M\$G: POR</pre>				

(9) Type the AT\$FWDL command and press the [Enter] key on your keyboard. Click on [Transfer] and select

[Send File...]

File Edit View	Call 1	Transfer Help	
🗅 🚔 🌚 🌋 🗉	D 7	Send File	
	_	Receive File	
		Capture Text	
SYSMSG: E	800	Send Text File	
\$SYSMSG: F		Capture to Printer	
HI\$FWDL \$OK CCC			

(10) Click on the [Browse] button to browse the firmware file where you saved and select Ymodem from the

Protocol drop-down list and click on the [Send] button.

(11) From the following snapshot, the firmware file is being uploaded.

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Packet:	144	Error checking:	CRC	File size:	246K
Retries:	0	Total retries:	0	Files:	1 of 1
.ast error:					
file:				143K of 2	46K
Bapsed:	00:00:33	Remaining:	00:00:23	Throughput:	4437 cps

5. Appendix

5.1. Product Specification

Hardware Specification			
Communication	GSM/GPRS/HSPA Dual-band (850/1900MHz)		
Positioning	GPS/GLONASS		
Antenna	Internal GPS and cellular antenna		
Motion Sensor	Vibration sensor		
Data Memory	2Mbytes for position data buffer		
Power	Battery powered with USB charge control		
Connector	Mini USB		
RTC	Built in RTC(Real Time Clock)		
LED Indicators	4 LEDs (Same as MiniMT indication)		
Operating Temperature	-40~+85 degree		

5.2. FCC Regulations

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.