#### 2005/10

# **SD-502 SDIO GPS** 接收器 使用手册

internal use only

此中文版本僅供對照參考之用

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## **1. SD-502** 概觀



# 2. 系統規格

Electrical Characteristics (Receiver)			
Chipset	SiRF Start III		
Frequency	L1, 1575.42 MHz		
C/A Code	1.023 MHz chip rate		
Channels	20 channel all-in-view tracking		
Accuracy			
Position Horizontal	10 meters, 2D RMS 1~5 meters, 2D RMS with WAAS corrected		
Velocity	0.1 m/sec		
Time	1 micro-second synchronized to GPS time		
Datum			
Datum	WGS-84 (default)		
Acquistion Rate			
Hot start	1 sec., average		
Warm start	38 sec., average		
Cold start	42 sec., average		
Reacquisition	isition 0.1 sec., average		
Protocol			
GPS Protocol	NMEA 0183 (default) SiRF binary (secondary)		
GPS Output format	GGA (1 sec), GSA (1 sec), GSV (5 sec), RMC (1 sec). GLL and VTG are optional.		
Dynamic Condition			
Acceleration Limit	Less than 4g		
Altitude Limit	18,000 meters (60,000 feet) max.		
Velocity Limit	Velocity Limit 515 meters/sec (1,000 knots) max.		
Jerk Limit	20 m/sec**3		
Temperature			
Operating	-10°C ~ +70°C		
Humidity	5 ~ 95% non-condensing		
Power			
Voltage	3.3 V		
Power Consumption	Power Consumption 110 mA		
Physical Characteristics			
Dimension	sion 95 mm x 30 mm x 13 mm		
Weight	approximately 30 grams		
Memory Size	512 MB		
SDIO Specification			
Compliant with SDIO Card Specification			
	on Ver. 1.00		

## 3. 介紹

SD-502 為一 SDIO 介面、具有內建記憶體、可提供大量資料儲存之 GPS 接收器。

內建 512 MB 記憶體能讓您輕易地規劃、儲存和分享檔案或文件。

SD-502 可用來追蹤訊號並依照地圖軟體使用大量地圖資料。

優雅流行的外觀設計可搭配任一種掌上型電腦。

輕巧的外型,方便您放在口袋裡隨處帶著走。

只需將它插入您的掌上型電腦就可以馬上使用來接收 GPS 訊號。

無方向性圓柱型天線可以接收四面八方 360 度訊號來源。

它可以滿足您各方面的應用,包括汽車導航,個人旅遊導航或追蹤,甚至航海導航。

我們的專業製造技術搭配最先進的 SiRF Start III 晶片組, SD-502 接收器能提供更高的靈敏度,更低的耗電率及更快速的衛星定位。

#### 3.1 功能

- SiRF Start III 高效率、低耗電晶片組。
- 內建高感度 GPS 天線。
- LED 燈號顯示 GPS 是否定位。
- 內建超大電容能維持快速接收的衛星系統資料。
- SDIO 介面。
- 操作平台: Pocket PC 2003, Win CE.Net, WM2003。
- Bsquare SDIO Now! 技術。
- 內建記憶體容量: 512 MB。

#### 3.2 包裝

開始使用之前,請確認包裝內有以下物品。 如有任何物品短少或損壞,請立即聯絡經銷商。

- SDIO GPS 接收器和蓋子。
- 光碟(包含使用手冊、驅動程式和測試程式)。

#### **3.3 LED** 功能

GPS 狀態 LED (綠色)

- 閃爍 GPS 定位完成
- 恆亮 GPS 未定位

### 3.4 相容裝置

- Dell Axim X3 Pocket PC
- Dell Axim X30 Pocket PC
- Dell Axim X50 Pocket PC
- Dell Axim X50V Pocket PC
- Dell Axim X51V Pocket PC
- HP iPAQ h1930 Pocket PC
- HP iPAQ h1940 Pocket PC
- HP iPAQ h1950 Pocket PC
- HP iPAQ h2210 Pocket PC
- HP iPAQ h2750 Pocket PC
- HP iPAQ h4150 Pocket PC
- HP iPAQ hx2410 Pocket PC
- HP iPAQ hx4700 Pocket PC
- HP iPAQ h6315 Pocket PC
- HP iPAQ rx3115 Pocket PC
- Eten M500
- Fujitsu Loox 720
- Asus MyPal 730
- T-Mobile MDA compact

以上所列裝置已經過測試可與 SD-502 相容。

## 4. 安裝驅動程式

在將 SD-502 GPS 接收器使用於掌上型電腦之前,您必須先安裝驅動程式。

此驅動程式可經由 ActiveSync 而安裝到您的掌上型電腦內。

因此在安裝驅動程式之前,請先確認您的電腦已安裝好 ActiveSync,並且將掌上型電腦連接至您的個人電腦上。

(1). 將光碟放入光碟機內。AutoRun 程式會自行啓動安裝程式。按下「Install Driver for WinCE」按 鈕開始安裝驅動程式。(您也可以手動安裝,請在光碟根目錄下的「GlobalSatSDGPS.exe」上點兩 下即可。)



(2). 按下 Welcome 對話框的「Next」按鈕以及 End User License Agreement 對話框的「Yes」 按鈕。

Welcome X	End User License Agreement
Thank you for choosing to install this software for your Windows CE device. Before you begin, please look through the following README. Press the PAGE DOWN key to view the remaining portion.	Please read the following license agreement. Press the PAGE DDW/N key to see the rest of the agreement.
Gsat A	Gsat 🗡
	Do you accept all terms of the preceding End User License Agreement? If you choose No, Setup
If you wish to exit Setup without installing this software, choose Exit. If you wish to continue installing this software, choose Next.	Will close. To continue with setup you must accept this agreement by choosing ties.  No Yes
Exit Next >>	

(3). 接下來的兩個對話框,按下「Yes」及「OK」。現在驅動程式已經安裝至您的 PDA 裡。



(4). 按下「Exit」離開 AutoRun 安裝程式。



(5). 如果您要檢查驅動程式是否正確地安裝完成,請執行下列步驟。在您的 PDA 上,點選 Start / Settings,點選 System 標籤,然後點選 Remove Programs 圖示。您可以在清單上看到「LEADCHAIN GPSDisk」驅動程式。



(6). 如果您要檢視驅動程式的版本資訊,請開啓檔案總管,然後到「我的裝置」,「Windows」資料夾下,再打開一個檔名為「GPSDiskVersion.TXT」的檔案,即可獲知驅動程式的版本。

## 5. 測試 SD-502 GPS 接收器

您可以利用測試程式測試 GPS 接收器是否正常運作。此測試程式僅支援 Microsoft Windows CE 和 Pocket PC 之 PDA 平台。

Note: 關於 GPSinfo 測試程式之詳細介紹,請參考 GPSinfo 使用手冊,您可以在光碟的 根目錄上找到 GPSinfo\_User\_Manual\_Eng.pdf。

要安裝測試程式,請執行下列步驟:

(1). 將光碟放入光碟機內。AutoRun 程式會自行啓動安裝程式。按下「Install GPSinfo」按鈕開始安裝測試程式。(您也可以手動安裝,請在光碟根目錄下的「GPSinfo.exe」上點兩下即可。)



(2). 按下「Next」按鈕繼續。



(3). 接下來的兩個對話框,按下「Yes」及「OK」。現在 GPSinfo 程式已經安裝至您的 PDA 裡。

Select a program's check box if you want to install it on your mobile device, or clear the check box if you want to remove the program from your device. Note: If a program that you installed is not listed, the program was not designed to be used on your mobile device.	Select a program's check box if you want to install it on your mobile device, or clear the check box if you want to remove the program from your device. Note: If a program that you installed is not listed, the program was not designed to be used on your mobile device.
alling Applications Application GPS Info" using the default application install directory?	Please check your mobile device screen to see if additional steps are necessary to complete this insta
	<u> </u>
Space required for selected programs:	Space required for selected programs:
Space required for selected programs: Space available on device:	Space required for selected programs: Space available on device:
Space required for selected programs: Space available on device:	Space required for selected programs: Space available on device:
Space required for selected programs: Space available on device: Image: Install program into the default installation folder Remove from both locations	Space required for selected programs: Space available on device:
Space required for selected programs: Space available on device: ✓ Install program into the default installation folder Remove from both locations To remove the selected program from both your device and this computer, click Remove. <u>Bemove.</u>	Space required for selected programs:         Space available on device:         ✓ Install program into the default installation folder         Remove from both locations         To remove the selected program from both your device and this computer, click Remove.

(4). 按下「Finish」結束安裝並按下「Exit」離開 AutoRun 安裝程式。



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(5). 如果您要檢查測試程式是否正確地安裝完成,請執行下列步驟。在您的 PDA 上,點選 Start / Settings,點選 System 標籤,然後點選 Remove Programs 圖示。您可以在清單上看到「GPS Information GPS Info」驅動程式。

Start	at 📢 6:54	🎊 Settings		📰 剩 6:55 😵	🎢 Settings 🛛 🗱 📢 8:19 🐽
🌯 Today	er 01, 2005	Clock &	Momory	Microphono	Remove Programs
ActiveSync	· information	Alarms	Premory	Plictophone	Programs in storage memory:
Contacts			6		GPS Information GPS Info
A Home		Mirror	Power	Regional	LEADCHAIN GPSDisk
Internet Explorer	ments			Settings	
Messaging					
Recent Programs	-	Remove	Screen	Switcher Bar	
Settings		Programs			
? Help					Remove
		System Information	_	•	Total storage memory available: 29128k
	The Market	Personal System	Connectio	ons	Adjust memory allocation.
New	60 ( <b>)</b> 🐺			- I	

#### **FCC Notices**

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 .

FCC RF Exposure requirements:

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.