



BLE Dongle

使用說明書

◎ 英展實業股份有限公司版權所有



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一、產品規格

- Bluetooth Specification V4.0 (BLE)
- ▶ 支援 USB 2.0 VCP 模式
- ➢ 發送功率: -6~4 dbm (-6dbm 時訊號功率最強,但耗電較大)
- ▶ 電源系統: DC 5V
- ▶ 外觀尺寸: 70 * 26 * 12 mm
- BaudRate: 1200 ~ 921.6Kbps (N.8.1) (Auto BaudRate)
- ➢ Dongle 可透過通訊軟體使用指令設置(第四節)或使用 FernLand BLE Tool 設置(第五節)

二、一般模式 (BaudRate 2400~921.6K)

當所有設定值皆設定完成後裝置將會針對您的設定直接進行連線動作,當裝置連線完成綠色 LED 燈將會顯示通知連線以完成,即可進行資料傳遞與溝通。

燈號說明:

未連線或待機狀態: 綠色 LED 燈閃爍(需視上述設定值)。 連線完成或已連線狀態: 綠色 LED 燈恆亮。 連線錯誤或其它錯誤: 紅色 LED 燈恆亮。

三、命令模式 (BaudRate 1200)

1. 查詢/設定

※設定回覆説明: OK(寫入成功)

※命令下達都以 ASCII 發送

西日		查询	設定		254 日日
坝口	命令	回覆	命令	回覆	しん うくう
裝置(Dongle)	VD	FernLand	vn<名稱>	OK	名稱最大長度
名稱	VII	(Default)	Ex: vnFernLand	Set Err	為 20 個 Bytes
Sanviaa LILUD			su <service uuid=""></service>	OK	Service UUID
Service UUID	Su	FFFU (Delault)	Ex: suFFF0	Set Err	為 4 個 Bytes ^{<備註一>}
Characteristics	ah		ch <characteristics uuid=""></characteristics>	OK	Characteristics UUID
UUID	CII	FFFI (Delault)	Ex: chFFF1	Set Err	為 4 個 Bytes ^{<備註一>}
劫行措士名名	5	0 (Default)	ro <模式>	OK	主(Central):0
轨行模式角色	10	0 (Delault)	Ex: ro0	Set Err	從(Peripheral) : 1
西米茨西	5		ps<密碼>	OK	配對密碼長度為6個
111 名 16	μs	000000 (Delault)	Ex: ps000000	Set Err	(000000 ~ 999999)
和料茨准的动	20	0 (Default)	pe<密碼啟動>	OK	啟動密碼功能:1
癿封峾岣啟虭	he	0 (Delault)	Ex: pe0	Set Err	停止密碼功能:0

Set Err(寫入失敗)



щ	查询		設定		םם אל
坝日	命令	回覆	命令	回覆	176 47
配對狀態	рі	0 (Default)	pi<狀態> Ex: pi0	OK Set Err	執行配對:1 不執行配對:0 ※請注意若進行與 Random address 裝置進行 連線請開啟配對功能
天線發送功率	pm	1 (Default)	pm<功率> Ex: pm1	OK Set Err	天線發送功率: 0:-6dbm,1:0dbm,2:4dbm
寫入回覆狀態	rp	0 (Default)	rp<狀態> Ex: rp1	OK Set Err	0: 寫入不回覆1: 寫入回覆
連線裝置 (BLE Address)	са	00:00:00:00:00:00 (Default)	ca<藍牙地址> Ex: ca00:00:00:00:00:00	OK Set Err	此功能僅開放於 主(central)模式
LED 燈號 顯示模式	le	0 (Default)	le <led 顯示=""> Ex: le0</led>	OK Set Err	待機時綠燈閃爍:0 待機時綠燈不閃爍:1

2.其他

※設定回覆說明: OK(寫入成功) Set Err(寫入失敗)

- TE 12	設定当時		<u>ي</u> بر ال	
坝日	命令	回覆	レビック	
法队和料咨判		OK		
<i>间际</i>	pc	Set Err		
擷取連線裝置	66	訊號強	此功能借明故故 t (contral) 描述	
RSSI 強度	55	度數值	此功能准用及於王(Central)侯氏	
回费历成机学	ro	OK	业会会收重机研究结构 Dofault	
凹復尔敞改火	rn	Set Err	此师令府里政所有 政 定 值 為 Delaun	
裝置(Dongle)重	rs	OK	若指令無作用,可能是因為作業軟體的差異	
新啟動設定		Set Err	導致佔阜,請拔出 Dongle 再重新插入。	
讀取裝置				
(Dongle)	sv	V1.1		
軟體版本				
讀取裝置(Dong		藍芽位址		
le)	bt	(XX:XX:XX:		
藍芽地址		XX:XX:XX)		
掃描週邊藍	de	週邊藍芽裝置		
芽(BLE)裝置	us	位址與名稱	此为肥准用双於土(UEIIIIaI)供式	

※當設定值錯誤時紅燈會顯示告知您的設定值有誤



<備註一>參考下表機種設置

機種	Service UUID	Characteristics UUID	說明
	E611	E812	BLE 命令通訊口
ExBLE-P		E813	UART 通訊口
		E814	BLE模組名稱設置口
		E812	BLE 命令通訊口
ExBLE-R	E711	E813	UART 通訊口
		E814	BLE模組名稱設置口
		E812	BLE 命令通訊口
ExBLE-C	E811	E813	UART 通訊口
		E814	BLE模組名稱設置口
		E812	BLE 命令通訊口
ExBLE-D	E911	E813	UART 通訊口
		E814	BLE模組名稱設置口

四、使用指令設置說明

- 1. 進入 Dongle 設定模式→ ComPort set BaudRate 1200,n,8,1
- 2. su<Service UUID> set E711 (參考備註一) → ex: suE711
- 3. ch<Characteristics UUID> set E813 (參考備註一) → ex: chE813
- 4. ds →搜尋附近所有設備 Name 與 MAC
- 5. ca<MAC>→填上所搜尋到的設備 MAC
- 6. ComPort set BaudRate 9600,n,8,1
- 7. 將可以收到秤台重量資料。

五、使用 FernLand BLE Tool 設置說明

1. FernLand BLE Tool 系統需求

- 電腦和處理器:1GHz 或更快速的 x86 或 x64 位元處理器
- 記憶體:2GB 的記憶體 (建議使用 4GB)
- 顯示器:1024*768 螢幕解析度
- 作業系統:Windows XP(SP3)、Win7、Win8、Win10。英文或繁體中文版
- USB 介面



2. 安裝 FernLand BLE Tool

執行 FernLandBLETool_Setup_1_0_0_0.exe

6	FernLand	d BLE Tool - InstallShield Wizard	×
	_	Welcome to the InstallShield Wizard for FernLand BLE Tool	
	EXCELL	The InstallShield(R) Wizard will install FernLand BLE Tool on your computer. To continue, dick Next.	
		WARNING: This program is protected by copyright law and international treaties.	
		< Back Next > Cancel	

按 Next

FernLand BLE Tool - InstallShield Wizard	×		
License Agreement Please read the following license agreement carefully. EXC	ELL"		
FERNLAND BLE Tool License Agreement	^		
Copyright (C) 2015-2016 EXCELL PRECISION CO., LTD.			
IMPORTANT: YOU SHOULD CAREFULLY READ THIS LEGAL AGREEMENT BEFORE INSTALLING THIS PACKAGE.	ſ		
BY INSTALLING YOU ACCEPT ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT AND	~		
I accept the terms in the license agreement			
\bigcirc I <u>d</u> o not accept the terms in the license agreement			
InstallShield			
< <u>B</u> ack Next > Cancel			

點選 I accept the

按 Next



Customer Information Please enter your information.	EXCELL
<u>U</u> ser Name: User Name Organization:	
Company Name	
InstallShield	

輸入 User Name 和 Organization

;	FernLand BLE Tool - InstallShield Wizard
Destinati Click Nex	on Folder t to install to this folder, or click Change to install to a different folder.
	Install FernLand BLE Tool to: C:\Program Files (x86)\EXCELL\My Product Name\ Change
InstallShield -	< <u>B</u> ack <u>Next</u> > Cancel

按 Next



FernLand BLE T	Tool - InstallShield Wizard				
Ready to Install the Program The wizard is ready to begin installation					
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard. Current Settings:					
Setup Type:					
Typical					
Destination Folder:					
C:\Program Files (x86)\EXCELL\My	C:\Program Files (x86)\EXCELL\My Product Name\				
User Information:	User Information:				
Name: o					
Company: o					
l InstallShield	< Back 🖗 Install Cancel				

按 Install

1	FernLand BLE Tool - InstallShield Wizard 🛛 – 🗖 💌			
Installing The prog	FernLand BLE Tool Image: Constant of the second s			
Please wait while the InstallShield Wizard installs FernLand BLE Tool. This may take several minutes.				
	Status:			
	Writing system registry values			
InstallShield –	< <u>B</u> ack <u>N</u> ext > Cancel			

等待安裝進度



ø	FernLand BLE Tool - InstallShield Wizard		
		InstallShield Wizard Completed	
	EXCELL	The InstallShield Wizard has successfully installed FernLand BLE Tool. Click Finish to exit the wizard.	
		< <u>B</u> ack <u>Finish</u> Cancel	

按 Finish 完成安裝

3. FernLand BLE Tool 主畫面說明

🛛 🖉 [FTM000] FernLand BLE Tool 🛛 – 🗖 🗙
System(S) Exit(X) 1
Search Get Ver.
3
4
Characteristics UUID
OBT Command OUART ONAME
Connect Clear Console
5 11
×
BLE COM5 None
6 7 8



說明:

- (1) 功能選單
- (2) 按 Search 搜尋磅秤。找到的磅秤會顯示在(4)。搜尋前會先將 Dongle 斷開與磅秤的連線。
- (3) 按 Get Ver.查詢 Dongle 版本,顯示在(8)。查詢前會先將 Dongle 斷開與磅秤的連線。
- (4) 按 Search 搜尋磅秤,找到的磅秤會顯示在這裡。
- (5) 選定(4)裡面找到的磅秤後,按 Connect 會使 Dongle 與選定的磅秤建立連線。
- (6) 狀態列。顯示設定 Dongle 的 Com Port。
- (7) 狀態列。顯示 Dongle 設定連接磅秤的結果。連線成功會顯示磅秤的 MAC。否則 None。
- (8) 狀態列。顯示 Dongle 版本號。
- (9) Characteristics UUID
- (10) 控制台。任何執行設定時,發送的命令與接收的結果都會顯示在這裡。
- (11) 清除控制台的信息

4. 設定 Dongle 所在的 COM PORT

插入 Dongle

執行 FernLand BLE Tool

<mark>₿≪</mark> [FT	M000] FernLand BLE Tool 🛛 🚽 🔍
System(<u>S)</u> Exit(<u>X</u>)	
Search Get Ver	
Characteristics UUID	
○ BT Command	
Connect Clear Cons	ole
	^
	~ .
BLE COM5 None	

按 System → Preference



8 «	[FTS010] Preference	- 🗆 🗙
Serial Port Setting		
Com Port		
800		
Interface Language		
English	¥	
	Save	Exit

下拉 Com Port 選擇 Dongle 所在的 Com 編號,如果沒有顯示在下拉選單裡,直接輸入亦可。 BLE Timeout(ms)預設 800,即每傳送一次命令後等待指定毫秒後,再傳送下一個指令。

Interface Language 可以下拉選擇英文、繁中、簡中。

設定完畢後必須按 Save 才能生效。

最後按 Exit 離開。

5. 設定 Dongle 要連接的秤台

插入 Dongle

執行 FernLand BLE Tool

<mark>8</mark> «	[FTM00	00] FernLand BLE	Tool	 ×
System(<u>S</u>) Exit(<u>X</u>)				
Search	Get Ver.			
Characteristics UU O BT Command	ID			
Connect	Clear Console			
				^
				~
BLE COM5 None				.::

按 Search



8«	[FTM00	00] FernLand	BLE Tool	 ×
System(<u>S</u>) Exit(<u>X</u>)				_
Search	Get Ver.			
Characteristics UL	JID			
O BT Command	● UART			
Connect	Clear Console			
[Send] ca00:00:00:	00:00:00			^
[Recv] OK				
BLE COM5 None				

<mark>8 «</mark>	[FTM00	0] FernLand	BLE Tool	-	×
System(<u>S</u>) Exit(⊠)					
Search	Get Ver.				
GWBLE,E711,5C:3 FJ5,E811,78:A5:04	1:3E:47:64:FD I:60:FF:DE				
Characteristics UUI	D				
O BT Command	UART				
Connect	Clear Console				
[Send] ca00:00:00:0 [Recv] OK [Send] da [Recv] GWBLE,E711, FJ5,E811,78:A5:04:6	0:00:00 5C:31:3E:47:64:F ;0:FF:DE	=D			~
BLE COM5 None					×

找到磅秤後會顯示在視窗裡面。顯示內容為磅秤名稱,UUID,MAC

尋找中畫面上的按鈕變為不可使用。



🛚 « [FTM000] FernLand BLE Tool 🛛 – 🗖 🗙	
System(S) Exit(X)	
Search Get Ver.	
GWBLE,E711,5C:31:3E:47:64:FD FJ5,E811,78:A5:04:60:FF:DE	
Characteristics UUID BT Command UART Connect Clear Console	
[Send] ca00:00:00:00:00 [Recv] OK [Send] da [Recv] GWBLE,E711,5C:31:3E:47:64:FD FJ5,E811,78:A5:04:60:FF:DE	~
BLE COM5 None	

選定要連線的磅秤後,在 Characteristics UUID 區,按 Connect 進行連線設定。連線設定過 程中所有的按鍵變為不可使用。

<mark>8 «</mark>	[FTM000] FernLand BLE Tool 🛛 – 🗖 🗙
System(<u>S</u>) E	xit⊗
Search	Get Ver.
GWBLE,E711	1,5C:31:3E:47:64:FD
FJ5,E811,/8	:A5:04:60:FF:DE
Characterist	ics UUID
O BT Comm	nand O UART O NAME
Connect	Clear Console
[Recv] OK	^
[Send] da	E711 5C·31·3E·47·64·ED
FJ5,E811,78:A	5:04:60:FF:DE
[Send] suE71:	1
[Send] chE81	3
[Recv] OK	
[Send] ca5C::	31:3E:47:64:FD
[Recv] OK	· · · · · · · · · · · · · · · · · · ·
BLE COM5	5C:31:3E:47:64:FD

關閉 FernLand BLE Tool 即可開始使用,若是 Dongle 要裝在別台機器要確認 Com Port 是否正確。



	保證說明
(-)	本機件在優待服務有效期間(購買日期壹年內)正常情況使用下,
	如有故障時,享由本公司(或經銷商)免費服務。
(ニ)	如有下列情形之一者,雖在免費服務期間內,亦得酌收材料成本及
	修理費用, 敬請見諒。
	1. 使用失當而導致之故障或損壞。
	2. 自行改裝或拆修而導致之損壞。
	 未經本公司所授權之技術人員修護時產生之損壞。
	4. 因天災地變所導致之損壞。
	5. 使用環境不佳致蟲害、潮濕,所導致之損壞。
(三)	遇有下列情形之一者,得按價收費:
	1. 超過服務保證期間者。
	2. 到使用地點修理,得酌收交通費。