

VFD-USB01 USB/RS485 Communication Interface

Instruction Sheet

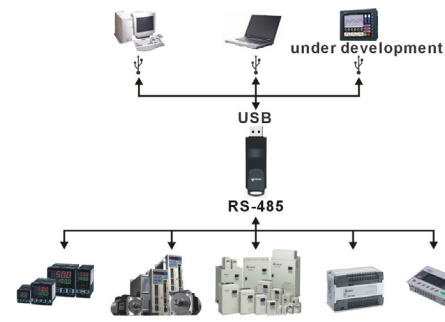
- Please thoroughly read this instruction sheet before installation and putting it into use.
- The content of this instruction sheet and the driver file may be revised without prior notice. Please consult our distributors or download the most updated instruction/driver version at http://www.delta.com.tw/product/em/control/cm/control_cm_main.asp

1 Preface

VFD-USB01 is a convenient RS485-to-USB converter, which does not require external power-supply and complex setting process. It supports baud rate from 75 to 115.2kbps and auto switching direction of data transmission. In addition, it adopts RJ-45 in RS-485 connector for users to wire conveniently. And its tiny dimension, handy use of plug-and-play and hot-swap provide more conveniences for connecting all DELTA IABU products to your PC.

2 Applicable Models: All DELTA IABU products


3 Application



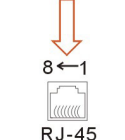
4 Specifications

Power Supply	No external power is needed
Power Consumption	0.4W
Isolated Voltage	3000Vdc
Baud Rate	Support 75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps
RS485 Connector	RJ-45
USB Connector	A type (plug)
Compatibility	Full Compliance with USB V2.0 specification
Max. Cable Length (between PC to VFD-USB01)	100m
Support RS-485 Half-Duplex Transmission	

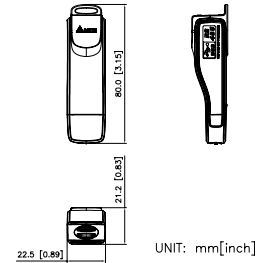
5 RJ-45



PIN	Description
1	Reserved
2	Reserved
3	Reserved
4	SG+
5	SG-
6	Reserved
7	Reserved
8	Reserved



6 Dimension



7 LED Display

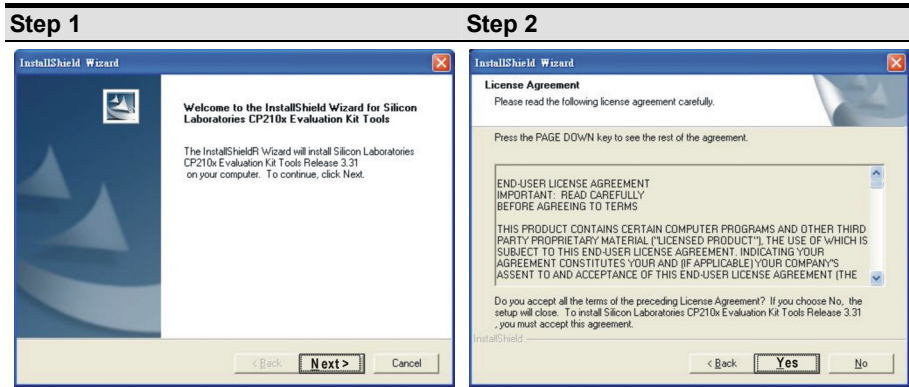
- Steady Green LED ON: power is ON.
- Blinking orange LED: data is transmitting.

8 Preparations before Driver Installation

Please extract the driver file (VFD-USB01_Drivers.exe) by following steps. You could find driver file (VFD-USB01_Drivers.exe) in the CD supplied with VFD-USB01.

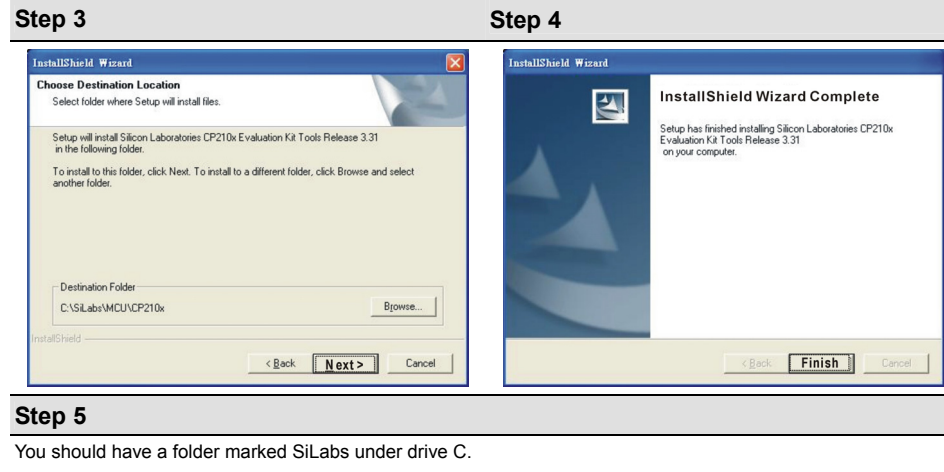
NOTE

Do NOT connect VFD-USB01 to PC before extracting the driver file.



Step 1 Welcome to the InstallShield Wizard for Silicon Laboratories CP210x Evaluation Kit Tools. The InstallShield Wizard will install Silicon Laboratories CP210x Evaluation Kit Tools Release 3.31 on your computer. To continue, click Next.

Step 2 License Agreement. Please read the following license agreement carefully. Press the PAGE DOWN key to see the rest of the agreement.

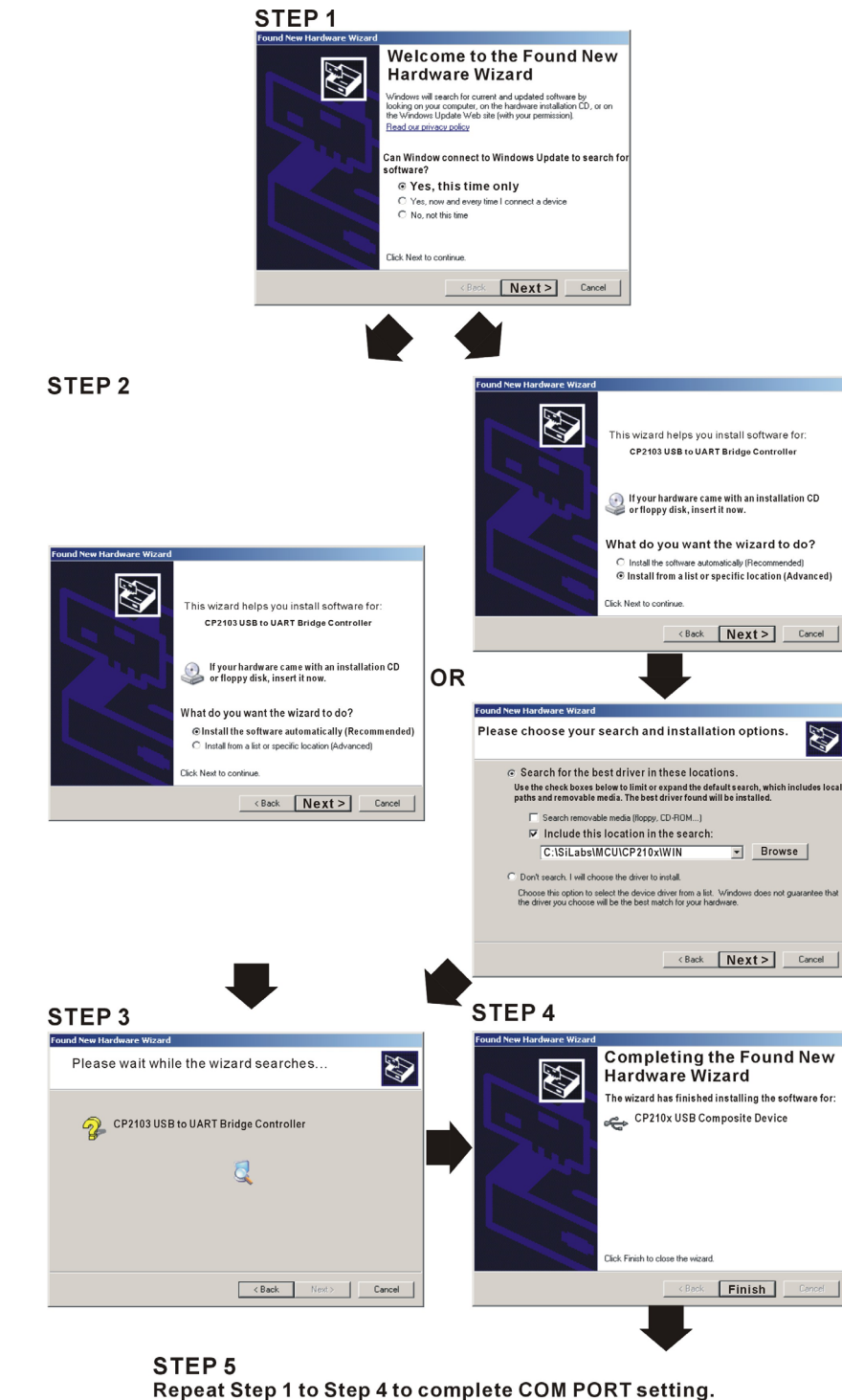


Step 3 Choose Destination Location. Select folder where Setup will install files. Setup will install Silicon Laboratories CP210x Evaluation Kit Tools Release 3.31 in the following folder. To install to this folder, click Next. To install to a different folder, click Browse and select another folder. Destination Folder: C:\SILabs\MCU\CP210x

Step 4 InstallShield Wizard Complete. Setup has finished installing Silicon Laboratories CP210x Evaluation Kit Tools Release 3.31 on your computer.

9 Driver Installation

After connecting VFD-USB01 to PC, please install driver by following steps.



STEP 1 Welcome to the Found New Hardware Wizard. Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission).

STEP 2 This wizard helps you install software for: CP2103 USB to UART Bridge Controller. What do you want the wizard to do? Install the software automatically (Recommended).

STEP 3 Please wait while the wizard searches... CP2103 USB to UART Bridge Controller.

STEP 4 Completing the Found New Hardware Wizard. The wizard has finished installing the software for: CP210x USB Composite Device.

STEP 5 Repeat Step 1 to Step 4 to complete COM PORT setting.

VFD-USB01 USB/RS485 通訊介面

說明書

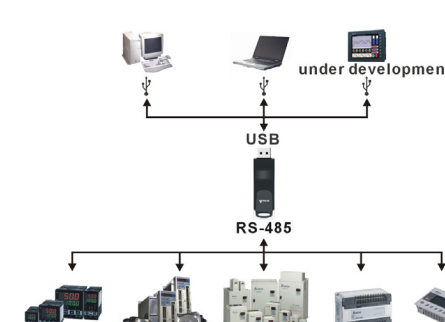
- 請詳細閱讀下列說明後才使用本產品，以確保使用安全。
- 由於產品精益求精，當內容規格或驅動程式有所修正時，請洽詢代理商或至台達網站 (http://www.delta.com.tw/product/em/control/cm/control_cm_main.asp) 下載最新版本。

1 引言

VFD-USB01 RS-485/USB 轉換裝置，不需外接電源，不需任何設定，即可支援不同的傳輸速率從 75 到 115.2kbps，並可自動切換資料流方向。通過 USB 接口有隨插即用和熱插拔的方便性，提供和 RS-485 裝置的溝通介面，體積小且方便使用，RS485 採用 RJ-45 網路線接口，使用者能更便利的接線。

2 適用機種：台達電子 IABU 全系列產品


3 應用



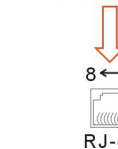
4 規格

電源需求	不需外接電源
消耗功率	0.4W
隔離電壓	3000Vdc
傳輸速度	支援 75, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps
RS-485 端子形式	RJ-45
USB 接頭	A type (plug)
相容性	符合 USB v2.0 規格
最大使用線長 (PC 至 VFD-USB01)	100 公尺
支援 RS-485 半雙工	

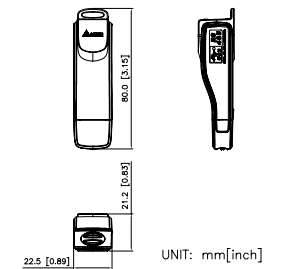
5 RJ-45



PIN	Description
1	Reserved
2	Reserved
3	Reserved
4	SG+
5	SG-
6	Reserved
7	Reserved
8	Reserved



6 尺寸



7 LED 顯示

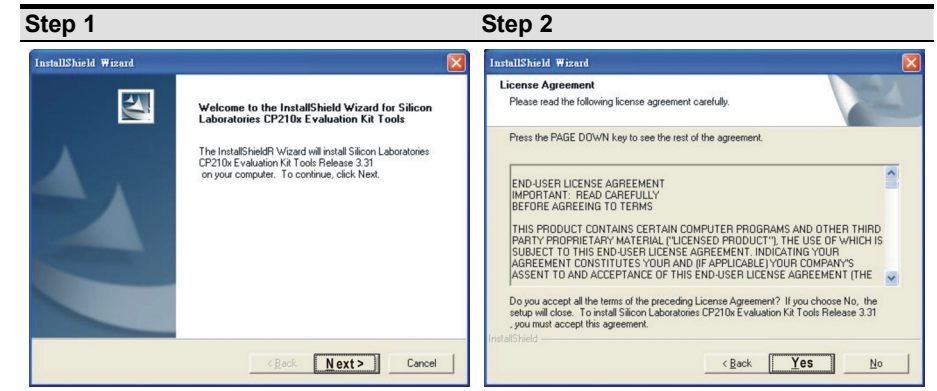
- 綠色 LED 亮起，表示有電源。
- 橘色 LED “閃爍”，表示資料傳輸。

8 安裝驅動程式前準備工作

請將隨機所附 CD 內的 USB driver 驅動程式檔 (VFD-USB01_Drivers.exe) 依下列步驟解壓縮。

NOTE

在解壓縮檔案前，請勿將 VFD-USB01 插入電腦。



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Step 2 License Agreement. Please read the following license agreement carefully. Press the PAGE DOWN key to see the rest of the agreement.



9 安裝驅動程式

請將 VFD-USB01 連接至電腦 USB 埠，完成後，請依以下步驟安裝



STEP 5 重複以上Step 1至Step 4以完成COM PORT設定。



VFD-USB01 USB/RS485 通訊介面

說明書

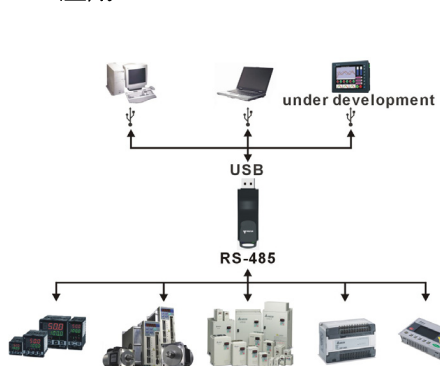
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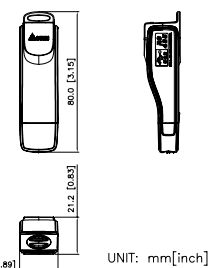
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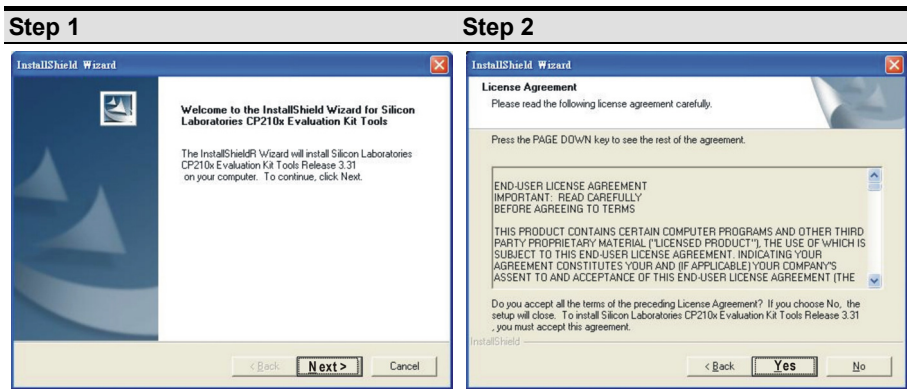
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請將隨機所附 CD 內的 USB driver 驅動程式檔 (VFD-USB01_Drivers.exe) 依下列步驟解壓縮。

NOTE 在解壓縮檔案前，請勿將 VFD-USB01 插入電腦。



9 安裝驅動程式

請將 VFD-USB01 連接至電腦 USB 埠，完成後，請依以下步驟安裝



STEP 4 重複以上Step 1至Step 3以完成COM PORT設定。