

BriterEncoder.com

Software User Manual For (RS485) Single-turn & Multi-turn Absolute Encoder

Version 1.0



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1 Software installation and connection configuration

1.1 Devices used

The operation of the system requires the following software and hardware:

A Computer	Support System: Windows 2000/XP/7 /10	
A Data Cable	RS485 to USB communication line (this manual uses the ZTEK USB to RS422/485 serial port line)	
An absolute encoder	Briter single-turn absolute encoder (RS485 interface, 1024P/R) Model : BRT38-R0M1024-RT1	
A screwdriver	A Philips screwdriver	
Software	'BriterEncoder Software' acts as a connected host computer.	

1. A computer

Support System : Windows 2000/XP/7/10.

2. A RS485 to USB communication line.

Please note : The driver for RS485 to USB communication line needs to be installed in advance before use. The driver is on the CD in the RS485-to-USB communication cable kit.



3. An Encoder



This manual uses Briter multi-turn absolute encoder (RS485 interface, 1024P/R, 24turns). The software introduced in this manual is suitable for Briter single-turn and multi-turn RS485 encoders.



4. A Phillips screwdriver.





5. Software

The "BriterEncoder Software" is used as the connecting host computer. Refer to the following Screen shoot.

It could be download from the website: www.briterencoder.com.





1.2 Absolute Encoder Wiring Connection

 Connect the absolute encoder to the RS485-to-USB communication line. Briter absolute encoder has five connection wires, and the color and function definitions are as below:

	Red	Power supply (5V、9~30V)	Please pay attention to the voltage value on the encoder label before power on.
E	Black	Ground (GND)	/
The second second	Yellow	(ZR)	Function wire
WITH V ENCOULD BLACK OF	Green	RS485B	/
	White	RS485A	/

1. Please pay attention to the voltage value (5V, 9~30V) on the encoder label before power on. Make sure to supply power accordingly.

2. Set zero position: connect yellow wire to ground (black wire) more than 100mS.

3. Please do not connect the yellow wire to anywhere during working except when it is needs to be set zero position.

4. Restore the factory setting function: after power off, connect the yellow wire to ground (the black wire). Power on again, hold for 2 minutes, it can be reset after 2 minutes, power off, remove the yellow wire.

Use a Phillips screwdriver to connect the encoder to the RS485-to-USB communication line as shown below:





2. RS485 to USB communication cable to connect to the computer USD port.



1.3 Open the BriterEncoder software.

The 'BriterEncoder Software' does not need to be installed, Download it from the website: <u>www.briterencoder.com</u>. just double-click to open it.

名称	修改日期	类型	大小
1999 编码器上位机V2.0(发布版).exe	2020/2/24 12:03	应用程序	197 KB



2 Software startup

2.1 Detect whether the encoder is connected successfully.

Click the serial port detection button on the software interface.



If the connection is not successful, the following interface reminder will appear. There are several possible reasons.

1. No encoder connected.

2. The driver for RS485 to USB communication line is not installed. How to install the driver will be described at the end of the manual.

串口号:	串口检测	11111111111111111111111111111111111111	
波特率: ⁹⁶⁰⁰		60 120 140	
编码器设置		160	
● 単圈 波特率 19600	· 建设度示 X	180 =	
地址 ID :1	① 没有找到可用单口,唐拉查RS485连接线	200	ĺ.
零点。		220	
模式 章间	論定	300 240	
返回时间 0	设定时间	· · · · · · · · · · ·	
旋转方向: <mark>CCW</mark>	设定方向 单圈	值:0 圈数:0	
	编码	值:0 角度:0.00	
连接编码器 措	医编码器 ■ 快速 「编码器列表 —		
	10 3034	は恋 横式 方向 精度 腰	124



If the connection is successful, the serial port number will appear.





2.2 Software connection encoder

The software can automatically recognize the number of turns of the absolute encoder, and only when the single-turn absolute encoder is used as an electronic multi-turn absolute encoder, it is necessary to select the multiturn button.





Baud rate: the baud rate value can be reset, and the factory default value for all types of RS485 absolute encode is 9600.



Encoder Address ID : when multiple encoders are linked at the same time. The encoder address ID needs to be set to a different one.





Click the Open serial port button.



Then click the connect encoder button, and the software will automatically search for connectable encoders and send corresponding instructions.





Pop-up prompt box, if the default baud rate and ID number, click the OK button. If multiple encoders are connected through the same RS485-to-USB communication line, you can go back to the main interface to select the corresponding ID encoder and baud rate. Click again to connect to the encoder.



After the software connection is successful, the encoder angle value, ID related information, sending instructions and other information will be displayed. The information will change with the rotation of the encoder.





3 Install RS485 Driver Software

3.1 Query whether the RS485 driver software is installed or not.

The RS485 driver is used to drive the RS485 to USB communication line to communicate with the computer.

Click the computer start menu and select the control panel command.



Click device and voice.





Click device manager.

 ■ 硬件和声音 ← → ~ ↑ ● ● 	面板 > 硬件和声音
控制面板主页	
系统和安全	「「「添加设备」 局级打印机设置 」 認休 「「设备管理器」 更改 Windows To Go 后动选项
网络和 Internet	自动播放
• 硬件和声音	■ ● 更改媒体或设备的默认设置 自动播放 CD 或其他媒体
程序	声音
用户帐户	● 週整系統音量 ■ 更改系統声音 ■ 管理音频设备
外观和个性化	小 申源洗项
时钟和区域	夏政电池设置 更改电源按钮的功能 更改计算机睡眠时间 调整屏幕亮度 选择电源计划
轻松使用	Windows 移动中心 调整常用移动设置 在给出演示文档之前调整设置
	高清晰音频管理器
	NVIDIA 控制面板

Click the port column in device manager, and if you have connected the connection encoder to the computer and have not successfully installed the RS485 driver software, this column will give an exclamation point warning.

4	设	备管理器
文	(牛(F	F) 操作(A) 查看(V) 帮助(H)
(=	=)	
~	-	DESKTOP-2LSTJ9A
	5	■ IDE ATA/ATAPI 控制器
	2	■ 处理器
	>	磁盘驱动器
	>	😂 存储控制器
	5	古印队列
	>	→ 电池
	*	🚆 端口 (COM 和 LPT)
		💭 USB Serial Port (COM3)
	>	🛄 计算机
	>	💷 监视器
	>	键盘
	>	😵 蓝牙
	>	一 人体学输入设备
	>	■ 软件设备
	>	🔰 声音、视频和游戏控制器
	ò.	● 鼠标和其他指针设备
	>	🖣 通用串行总线控制器
	5	🚽 网络适配器
	>	1 系统设备
	>	🕎 显示适配器
	5	🔰 音频输入和输出
		图相机



The solution is as follows: right-click in the problematic port bar, update the driver bar

appears, double-click.



Select automatic search driver.



You can also select "Browse my computer for driver software (R)" to manually add drivers to your computer.



The following screen will appear.

文件(F) 操作(A) 查看(V) 帮助(H) ● ● □ □ ● ● ● ● ● ● ● ● ● ● ●	🛃 设备管理器		1775	
 ● ● Ⅲ ● □ DE ● □ DE	文件(F) 操作(A)	查看(V) 帮助(H)		
・ ・	(+ +) 🖬 🗊			
○ 以田 ● 更新驱动程序 - USB Serial Port (COM3) ○ 破益 ● 正在联机搜索驱动程序 ○ 取訂 ● □ ○ 取試 ● □ ○ 取試 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □ ○ 取 ● □	- 🗄 DESKT		×	
 ● 磁结 ● 中試 ● 申試 ● 申試 ● 申試 ● 申試 ● ● 認 ● ● 磁4 ● ● ● 磁4 ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	> つ IDE > □ 处理 ←	■ 更新驱动程序 - USB Serial Port (COM3)		
> ···································	→ 磁盘 → 金 存信	正在联机搜索驱动程序		
 □ 	→ 20112			
2 品也 2 通貨 2 該方 2 軟化 2 軟化 2 軟化 3 範 2 政指 3 範	> 🛄 计算			
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 ▲ 声音 ◎ 鼠枝 ◎ 通用 ○ 网络 ○ 示约 ○ 最方 ○ 電話 ○ 照析 	> 扁 人体			
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			取消	

If the installation is successful, the exclamation point warning will disappear. Appear as the below screen shoot.

