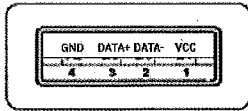


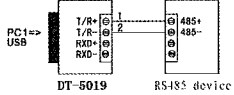
USB output signal and lead foot



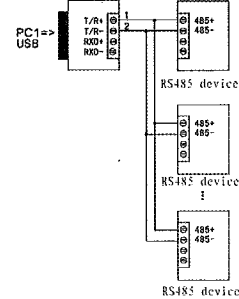
Connection instruction

► USB to RS485

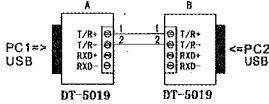
1, RS485 point-to-point/ half duplex 2-line communication



2, RS485 point-to-more/ half duplex 2-line communication



3, DT-5019 to DT-5019 half duplex communication



Regulare failure and failure elimination

1, Communication failure

- Check the USB port with connecting right
- Check RS422/RS485 Output with connecting right
- Check the power of device
- Check the Terminal blocks work
- Check the indicator flicker when receiving
- Check the indicator flicker when sending

2, Data loss or data fault

- Check the data transmission utilization ratio with same format

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Summarize

With the continuous development of the PC industry, USB interface is substituting the old industrial and low speed PC interface, but there are so much important equipment still use the RS485/ RS422 interface in the industrial environment. So many users have to use the USB to RS485 / RS422 converter to realize the data transfer between PC and RS485 / RS422 equipment.

DT-5019 is a universal converter of USB 2.0 to RS485/RS422, which is without addition power supply, compatible with USB, RS422, RS485 standards. It can convert USB signals to a balanced differential RS422 or RS485 signals. Each line has surge protection, and various surge voltage protections. The tiny capacitance distance guarantees RS422 / RS485 interface of high-speed transmission. RS422, RS485 connect by RJ45 and DB9 interface. Converter with zero delay automatic transceiver inside, unique I/O circuit automatically control data flow direction, without any handshake signals (such as RTS, DTR, etc.) and jumpers set realize full-duplex, half-duplex mode conversion, plug and play. Ensure the product fix for all existing communication software and hardware interface.

DT-5019 converters for point-to-point, point-to-multi point reliable communications. Provides the point to more each converter allows connecting 32 RS422 or RS485 devices, data rate of 300 to 921600bps. The power and data flow indicator light will show fault if any breakdown. Support of communication has USB to RS422, USB to RS485.

Function

DT-5019 converter supports four communication modes:

- Point-to-point / 4-line full-duplex
- Point-to-multi point / 4-line full-duplex
- Point-to-point / 2-line half-duplex
- Point-to-multi point / 2-line half-duplex

When the converter is working at full-duplex or half-duplex, needs to add a matched resistance to avoid reflects and disturbance of signal. (120Ω, 1/4W)

Installation and utilization

Please read carefully product manual before install DT-5019 converter, then insert USB cable which attached to USB port. This product use USB/DB-9, general connectors for input/output interface without jumpers, automatically identify RS422 or RS485 communication mode. Fit for twisted-pair cable or shielding wire connection, very convenient to disassemble. Point-to-point, point to more, full-duplex communication that connect four wire T/R+, T/R- and RXD+, RXD-, point-to-point, point to more, half-duplex communication that connect two lines T/R+, T/R-.

Performance parameter

- Standards: Compliant with USB 2.0, downward compatibility, and standard RS422, RS485

- USB signal: VCC, DATA+, DATA-, GND, FG
- RS422 signal: T/R+, T/R-, RXD+, RXD, GND
- RS485 signal: T/R+, T/R, GND
- Working mode: asynchronous working, point-to-point or point-to-more, full duplex 4-line, half duplex 2-line
- directional control: Using data flow automatic control technology, automatic control and data transmission criterion
- Band Rate: 300-921600bps, automatically detects serial signal rate
- load capacity: support to more each converter allows connecting 32 RS422 interface RS485 or equipment
- Transmission range: 1200meter of RS422/485, 5m of USB cable
- Interface Protection: 600V surge protection, ±15KV ESD protection
- Interface: USB A Male, DB9 Male
- signal indication: red for power, green for data sending, yellow for data receiving
- Transmission media: twisted-pair or shielded wire
- Transmission rate: 921600bps at 300M, 38400bps at 600M, 9600bps at 1.2KM
- Size: 1.2W length, converter 66*39*20mm
- Operating environment: -25°C to 70°C, relative humidity at 5% to 95%
- Support Windows98/ME/2000/XP/Vista/7 / Linux / MAC

Interface and signal:

DB9 pin: RS422/RS485 pin assignment for the output signal & terminals block			
DB9 Pin	Output signal	RS422 Full-duplex connection	RS485 Half-duplex connection
1	T/R+	TXD (A+)	RS485(A+)
2	T/R-	TXD (B-)	RS485(B-)
3	RXD+	RXD (A+)	N/A
4	RXD-	RXD (B-)	N/A
5	GND	GND	GND

DB9 PIN

