

TRP-C06

User's Manual

RS232 to RS422/485 Optical Isolated Converter



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1. Introduction

The TRP-C06 allows RS232 line signal bi-directionally convert to RS422 or RS485 standard. Featuring data format auto detecting and baud rate auto switching (from 1.2K to 115.2Kbps) users just need to plug the unit and go without software or hardware complicated setting. The RS485 control is completely transparent to the user and software written for Half-Duplex RS232 works without any modification. The Opto-isolations provides 3000VDC of isolation to protect the host computer from ground loops and destructive voltage spikes on the RS422/485 data lines. The internal surge-protection on each data line protects the module from dangerous voltages. Industry standard DIN rail enable fast and professional installation.

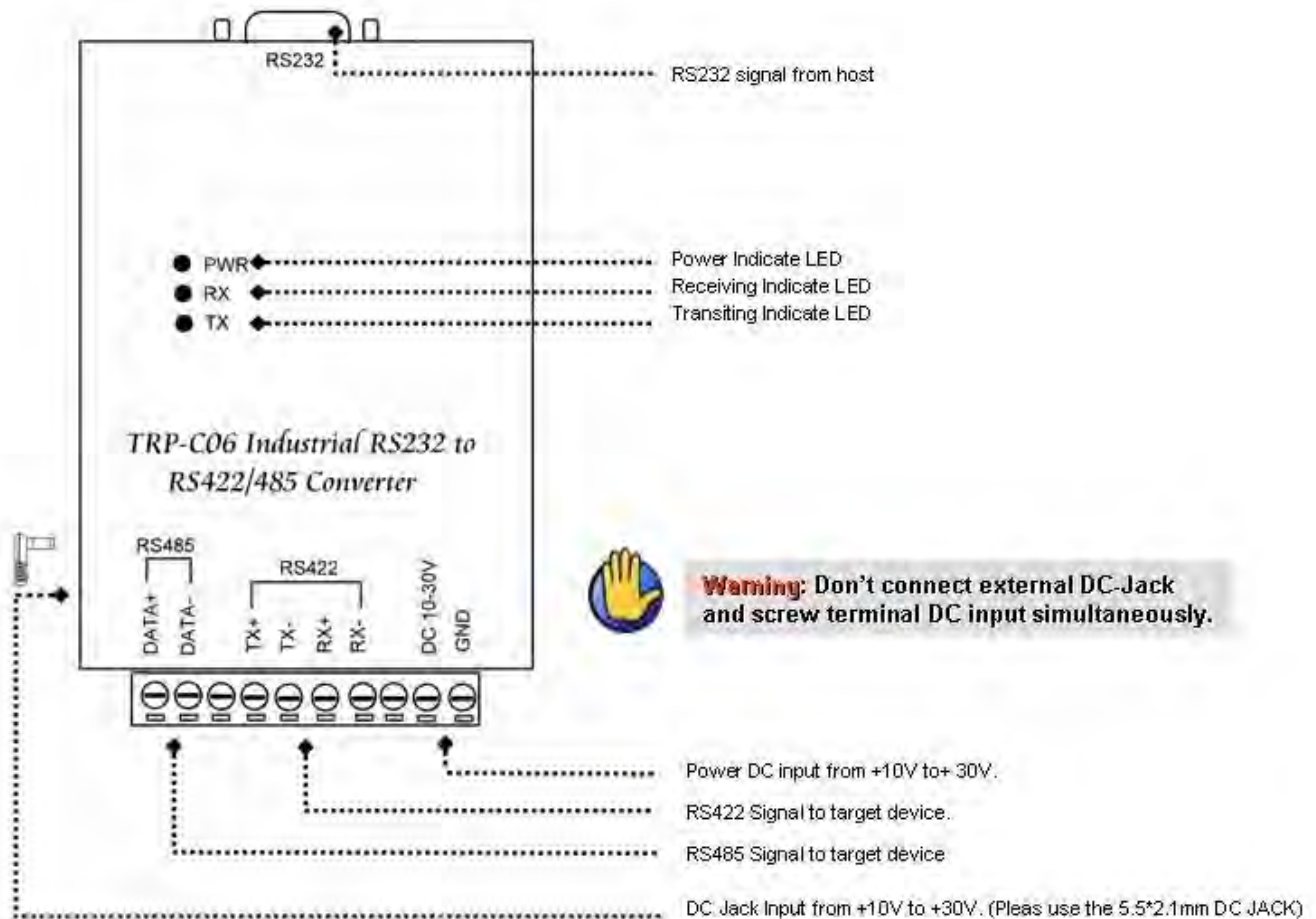
1-1. Features

- Auto direction flow control on RS-485.
- Auto switching baud rate up to 115.2 Kbps.
- Minimum 3000 V DC isolation protection.
- Over current protection.
- All RS422/485 signals provide surge protection.
- Power/TX/RX mode LED indicator.
- Support screw terminal and standard external DC power adaptor.
- Wide Range Power input voltage from DC +10V to +30V.

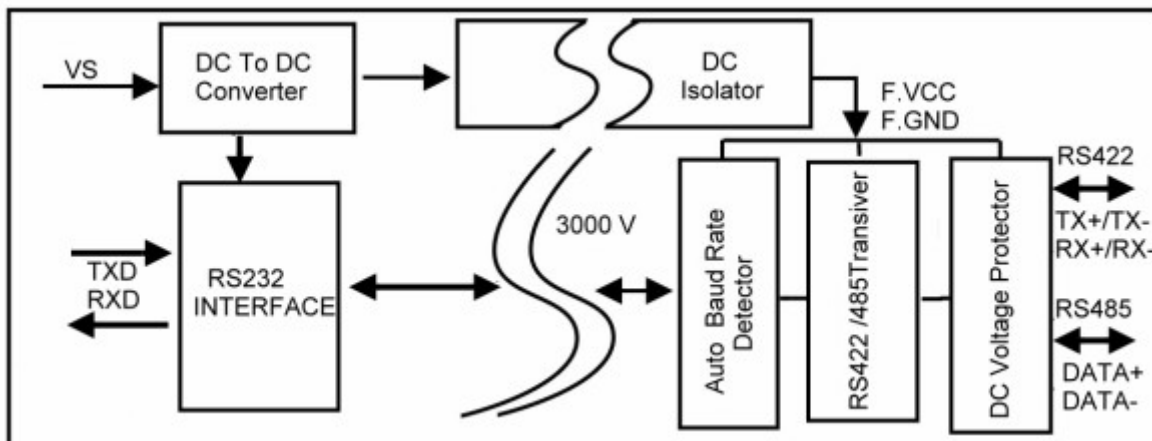
1-2. Specification.

- Power input voltage: DC +10V to +30V.
- Input:RS232 protocol.
- Output:RS422/RS485 protocol.
- Host connection: Standard D-Sub 9 pin female connector
- Electromagnetic Compatibility: CE
- Communication speed: form 1.2 to 115.2Kbps auto-switching.
- RS422/485 line protection: Against surge, short circuit, voltage peak.
- Distance: up to 4000ft (1250M).
- Connection type: Screw terminal for maximum AWG 12 wire.
- Signal LED: Power on, TX, RX.
- Din-Rail mountable: Yes.
- Power supply: Screw terminal, or standard external DC adapter.
- Power consumption: 1.2W
- Isolation Voltage: 3000V DC.
- Operating environment: -20 to 65°C.
- Storage temperature: -20 to 65°C.
- Dimension: 151mm X 111mm X 26mm.
- Weight: 360g.
- Humidity: 10-90% non-condensing.

2. TRP-C06 panel layout



3. TRP-C06 Hardware structure



4. Install TRP-C06

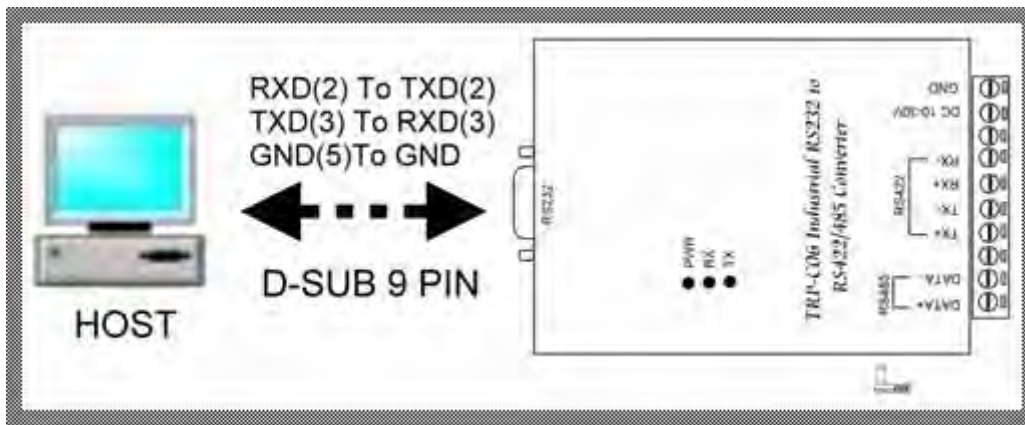
4-1. Connect power source with TRP-C06, if power properly supplies the PWR LED will light up.

Warning: User can only choose one of 2 power source

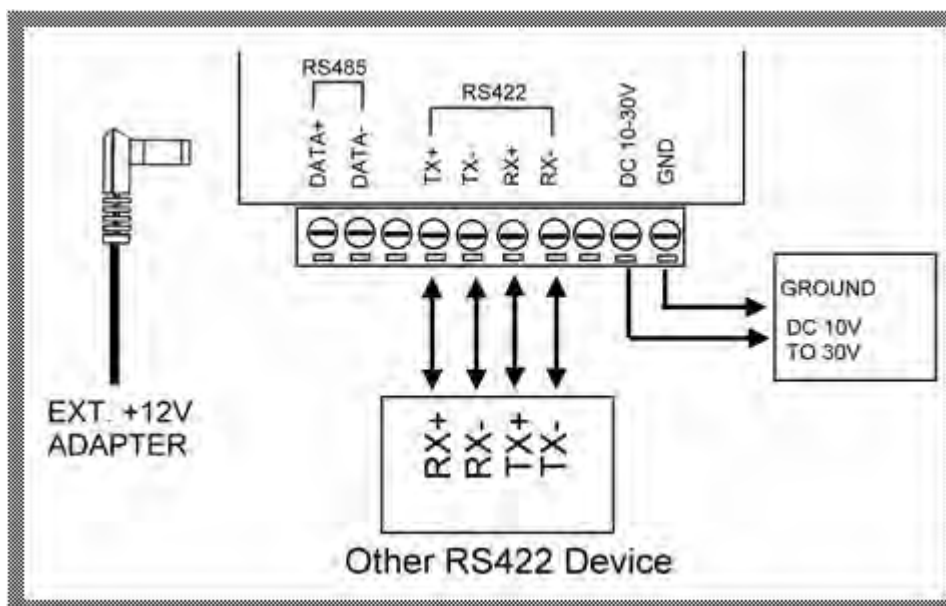
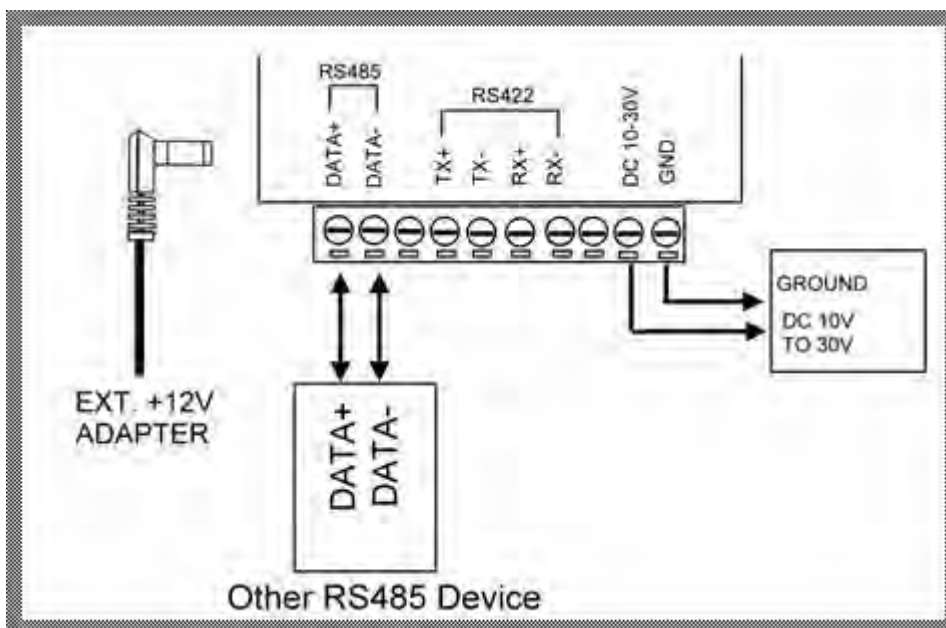
External DC-Jack or Screw terminal DC input

Do not use external DC-Jack and screw terminal DC input simultaneously.

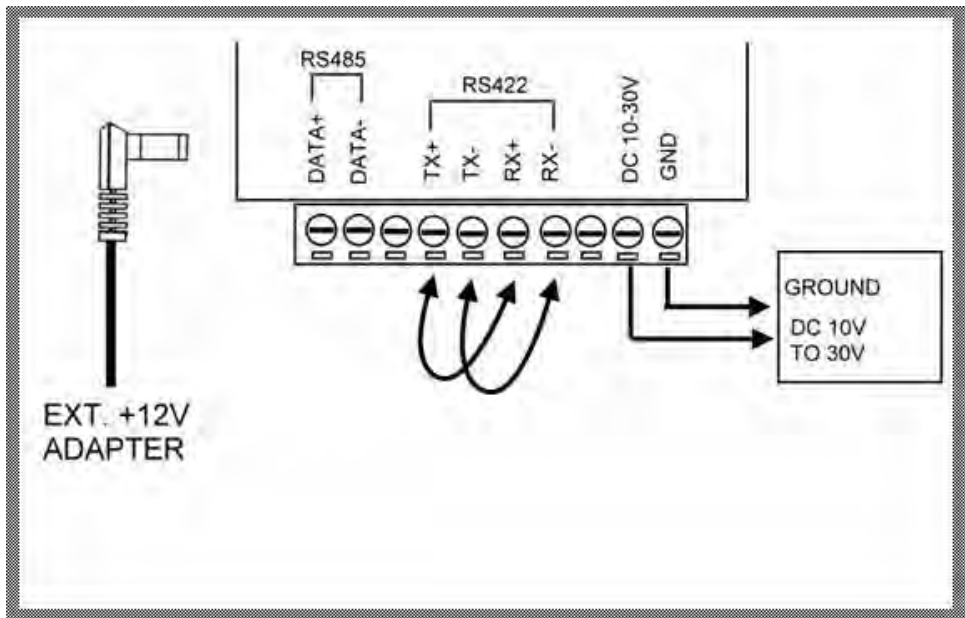
4-2. Connect TRP-C06 with Host PC.



4-3. Connect TRP-C06 with RS4222 or RS422/485 serial device.



5. Loop back test



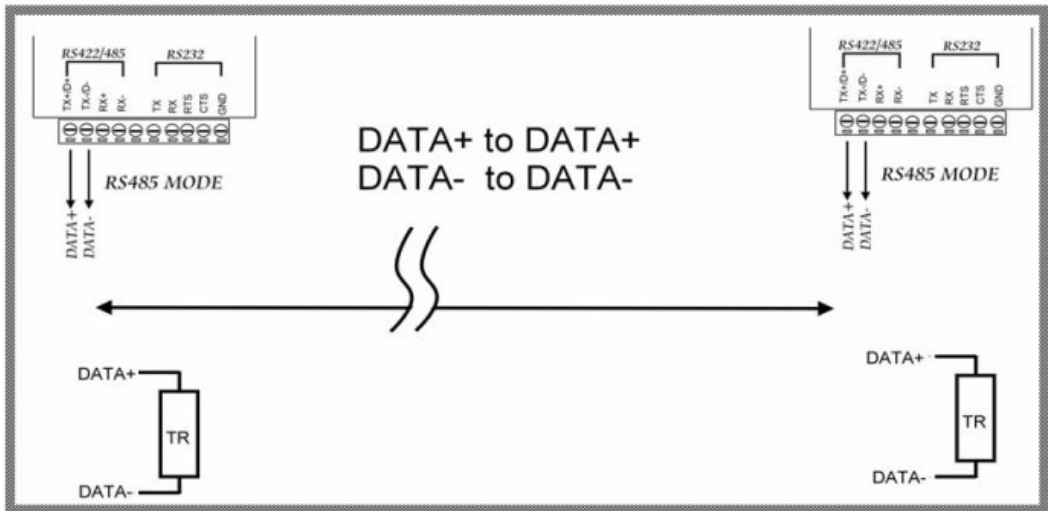
User may download from Trycom web site www.trycom.com.tw

Test422.com is for DOS
 Demo.exe is for Windows

6. Terminal Resistor connection.

TRP-C06 does not has built-in terminal resistor, user may add external terminal resistor by following connection.

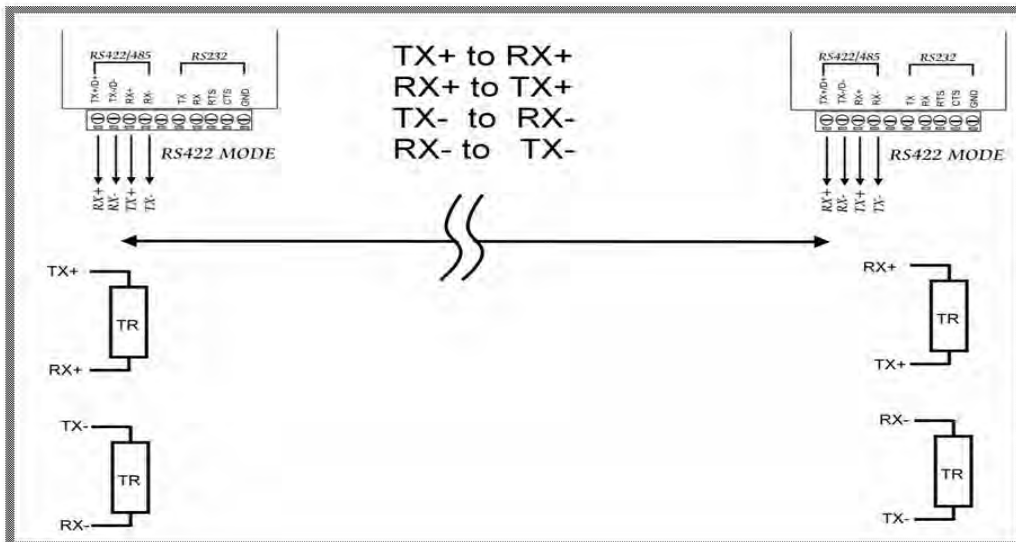
6-1. RS485



Terminal Resistor specification.

- 110 ohm: If distance between both end of RS485 devices in 1.2KM .
- 220 ohm: If distance between both end of RS485 devices in 600M .
- 330 ohm: If distance between both end of RS485 devices in 300M

6-2. RS422



Terminal Resistor specification...

110 ohm: If distance between both ends of RS422 devices in 1.2KM.

220 ohm: If distance between both ends of RS422 devices in 600M.

330 ohm: If distance between both ends of RS422 devices in 300M