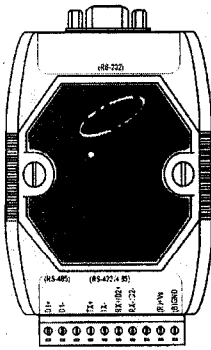


i-7520U

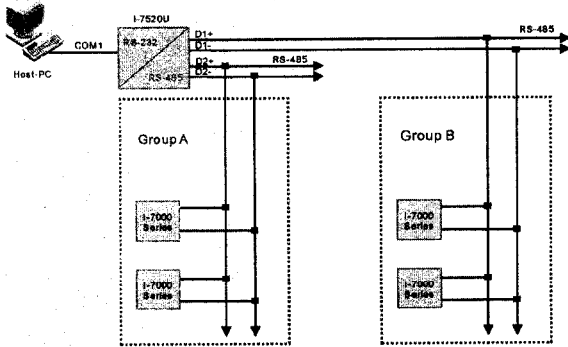
(Ultra Driving RS-232 to RS-485 Converter)



Specifications:

- Protocol: RS-422/485
- Connector: plug-in screw terminal block.
- Baud rate (bps): 1200, 2400, 4800, 9600, 19.2K, 38.4K, 57.6K, 115.2K (Switchable).
- Data Format: 9-bit, 10-bit, 11-bit, and 12-bit (Switchable).
- 256 modules max in one RS-485 network without repeater
- Isolation voltage: 3000V
- Isolation site: RS-232
- Repeater request: 4,000 feet or over 256 modules
- Power requirements: +10V dc ~ +30V dc
- Power consumption: 0.05A@24V; Max

Application For RS-485 Star type Networking:



Note: For RS-485 star type setting, please refer to page 4.

Selecting the i-7520U's Data Formats:

Switch 1 controls the data format. Data can be 9, 10, 11 or 12 bits. The factory default is 10 bits: one start bit, eight data bits, no parity bit and one stop bit.

When using the converter in combination with other i-7000 series modules, do not change the default setting as i-7000 series modules have a fixed data format of ten data bits.

The option of changing to 9, 11

or 12 bits is for use with other modules (other than i-7000 series modules) that have different data formats. Should you change the data format, be aware that you will have to change the data format settings on all the other modules in the network.

Data Format	NO.1 (S0)	NO.2 (S1)
09-Bit	ON	ON
10-Bit	ON	OFF
11-Bit	OFF	ON
12-Bit	OFF	OFF

Selecting the i-7520U's Baud Rate:

Switch 1 sets the baud rate. The options range from 1200 bps to 115.2 Kbps. The factory default is 9600 bps. Be aware that when you change the baud rate, you have to change the baud rate for all the connected modules accordingly. If use RS-422 mode, the baud rate doesn't need to be set.

Baud Rate	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	NO.9	NO.10
1200 bps	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
2400 bps	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
4800 bps	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
9600 bps	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
19.2K bps	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
38.4K bps	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
57.6K bps	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
115.2K bps	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Selecting the Pull-UP and Pull-LOW resistor in the RS422/485:

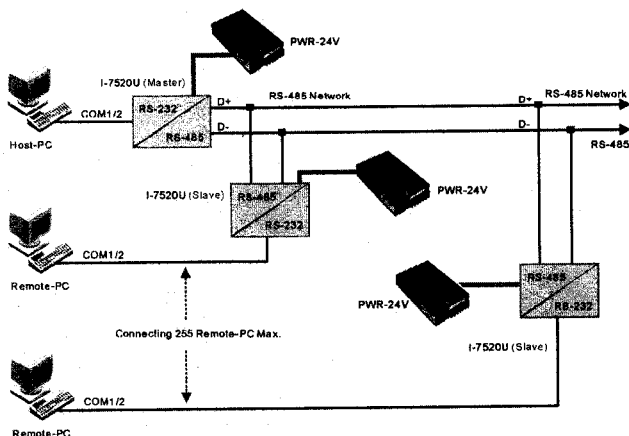
Switch 2 sets the pull-up and pull-low resistor. When your application need more i-7520U to connect RS-232 device or PC. You need to set the master i-7520U to resistor enable, and set the slave i-7520U to resistor disable by SW2.

	NO.1	NO.2	NO.3	NO.4
Resistor Enable	ON (Default)	ON (Default)	ON (Default)	ON (Default)
Resistor Disable	OFF	OFF	OFF	OFF

Note:

- NO.1 is an RS-485 channel 1 Pull-UP resistor.
- NO.2 is an RS-485 channel 1 Pull-LOW resistor.
- NO.3 is an RS-485 channel 2 Pull-UP resistor.
- NO.4 is an RS-485 channel 2 Pull-LOW resistor.

Application For PC Networking:



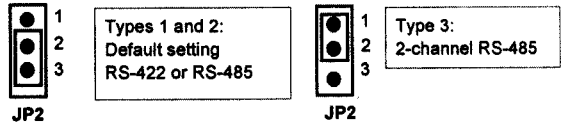
Selecting the i-7520U's output type:

NOTE: The RS-422 and RS-485 output types couldn't be used simultaneously, which means that you can only select 1 type to output.

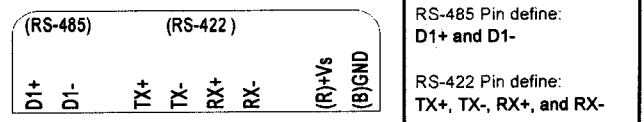
- Type 1: 1-channel RS-485 output.
- Type 2: 1-channel RS-422 output.
- Type 3: 2-channel RS-485 output. (Support star network)

RS422/485 Output Jumpers settings:

- For type 1: Set the JP2 jumper to positions 2 and 3.
- For type 2: Set the JP2 jumper to positions 2 and 3.
- For type 3: Set the JP2 jumper to positions 1 and 2.



Pin Assignment For type1 and type2:



Pin Assignment For type3:

