

I-2533 Quick Start

1. Introduction

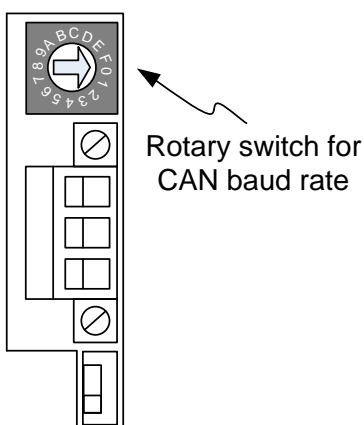
This quick start helps users to apply the I-2533 in users' applications quickly. If users need the details of I-2533, please refer to the I-2533 user manual. Users can free download it from the web site as follows or get it from product CD (path: CAN/Converter/I-2533).

http://www.icpdas.com/products/Remote_IO/can_bus/i-2533.htm

2. Hardware Installation

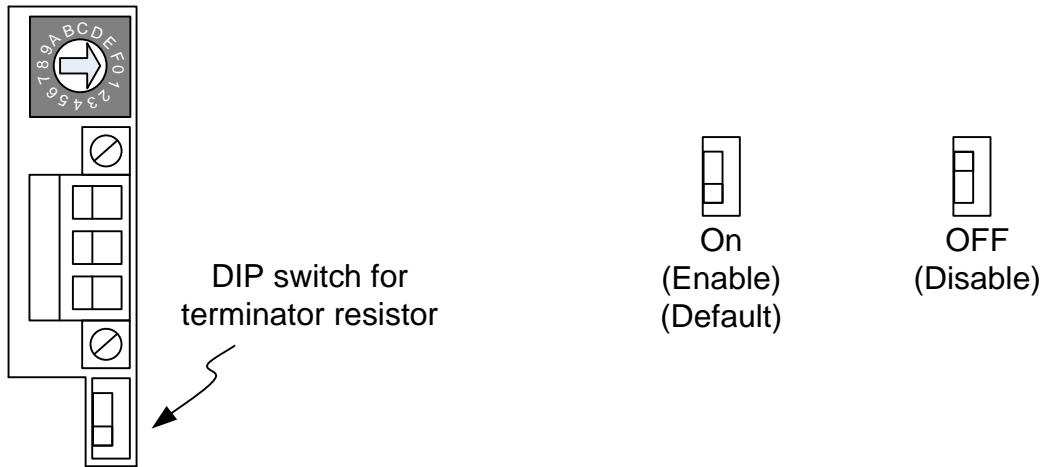
Before using I-2533, some things must be done.

1. Prepare one pair of I-2533.
2. Set the CAN baud rate of each I-2533 by using rotary switch. You can refer to the following table for details. (If you set the rotary switch to "A", please use utility tool to do the configuration before.)

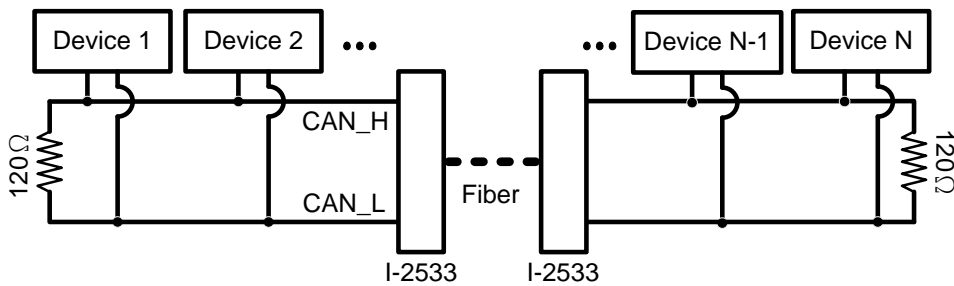


Switch Value	Description
0	Set baud rate to 10 kbps
1	Set baud rate to 20 kbps
2	Set baud rate to 50 kbps
3	Set baud rate to 80 kbps
4	Set baud rate to 100 kbps
5	Set baud rate to 125 kbps
6	Set baud rate to 250 kbps
7	Set baud rate to 500 kbps
8	Set baud rate to 800 kbps
9	Set baud rate to 1 Mbps
A	Set baud rate to user-defined baud rate which is configured by I-2533 utility.
B~D	Not-available
E	Update firmware
F	Set I-2533 into configuration mode.

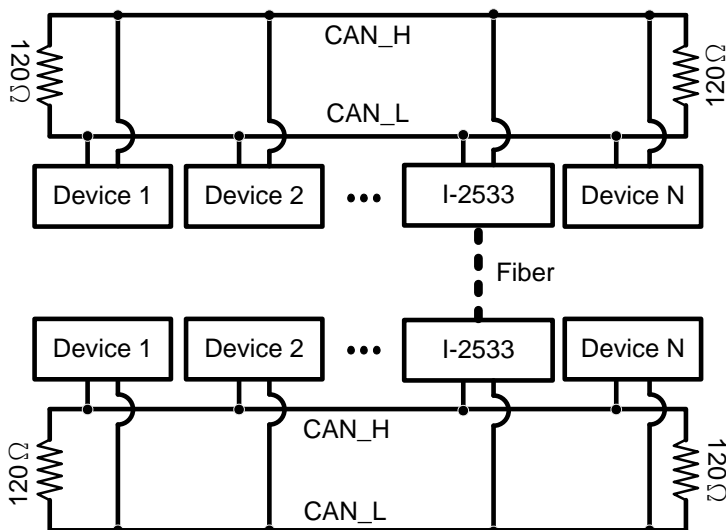
3. Check the application structure, and determine if the terminator resistor is needed or not. You can find it at the position as follows.



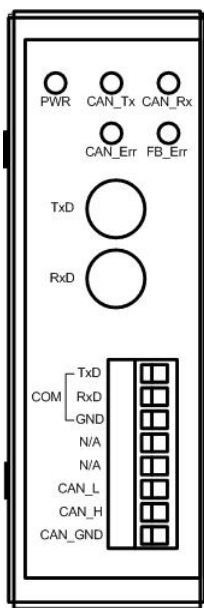
Generally, if your application is as follows, we recommend you to enable the terminator resistor.



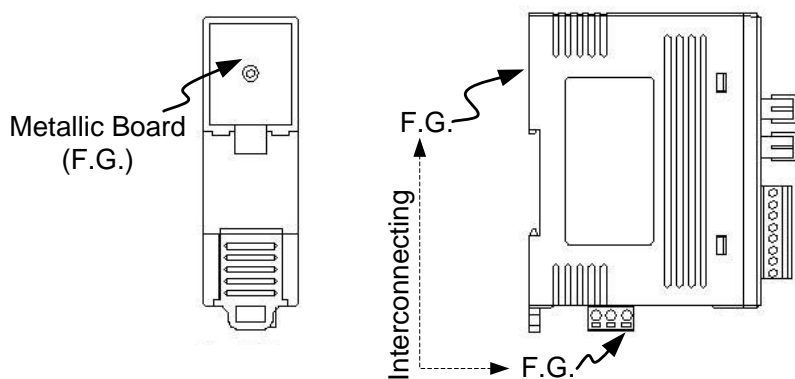
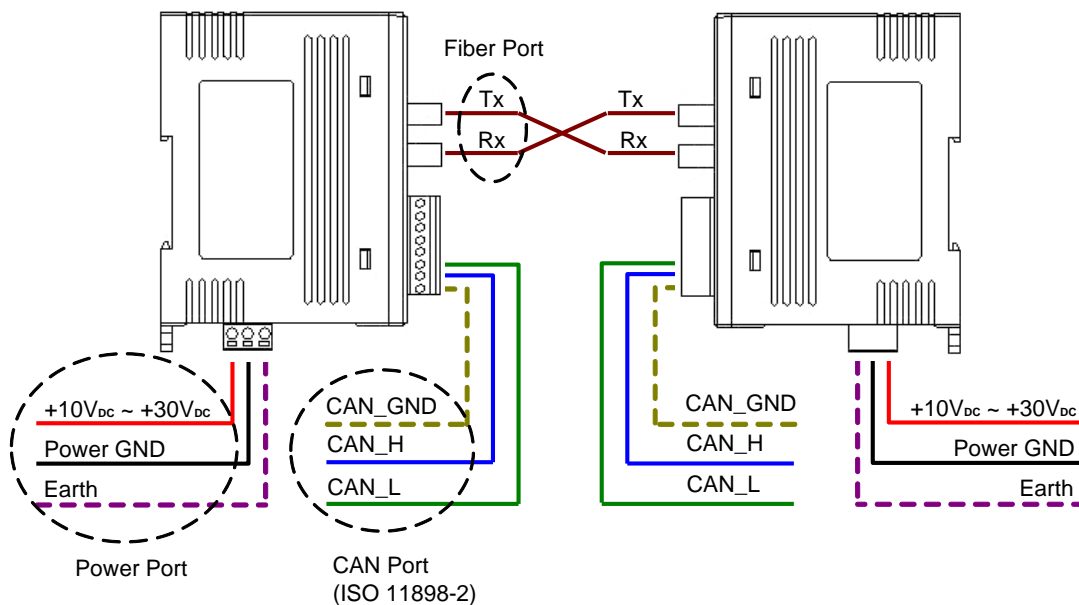
If your application is like the structure as follows, the terminator resistor is not needed.



4. Connect the fiber port of these I-2533, CAN port, power line and frame ground. The pin assignment and wire connection are as follows. When finished, run your application with these I-2533.



Pin No.	Description
TxD	Fiber TxD port
RxD	Fiber RxD port
1	TxD pin of the RS-232 port for configuration
2	RxD pin of the RS-232 port for configuration
3	GND pin of the RS-232 port for configuration
4	Non-available
5	Non-available
6	CAN_L pin of CAN bus
7	CAN_H pin of CAN bus
8	CAN_GND pin of CAN bus



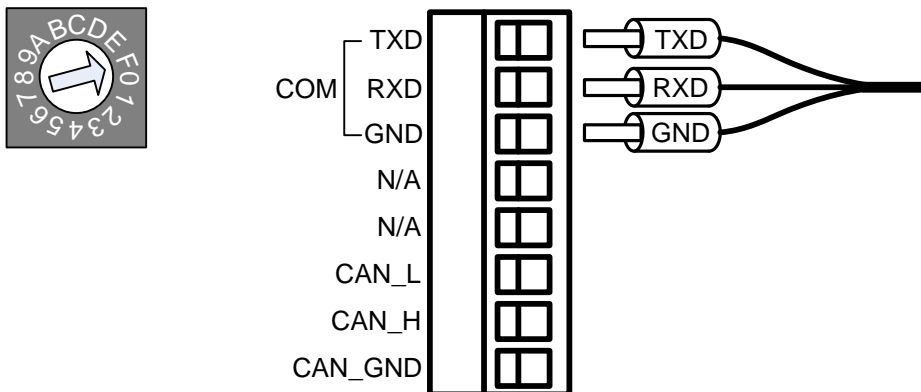
3. Utility Tool

When users want to use user-defined baud rate or set the message filter, I-2533 utility tool may be needed. It can be free downloaded from the following web site or get it in the product CD (path: CAN/Converter/I-2533 /Software):

http://www.icpdas.com/products/Remote_IO/can_bus/i-2533.htm

After getting the utility tool, please follow the following steps to set the baud rate and message filter.

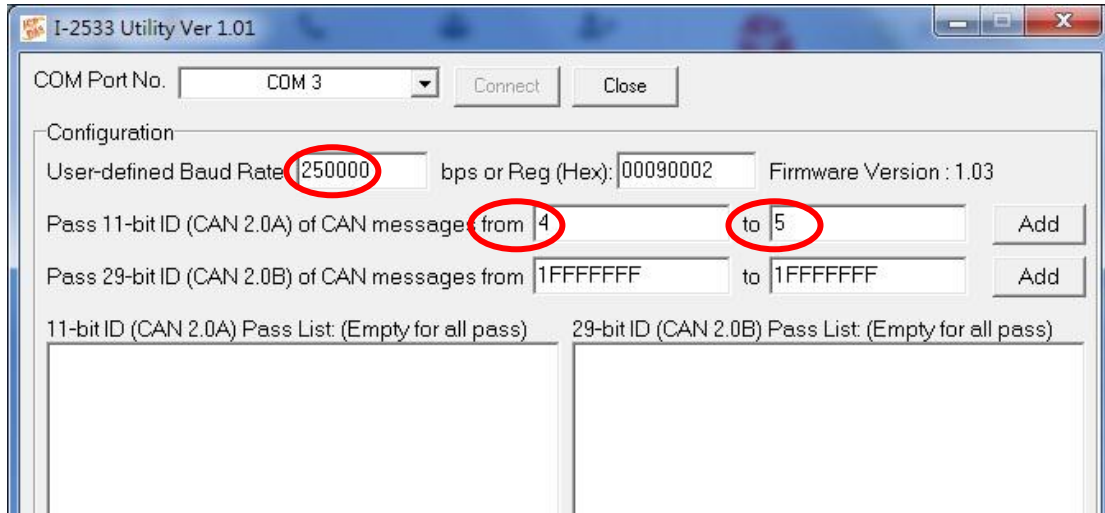
Step0: Power off the I-2533. Set the rotary switch to “F”, and connect the PC available COM port with the COM port of the I-2533. Users can find the communication cable in the product box. When connecting to the COM port of I-2533, the TXD pin of the cable is connected to the TXD pin of the COM port, RXD pin of the cable is connected to the RXD pin of the COM port, and GND pin of the cable is connected to the GND pin of the COM port. Then, power on the I-2533.



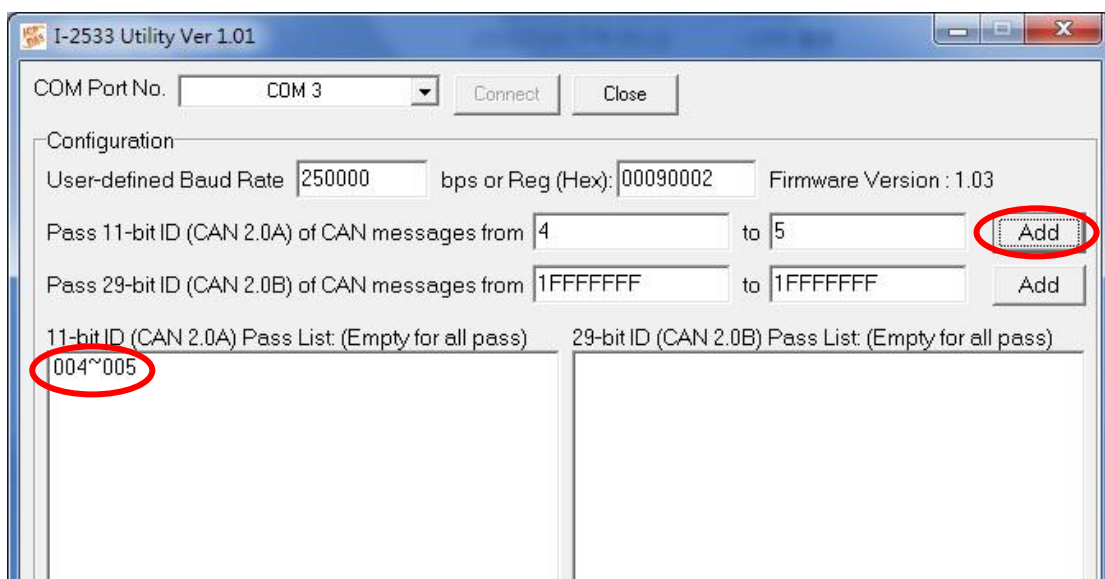
Step1: Execute the I2533_Utility.exe, the dialog of the I-2533 Utility will be popped up. Select the PC COM port which is connected with the COM port of the I-2533. Then, click “Connect” button.



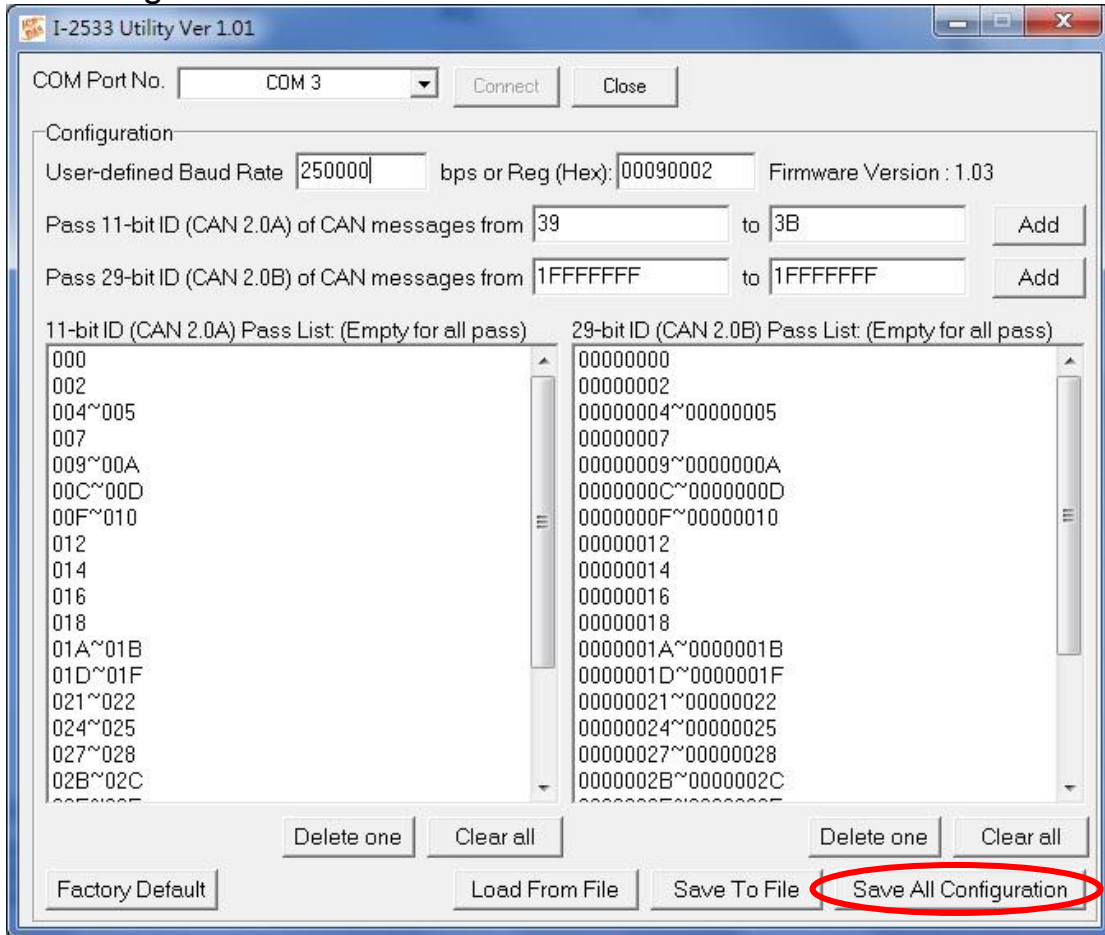
Step2: Users can set the baud rate on the “User-defined Baud Rate” field. Here, fill “250000” for 250 kbps. Then, set the filter by using the “from” field, “to” field, and “Add” button. For example, If users want to pass the CAN message with ID 0x4 and 0x5 in the CAN 2.0A specification. Fill the value “4” in the “from” field of CAN 2.0A, and the value “5” in the “to” field of CAN 2.0A.



Step3: Click “Add” button to add this configuration. The configuration is shown on the “Pass List” field. If the “Pass List” is not empty, only the messages matched with the “Pass List” will be passed. If the “Pass List” field is empty, it means all-pass. If users want to pass the message with ID 0x0 in the CAN 2.0A specification, fill the value “0” in both of “from” and “to” field and click “Add” button.



Step4: The method of configuring the message filter of the CAN 2.0B messages is similar with the configuration steps of the message filter of the CAN 2.0A messages. After finishing all of the configurations, click “Save all configuration” to store the configuration in the I-2533.

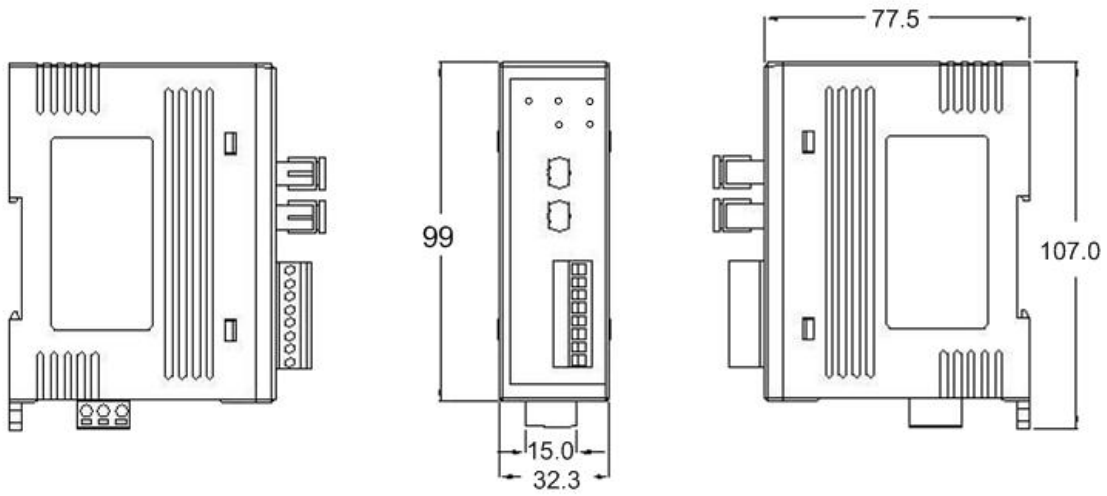


Step5: When the procedure is successful, the following message will be shown.



Step6. After finishing the configuration, set the rotary switch value to “0” ~ “A” and reboot the I-2533. The CAN message filter will be applied automatically in the value “0” ~ “A” of the rotary switch. The CAN baud rate set by utility is only applied when the rotary switch is set to “A”.

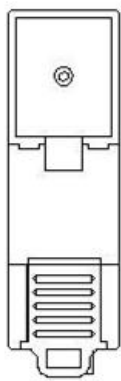
4. Dimension



Left Side View

Front Side View

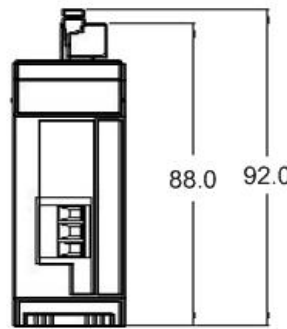
Right Side View



Back View



Top View



Bottom View

Unit: mm