

HUB-66U

6-Port RS-232/422/485 USB-to-serial
converter

User Manual



rev: 160205
Made in Taiwan



Safety and Notice

The **HUB-66U 6-Port RS-232/422/485 USB-to-serial converter** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **HUB-66U** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



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INTRODUCTION

The **HUB-66U 6-Port RS-232/422/485 USB-to-serial converter** provides user to connect 6 RS-232 or RS-232/422/485 devices to the laptop or workstation through the USB port. HUB-66U is compatible with new and legacy serial devices, and are perfect for mobile, instrumentation, and point-of-sale applications. With HUB-66U, user can control up to 6 devices with RS-232/422/485 connector through one USB port on the lap or PC.

FEATURES

- Supports Hi-Speed USB 2.0 (up to 480 Mbps)
- USB type A connector
- 256-byte FIFO and on-chip H/W, S/W flow control
- Built-in 15 kV ESD protection for all serial ports
- Hassle-free COM port retention
- Drivers provided for Windows
- External power
- Locking power jack

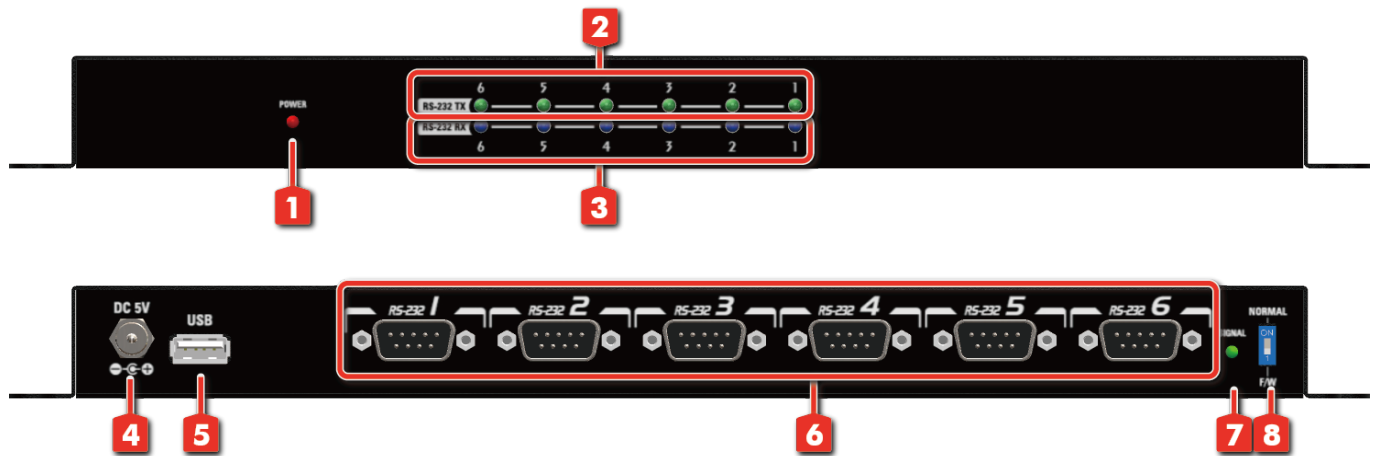
PACKAGE CONTENTS

- 1x HUB-66U
- 1x 5V power supply unit
- 1x Installation software CD

SPECIFICATIONS

Model Name		HUB-66U
Technical		
Role of usage		6 Port USB to Serial Converter
Compliance		USB 1.1/2.0 compliant
Speed		480 Mbps (Hi-Speed USB) and 12 Mbps (Full-Speed USB)
ESD protection		[1] Human body model—±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±8kV
PCB stack-up		4-layer board [impedance control — differential 100Ω; single 50Ω]
Input		1x USB
Output		6x RS-232
USB connector		USB type A
RS-232 connector		DE-9 [9-pin D-sub female]
Mechanical		
Dimensions [L x W x H]	Model	295 x 93 x 25mm [11.6" x 3.6" x 1"]
	Package	371 x 170 x 77mm[1'5" x 6.7" x 3"]
	Carton	410 x 368 x 393mm[1'3" x 1'4" x 1'5"]
Weight	Model	588g [20.7 oz]
	Package	1018g [2.2 lbs]
Fixedness		Wall-mounting case
Power supply		5V 2A DC
Power consumption		3Watts [max]
Operation temperature		0~40°C [32~104°F]
Storage temperature		-20~60°C [-4~140°F]
Relative humidity		20~90% RH [no condensation]

PANEL DESCRIPTIONS

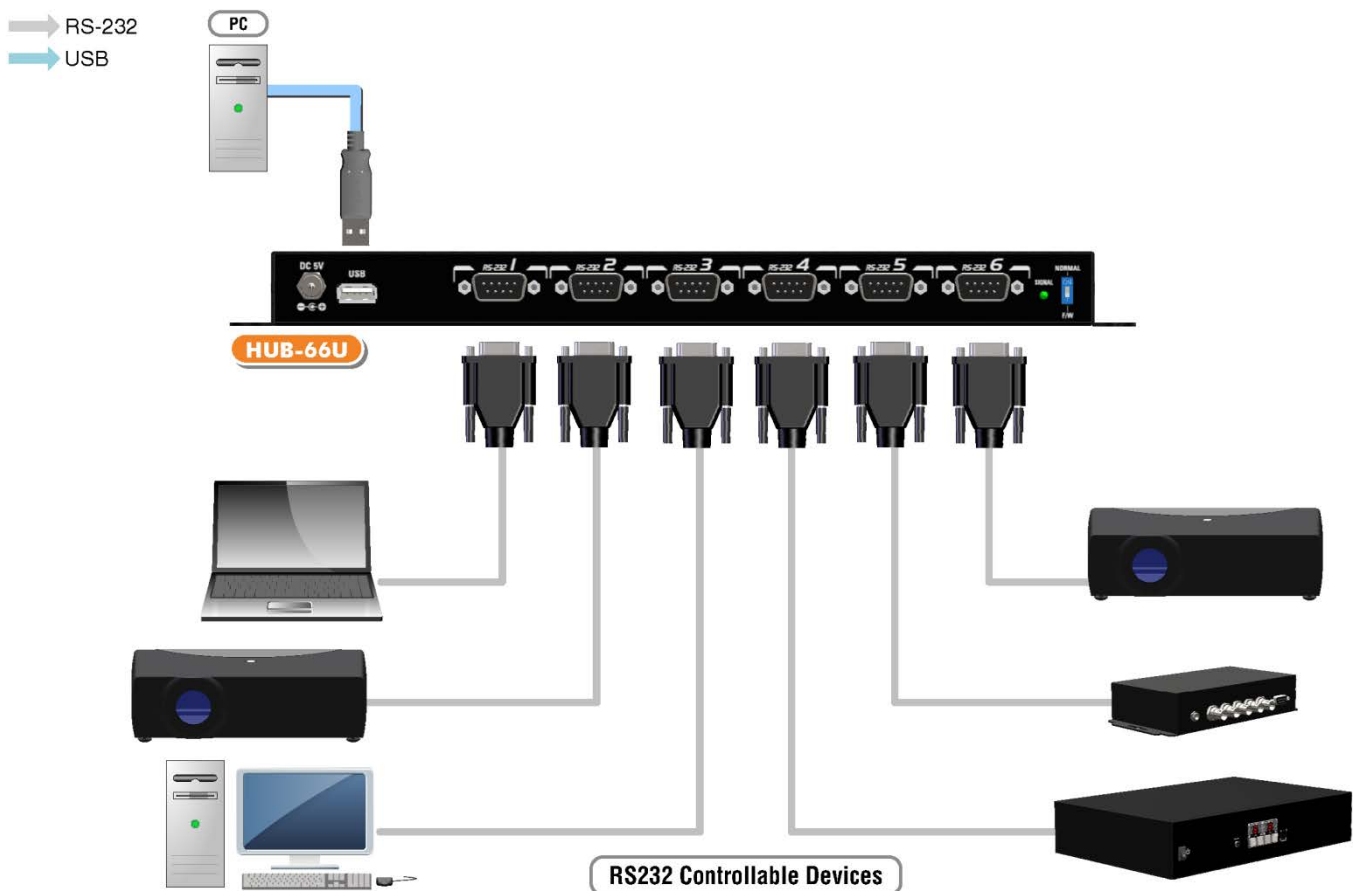


- 1. Power LED:** Power on/off indicator
- 2. RS-232 TX LED:** Port is sending data to connected device
- 3. RS-232 RX LED:** Port is receiving data to connected device
- 4. +5V DC:** Connect to a 5V power supply unit
- 5. USB:** Connect to the USB port of PC
- 6. RS-232 PORT 1 ~ 6:** .Connect to serial port devices with a DSUB-9 female-female or male-female cable
- 7. LED:** FW update indicator. LED will light when dip switch is set to FW update mode
- 8. DIP SWITCH:** FW update mode/ Normal mode

HARDWARE INSTALLATION

1. Connect the HUB-66U to your PC
2. Connect your serial device to the HUB-66U
3. Plug in 5V DC power supply unit to the power jack of HUB-66U

CONNECTION DIAGRAM



RS-232 PIN DEFINITION

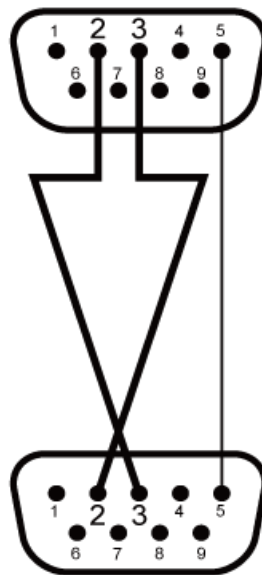
1. DB 9 Male RS-232/422/485 PIN DEFINITION

Pin	RS-232	RS-422/ 4-wire RS-485	2-wire RS-485
1	DCD	TxD-(A)	--
2	RxD	TxD+(B)	--
3	TxD	RxD+(B)	Data+(B)
4	DTR	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR	--	--
7	RTS	--	--
8	CTS	--	--

2. RS-232 CABLE PIN DEFINITION

MODEM NULL CABLE(DCE to DCE)

DB 9 female



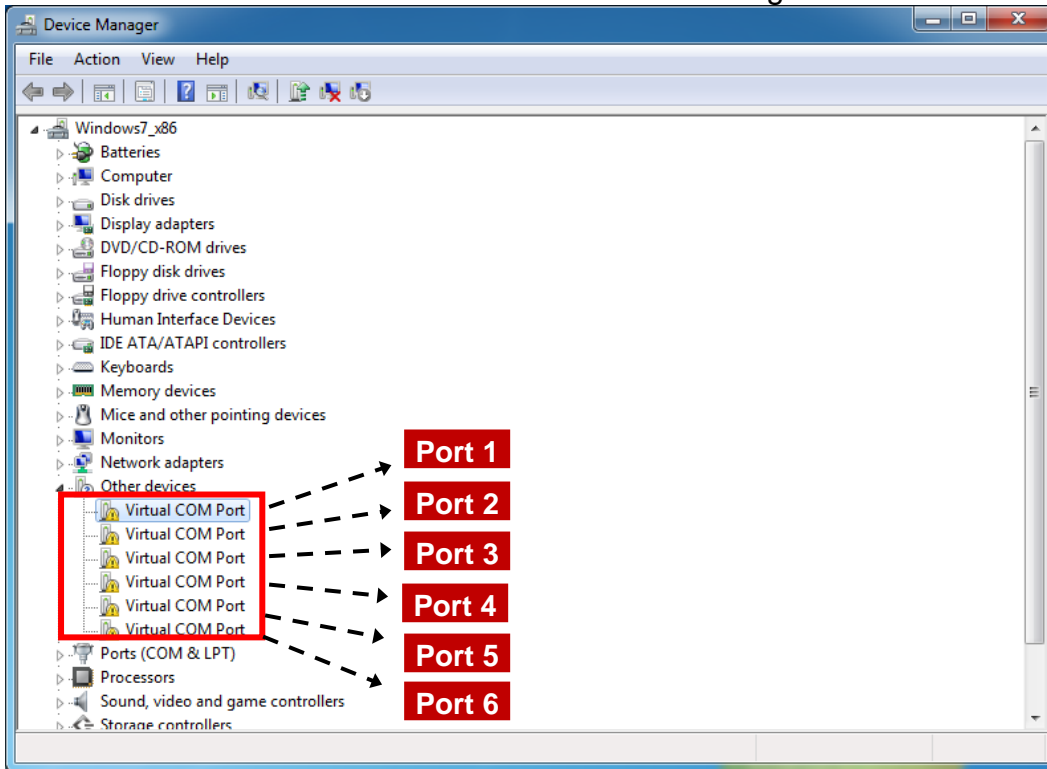
DB 9 female

Connector 1	Connector 2	Function
2	3	Rx ← Tx
3	2	Tx → Rx
5	5	Signal ground

DRIVER INSTALLATION

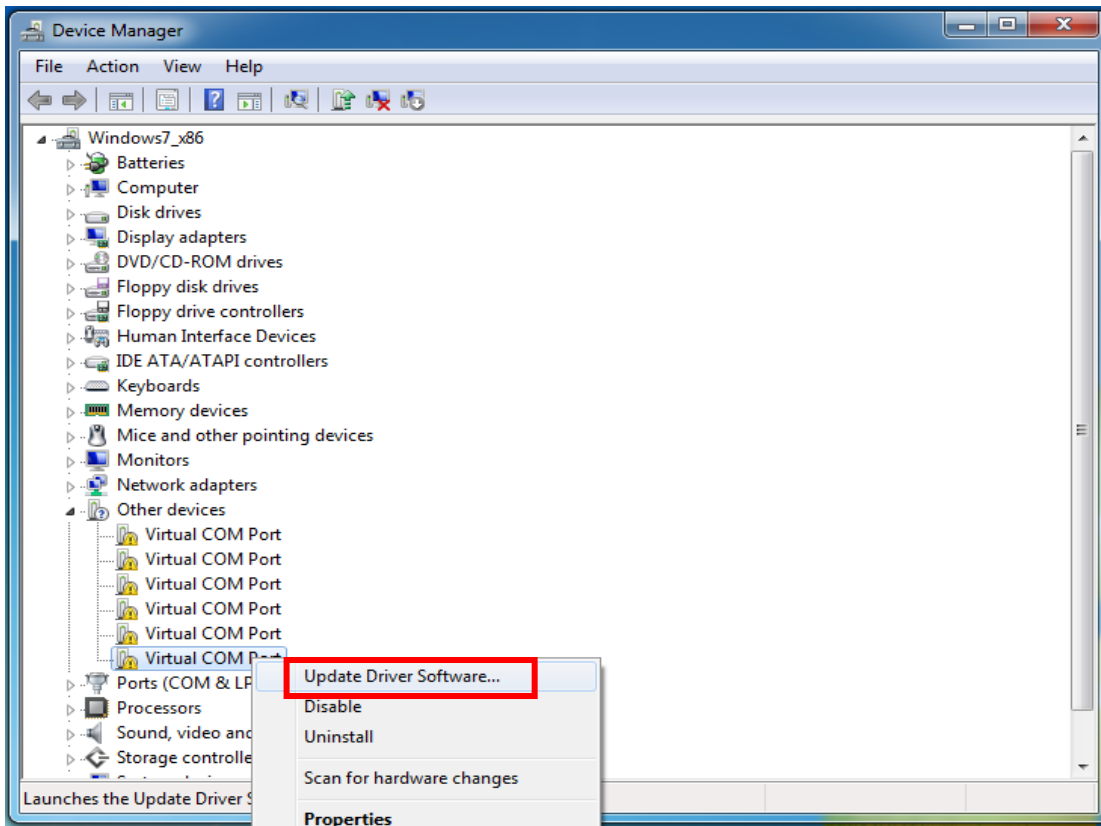
Step 1.

Use cable (USB to USB) to connect with the computer and Hub-66U. After connection, it will show 6 unknown virtual COM Port in the device manager.



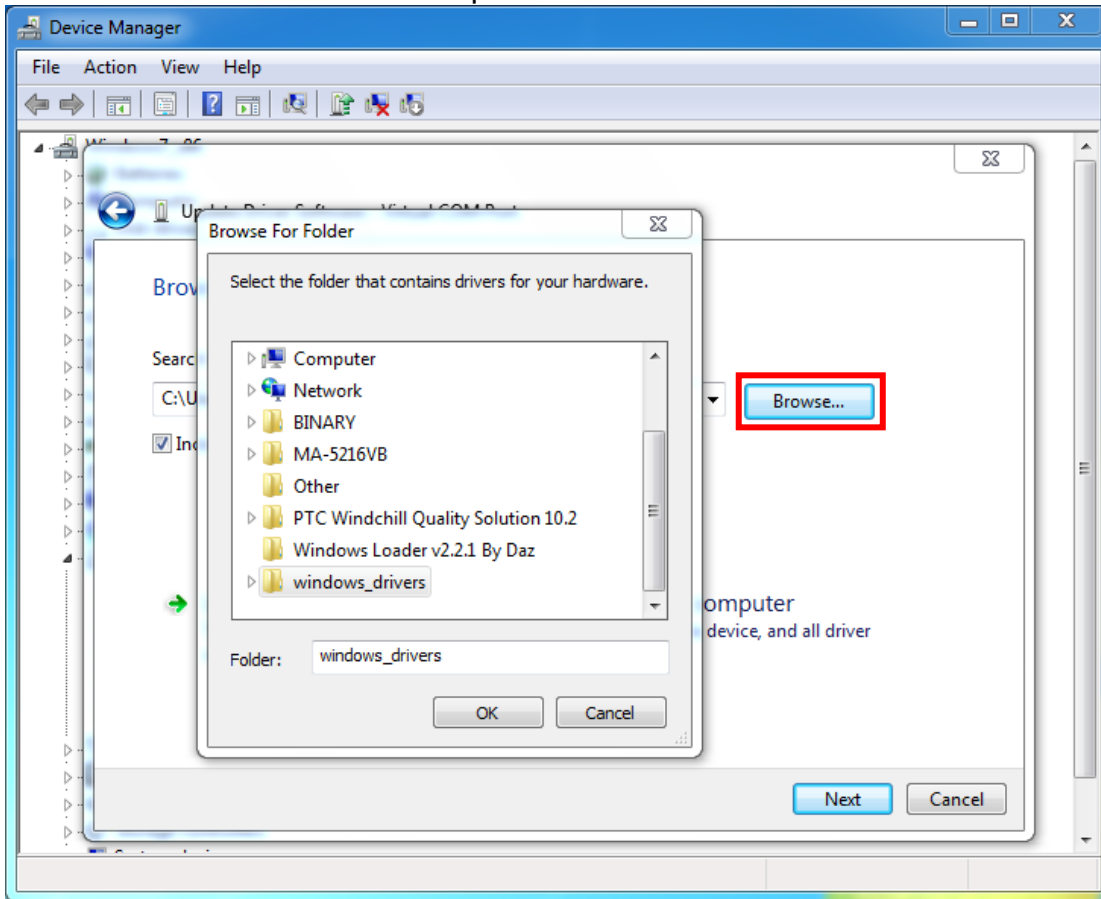
Step 2.

In the device manager, please click the Virtual COM Port with the right button to update the device driver software.



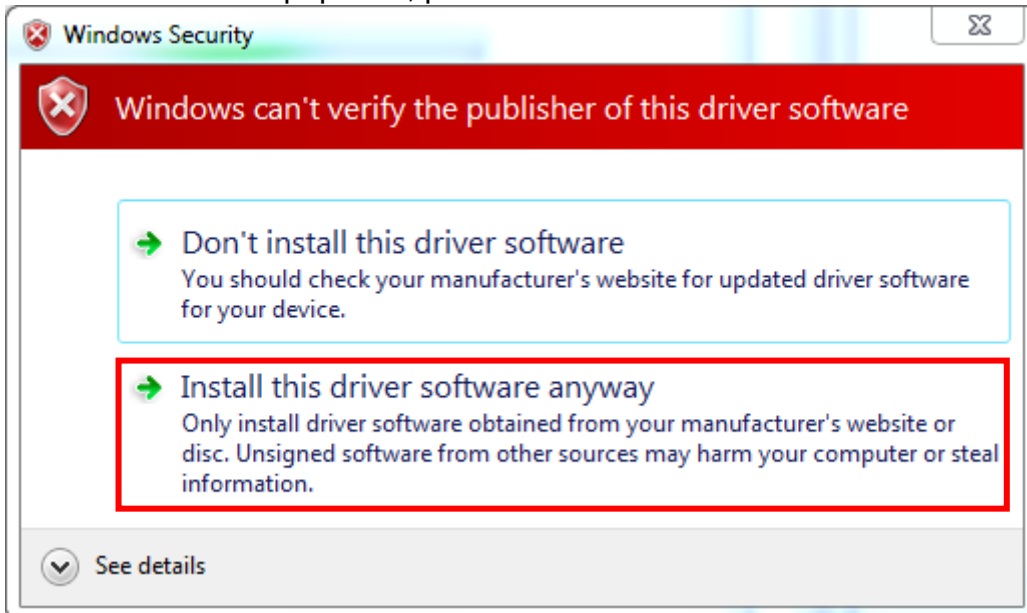
Step 3.

Browse the driver file on the computer and install it.



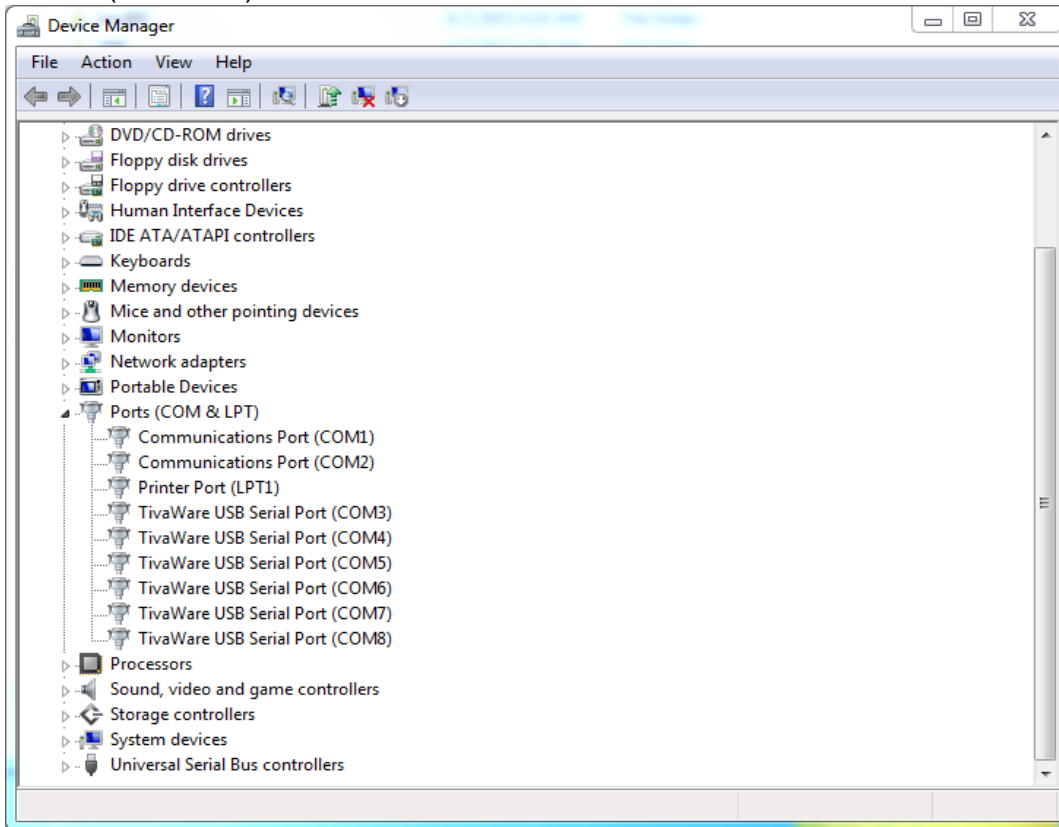
Step 4.

When alert window pops out, please select the “Install this driver software anyway”.



Step 5.

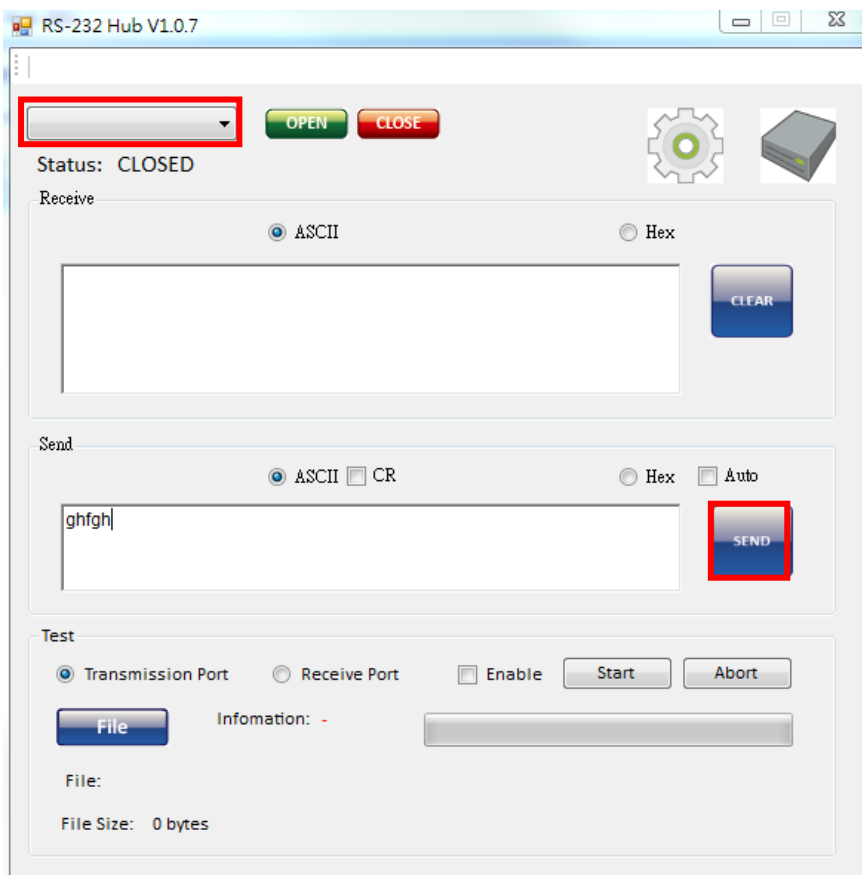
After finishing the installation, the order of COM port in the device manager is different from the device (Hub-66U).



Step 6.

Operate the Hub-66U software to test the order of COM port.

- (a) Select any COM port (take COM port 7 as an example).
- (b) Input some string or number and click the "Send" button.



Step 7.

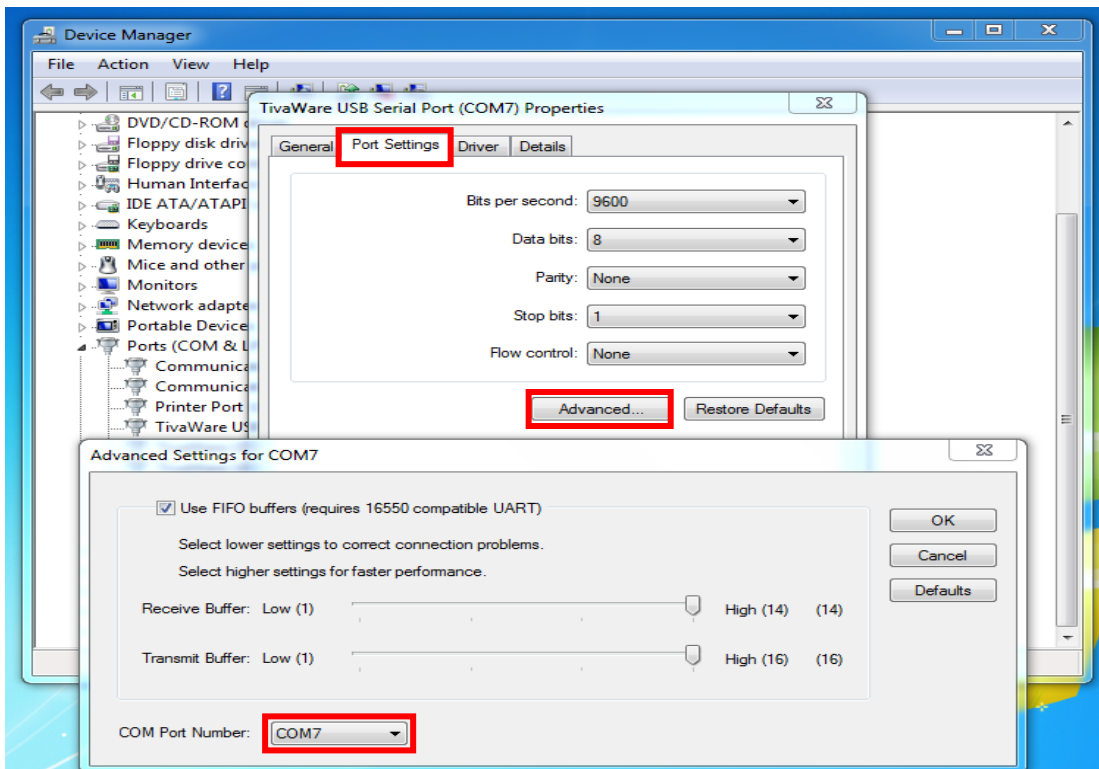
After step 6 finished, LED indicator with corresponding device's COM port will light on when transferring data.



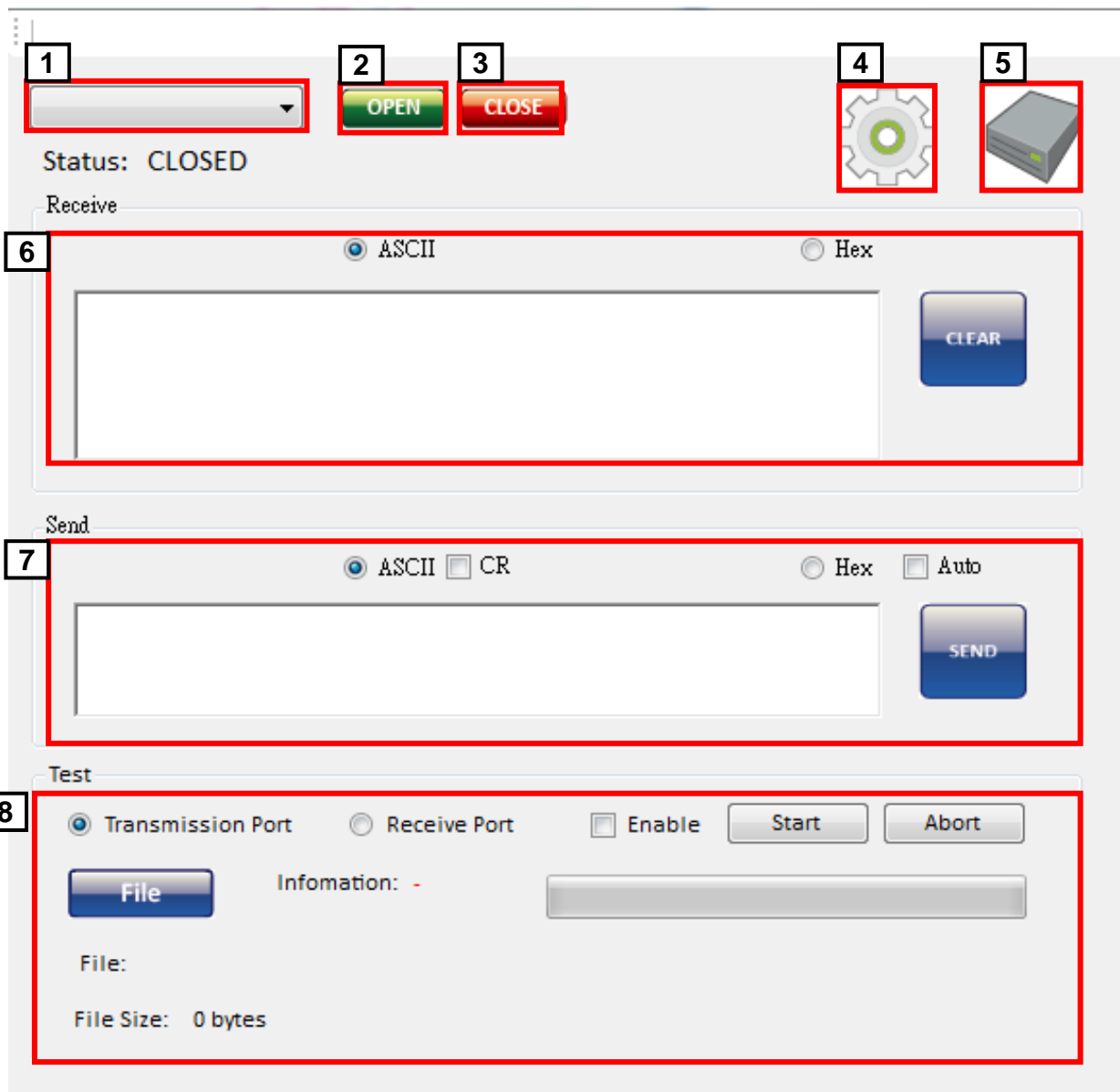
Step 8.

You can click the right button of mouse to select the content of virtual COM port to re-arrange the COM port number.

**Before this step, please remember to close the Hub-66U software. Or it will occupy the COM port that we cannot change the order.*



OPERATION SOFTWARE



1. Select COM Port
2. Open the selected COM Port
3. Close the selected COM Port
4. Set the Baud Rate/ Parity/ Databits/ StopBits
5. Set the RS-232 or RS-485 mode to each port
6. Received data information
7. Sent data information
8. Use the file to send or receive data (User has to click "Enable" item to use this function)

WARRANTY

The SELLER warrants the **HUB-66U 6-Port RS-232/422/485 USB-to-serial converter** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. **Also, the technical information contained herein regarding the HUB-66U features and specifications is subject to change without further notice.**