# TC-UR24 USB-Serial Adapter
# Hardware Manual

## Hardware Introduction:

The TC-UR-series adapter is a tool to help users link via PC USB port. Either the USB-to-PLC (RS232/422/485) or USB-to-Serial port system can use the TC-UR- adapter to link with.

The following description is the TC-UR- adapter hardware introduction:

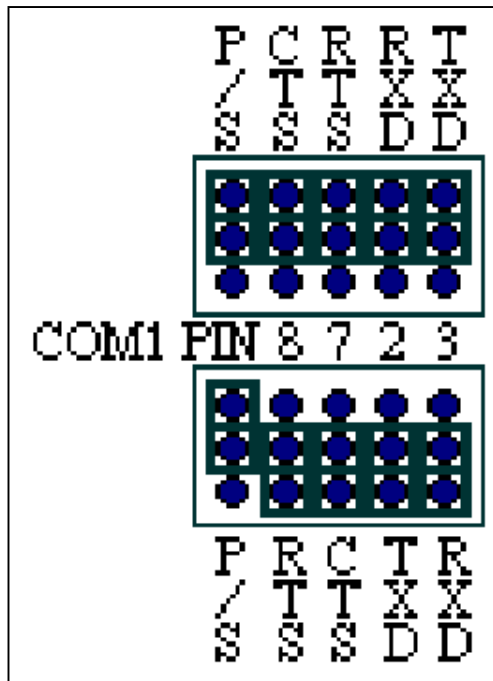<1> All-in-One Type:    TC-UR24
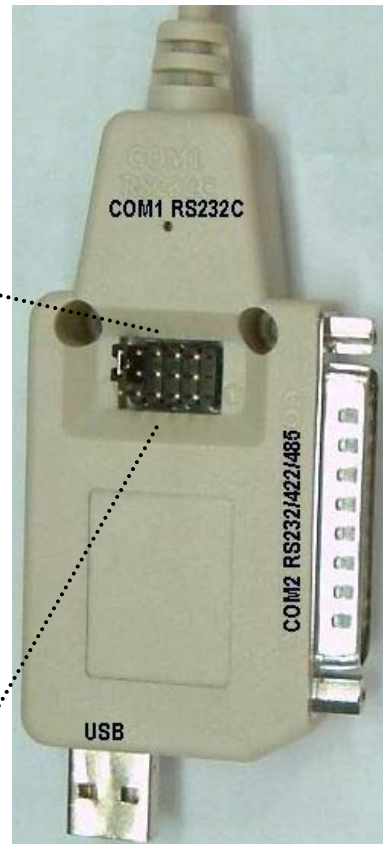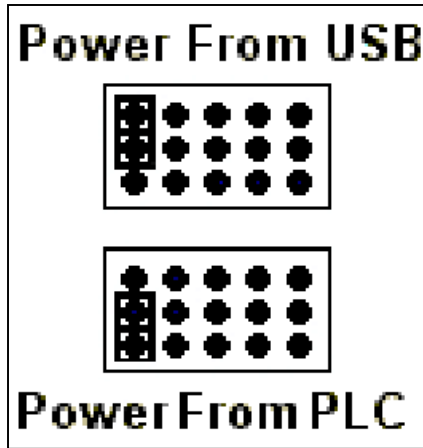


<2> Soli-PLC Type:



For Mitsubishi PLC usage          For Siemens S7-200 PLC usage

# DIP Switches Introduction:

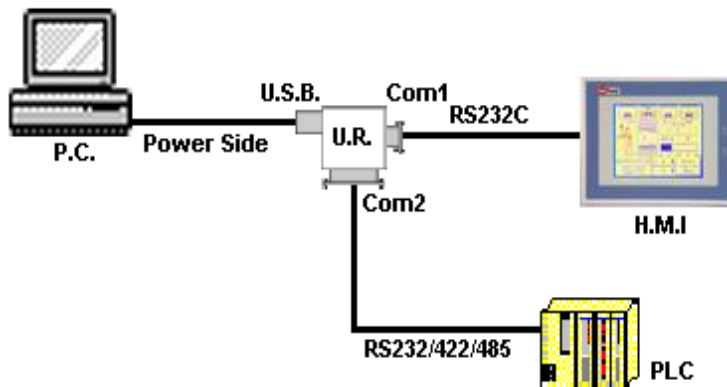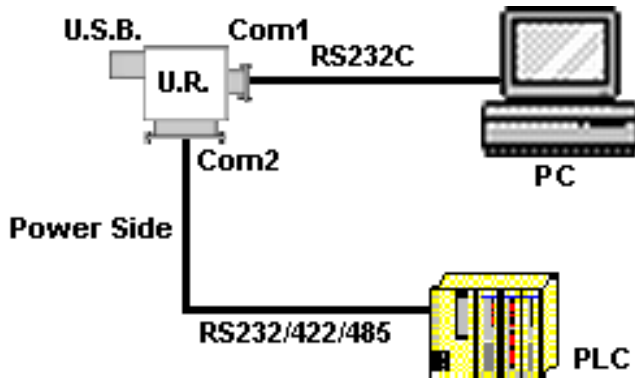The following table is the DIP switches definition of the TC-UR- adapter:

# Connecting System:

If you want to use the TC-UR- adapter to link with other devices, there are several samples of connecting system showing below for your reference:

**<1> All-in-One Type:**

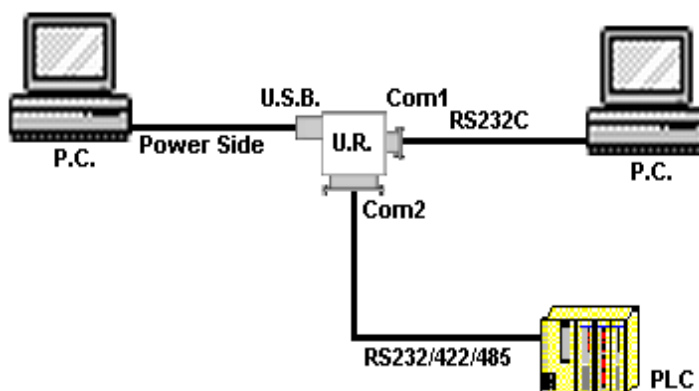    a. PC(USB) to COM2 (RS232/422/485): As a PLC programming cable.

    b. PC(USB) to standard serial port COM1(RS232C):

       (1) Reserve as an USB-to-Serial Adapter.

       (2) Reserve as an HMI download cable (For GD17 & PWS using)



    c. PC(COM1) to COM2 (RS232/422/485) PLC: As a PLC monitoring cable.



    d. PC(USB) to PLC(COM2) and PC(COM1) as a command catching cable --- For R.D. engineer debug using.

# Pin Assignments:   (For All-in-one Type)

## Serial Communication Port1 (COM1 9pin Male)

COM 1 is a serial port that supports RS-232 operation.
The pin assignments of the port are listed in the following table:

| Pin | Function |
|-----|----------|
| 1 | |
| 2 | RS-232 RXD/ RS-232 TXD; jumper selectable |
| 3 | RS-232 TXD/ RS-232 RXD; jumper selectable |
| 4 | |
| 5 | Signal Ground |
| 6 | |
| 7 | RS-232 RTS/ RS-232 CTS; jumper selectable |
| 8 | RS-232 CTS/ RS-232 RTS; jumper selectable |
| 9 | |

## Serial Communication Port2 (COM2 25pin Male)

COM2 is a serial port that supports RS232C, RS-422, and RS-485 operation.
The pin assignments of the port are listed in the following table:

| Pin | Function | Pin | Function |
|-----|----------|-----|----------|
| 1 | Chassis ground | 14 | RS-422 TXD+ and RS-485 TXD/RXD+ |
| 2 | RS-232 TXD | 15 | RS-422 TXD- and RS-485 TXD/RXD- |
| 3 | RS-232 RXD | 16 | RS-422 RXD+ |
| 4 | RS-232 RTS | 17 | RS-422 RXD- |
| 5 | RS-232 CTS | 18 | (no function) |
| 6 | Function as DSR | 19 | (no function) |
| 7 | Signal ground | 20 | Function as DTR |
| 8 | Function as CD | 21 | (no function) |
| 9 | (no function) | 22 | Function as RI |
| 10 | (no function) | 23 | RS-422 RTS+ |
| 11 | (no function) | 24 | RS-422 RTS- |
| 12 | RS-422 CTS+ | 25 | 5V input jumper selectable |
| 13 | RS-422 CTS- | | |

**<2> Soli-PLC Type:**

    a.  PC(USB) to single PLC(COM1): As a PLC programming cable for single PLC.

    b.  PC(USB) to standard serial port RS232C (COM2): Reserve as an USB-to-Serial Adapter.