

How to Use the USB-Uart Converter

Applicable Model: 07301

Use as USB-Uart Converter

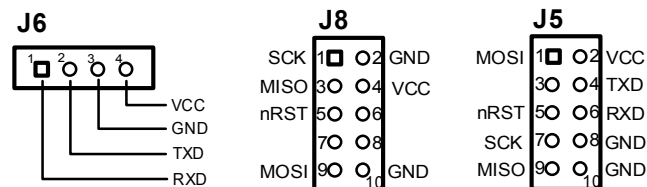
1. Install Driver

For Windows a driver is needed to use this converter. The driver creates a virtual COM port in PC when the converter is inserted into a USB port. For MAC and Linux driver is not required. The Windows driver can be downloaded at <http://www.reursion.jp/avr/cdc/download.html> or JYE Tech website www.jyetech.com.

2. Connect

To connect to PC you need an USB cable with a miniUSB 5-pin connector at one end. This is a standard USB cable for many popular digital devices like cell phones and digital cameras. It can also be purchased at www.jyetech.com (PN: 603-07301) if you can't find one.

For connection to target board either J5 or J6 can be used. Please see drawing below. The good thing is the pin arrangement of TXD (output coming out of the board) & RXD (input going into the board) for J5 and J6 is complementary.

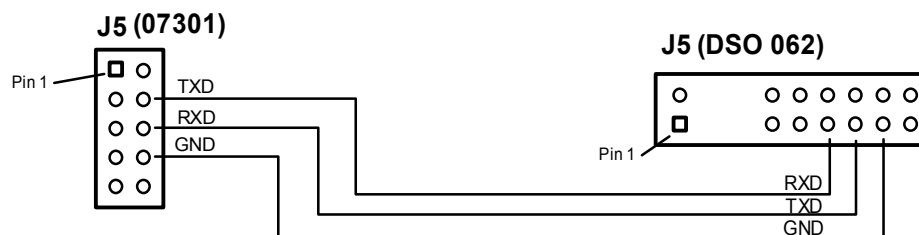


3. Verify

It is always a good idea to verify serial connection by looping back. After connecting USB cable with the converter short TX pin and RX pin at J6 (or J5) to see if anything sent from PC is echo back to screen. If everything sent are correctly echoed then the converter is working.

Use with JYE Tech DSO 062

DSO 062 needs a serial converter to connect to PC. This USB-Uart converter is idea for this purpose. Their connection is shown in the drawing below. Only three connections are needed. Please note that TXD at one end is connected to RXD at the other end, and vice versa.



Use as a General AVR Experiment Board

1. Program the on-board MCU

To program the on-board MCU either J5 or J8 can be used depending on programmer used. Please remember short the jumper "SELF PROG" to do programming.

2. Using separate power supply

The board can be powered from USB. But it can also be powered from other separate power supply without connecting to USB. To do so simply install a low cost common regulator 78L05 (TO-92 package) at location U2 and power the board from connector J9 (or J7). This way the board can accommodate power supply voltage range as wide as 7 – 20V.

Change the Board Into AVR USB Programmer

The board can be easily changed into an AVR USB programmer by following the steps below.

1. Remove resistor R8
2. Flash the MCU with USBASP firmware (available at <http://www.fischl.de/> or www.jyotech.com)

Revision History

Version	Date	Descriptions
01	2010.03.31	First created
02	2010.12.15	Added connector drawings.