

AN02-R18XL Setup For Square-1 RS232 Projects

Description

This appnote discusses how to setup **Rapid18XL** series PIC prototyping boards for RS232 experiments discussed in the **Serial Communications** book published by **Square 1 Electronics**.

Specifically, it covers the setup required for the bit-banged RS232 applications found in chapter 5 of that book.

To purchase a copy of **Serial Communications** for yourself visit: www.sq-1.com (website for **Square 1 Electronics**). As its title implies this book covers a variety of serial data transfer topics including RS232, SPI, I2C, PIC UART usage, etc...

This appnote makes the assumption that you have purchased a **Rapid18XL** prototyping board as a kit with the 232 option (PN **R18XL-232**) and are using a straight-through wired DB9 M-F serial cable (PN **DB9MF**) to attach the board to your PC (no null modem cable required).

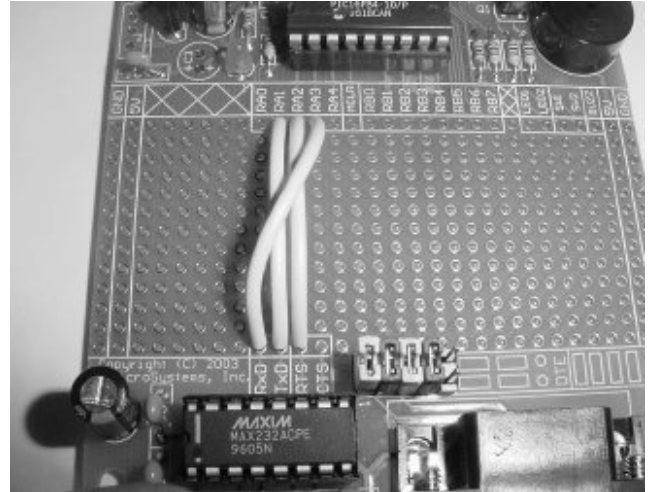
JU1 Jumper Setting:

To attach to a PC, the jumper block should be setup in the DCE configuration described in the Rapid18XL user manual (available for download on our website) and pictured in the right column.

Required Wiring:

You will need to install 3 jumper wires between the RS232 interface on the bottom of the board to the PIC on the top. Solder a wire between the **RA1** pin to **TxD** pin, another between the **RA3** pin to the **RxD**

pin, and a final wire between the **RA2** pin to the **RTS** pin. See completed wiring and jumper settings in the picture below:



Ok, the Square 1 Electronics book describes connecting the RA2 pin to the DTR pin, but they also require you to use a null modem cable. By hooking up **RA2** to **RTS** as described above, and jumpering **JU1** as **DCE** you get the same setup.

To do the interrupt driven projects from this book, attach an additional jumper wire between **RA3** and **RB0**—this allows the PIC to be interrupted upon activity on the **RxD** line.

These setups should get you through the RS232 PC to PIC projects described in Square 1's **Serial Communications** book.

Contact Us

We maintain a website where you can get information on our products, obtain literature, and download support files. Visit us online at:

www.dhmicro.com

Email your technical support questions to support@dhmicro.com. We try to respond to your questions within an hour if it is received Monday through Friday between the hours of 8am to 5pm (Mountain Time).

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