

## USB to RS-232 Converter Cables User's Guide

The USB to RS-232 converter cable (part number 20-151-0178) enables you to use Rabbit's serial programming cable via a USB port on your laptop or PC.

There is a *USB to RS-232 Converter Cable User's Manual* on the *miniCD* included with the converter cable that describes the software installation wizard steps for the various Windows operating systems. Insert the *miniCD* in your CD-ROM drive, open the User's Manual, and locate the steps for the Windows operating system on your PC or laptop. A setup wizard will appear when you connect the converter cable to the USB port on your PC or laptop. Note that the drivers may install automatically if you have already used another USB device, in which case no setup wizard will appear.

With the board or RabbitCore module assembled as described in their *Getting Started* instructions, connect the DB9 serial connector on the programming cable to the male DB9 connector on the converter cable and start Dynamic C.

- Determine which COM port was assigned to the USB programming port. On your laptop or PC, open **Control Panel > System > Hardware > Device Manager > Ports** and identify which COM port is used for the USB connection. In Dynamic C, select **Options > Project Options**, then select this COM port on the **Communications** tab, then click **OK**. You may type the COM port number followed by **Enter** on your computer keyboard if the COM port number is outside the range on the dropdown menu.
- Using **Options > Project Options** select "Use USB to Serial Converter" under the **Communications** tab. Click **OK**.

If you purchased your USB to RS-232 converter cable after September, 2007, there is an additional step if you are using the converter cable with boards and RabbitCore modules based on the Rabbit 2000 and Rabbit 3000 microprocessors with Dynamic C v. 9.52 or earlier.

- Using **Options > Project Options** *uncheck* "Enable Processor verification" under the **Communications** tab. Click **OK**. This step should correct the target communication error "**No Rabbit Processor Detected.**"

If Dynamic C still reports a target communication error such as "**No Rabbit Processor Detected.**" when you attempt to compile and run a program, it is likely that the wrong USB drivers were installed. This tends to happen with Windows XP especially when you have a network connection

from which the setup wizard could inadvertently select the wrong drivers automatically. Follow these steps to install drivers that will work.

1. Unplug the USB to RS-232 converter cable from the PC or laptop USB port.
2. Download FTDI's driver installer program at [www.ftdichip.com/Drivers/CDM/CDM%202.02.04.exe](http://www.ftdichip.com/Drivers/CDM/CDM%202.02.04.exe). If this driver is no longer available, FTDI's latest driver installer executable should always be available via a link from their Web page at [www.ftdichip.com/Drivers/VCP.htm](http://www.ftdichip.com/Drivers/VCP.htm).
3. Run the **CDM 2.02.04.exe** (or later) installer program that you just downloaded. Remember to exit the installer when it is done.
4. Plug the USB to RS-232 converter cable back into the PC or laptop USB port.
5. Now compile and run the program.

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