



GETTING STARTED

RIO Programmable I/O Kit

The RIO Programmable I/O Kit is intended to demonstrate how to expand an embedded control system design by adding additional I/O and other features. The Kit provides a Prototyping Board with a Rabbit I/O chip already installed and configurable header locations to allow you to develop your own application using the Dynamic C function calls and sample programs included with the Kit.

Application Kit Contents

The RIO Programmable I/O Kit contains the following items:

2 CD-ROMs — **Dynamic C[®]** with complete product documentation on disk, and supplemental CD with sample programs and information related to the RIO Programmable I/O Kit.

RCM4110 module.

Rabbit RIO Prototyping Board.

Universal AC adapter, 12 V DC, 1 A (includes Canada/Japan/U.S., Australia/N.Z., U.K., and European style plugs).

10-pin header to DB9 programming cable with integrated level-matching circuitry.

Getting Started instructions.

Plastic and metal standoffs with 4-40 screws.

A bag of jumpers and jumper wires for use on the Prototyping Board.

Rabbit 4000 Processor Easy Reference poster.

Registration card.

Visit our online Rabbit store at www.rabbit.com/store/ for the latest information on peripherals and accessories that are available for the Rabbit RIO chip.

Installing Dynamic C[®]

Insert the CD from the RIO Programmable I/O Kit in your PC's CD-ROM drive. If the installation does not auto-start, run the **setup.exe** program in the root directory of the Dynamic C CD. Install any Dynamic C modules after you install Dynamic C.

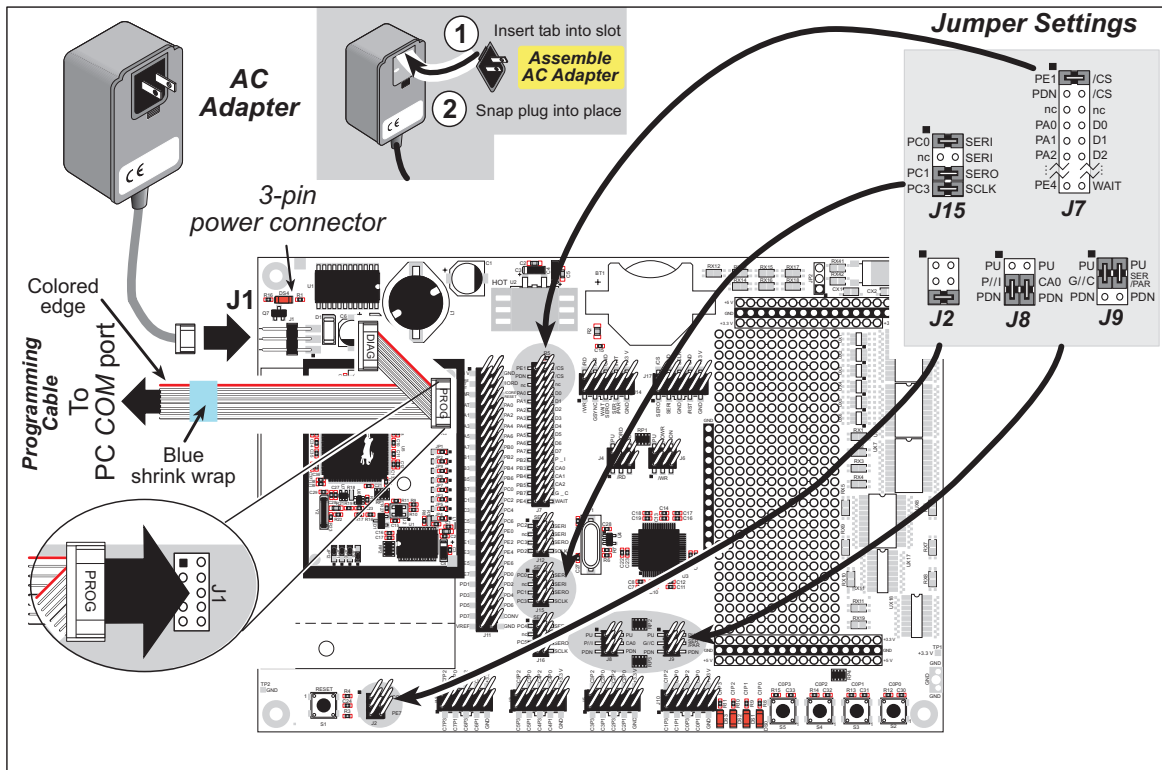


Figure 3. Prototyping Board and Programming Cable Setup

NOTE: Be sure to use the programming cable (part number 101-0542) supplied with the RIO Programmable I/O Kit—the programming cable has blue shrink wrap around the RS-232 converter section located in the middle of the cable. Programming cables with red or clear shrink wrap from other Rabbit Semiconductor kits are not designed to work with RCM4110 modules.

Connect the other end of the programming cable to a COM port on your PC.

NOTE: Some PCs now come equipped only with a USB port. It may be possible to use an RS-232/USB converter (Part No. 540-0070) with the programming cable supplied with the RIO Programmable I/O Kit. Note that not all RS-232/USB converters work with Dynamic C.

5. Connect Power

Once all the other connections have been made, you can connect power to the Prototyping Board.

First, prepare the AC adapter for the country where it will be used by selecting the appropriate plug. The RIO Programmable I/O Kit presently includes Canada/Japan/U.S., Australia/N.Z., U.K., and European style plugs. Snap in the top of the plug assembly into the slot at the top of the AC adapter as shown in Figure 3, then press down on the plug until it clicks into place.

Connect the AC adapter to 3-pin header J1 on the Prototyping Board as shown in Figure 3 above. The power connector may be attached either way as long as it is not offset to one side—the center pin of J1 is always connected to the positive terminal, and either edge pin is ground.

Plug in the AC adapter. The power LED on the Prototyping Board above the power connector at J1 should light up. The RCM4110 and the Prototyping Board are now ready to be used.

NOTE: If you need to reset the RCM4110, disconnect, then reconnect the power supply.

