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Technical Support

If you have questions about your controller or need technical support, contact Comtrol using one of the following methods.

Corporate Headquarters:

- email: **support@Comtrol.com**
- FAX: (612) 631-8117
- Toll free: (800) 926-6876
- Phone: (612) 631-7654
- BBS: (612) 631-8310 (for device driver updates or technical support)

Note: *The BBS supports modem speeds up to 28.8 Kbps with 8 bits, and no parity.*

Comtrol Europe:

- FAX: +44 (0) 1 869-323-211
- Phone: +44 (0) 1 869-323-220
- BBS: +44 (0) 1 869-243-687

Comtrol has a staff of hardware and software engineers, technicians, and managers available to help you.

Fourth Edition July 19, 1995

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RocketPort® MultiPort Serial Boards

RocketPort® 8

Hardware Reference Card

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Introduction

The RocketPort multiport serial controller series fits into a 16-bit ISA slot of a personal computer. The RocketPort series uses a 36 MHz processor specifically designed to process asynchronous serial communications, thereby maximizing performance and eliminating bottlenecks.

The RocketPort series uses Application Specific Integrated Circuits (ASICs) technology to replace most hardware components, including:

- The processor
- Serial controller
- Bus interface logic and other miscellaneous logic

The RocketPort series is I/O mapped eliminating memory mapping conflicts.

The RocketPort series supports RS-232 or RS-422 mode and connects easily to an interface box.

You can install up to four RocketPort controllers into one PC. You can install any combination of the series, which includes the following:

- 4-port model (RocketPort 4 or RocketPort 4J; the RocketPort 4J does not require an interface box)
- 8-port model (RocketPort 8 or RocketPort 8J; the RocketPort 8J does not require an interface box)
- 16-port model (RocketPort 16)
- 32-port model (RocketPort 32)

The RocketPort series is easy to install and configure using the installation documentation for the RocketPort device driver for your operating system.

Specifications

The following tables illustrate RocketPort 8 conditions and specifications.

Conditions

Condition	Value
Air temperature: System on System off	 0 to 70°C -65 to 150°C
Humidity (non-condensing): System on System off	 8% to 80% 20% to 80%
Altitude	0 to 10,000 feet
Heat output	25.2 BTU/Hr
Mean Time between Failures	61.4 years

Specifications

Topic	Specification
I/O ports/expansion slot	8
Number of RocketPort controllers/system	4
Interfaces	RS-232 Optionally, RS-422
Interrupt	None, 3, 4, 5, 9, 10, 11, 12, and 15

Continued

Specifications (Continued)

Topic	Specification
Control by device driver: Baud rate Data bits Stop bits	 50 to 230.4 KB 7 or 8 1 or 2
Power requirements: +5 VDC +12 VDC -12 VDC	 4.5 W 1.1 W 1.8 W
Current consumption: +5 VDC +12 VDC -12 VDC	 900 mA 92.8 mA 148 mA
Bus interface	ISA
Dimensions	8.1" by 4.2"

Electromagnetic Compliance

Topic	Specification
Canadian EMC requirements	Yes
EN55022 Class A	Yes
EN50082: 801-2, ESD 801-3, RF 801-4, FT	Yes
FCC Class A certification	Yes
Surge protection	Meets standard EIA-232-D and provides ESD surge protection exceeding 2,000 V per MIL-Std-883C method 3015.

Safety Compliance

Topic	Specification
UL Recognized	Yes

Setting the DIP Switch

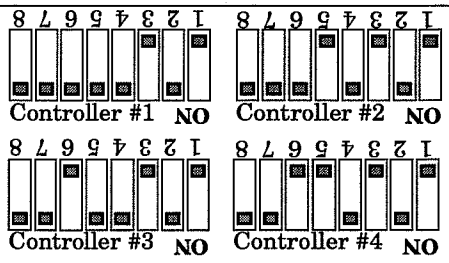
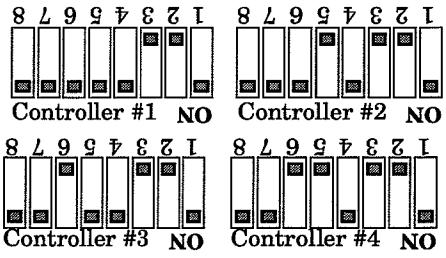
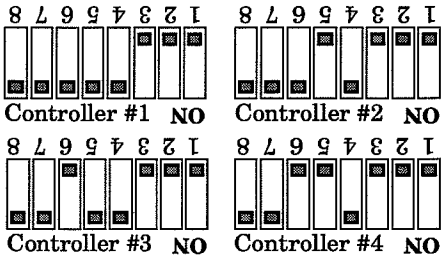
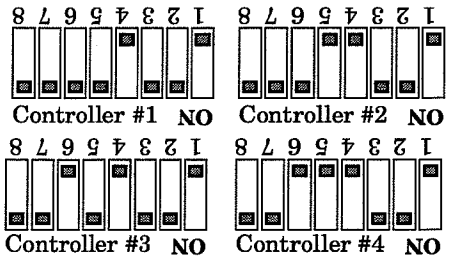
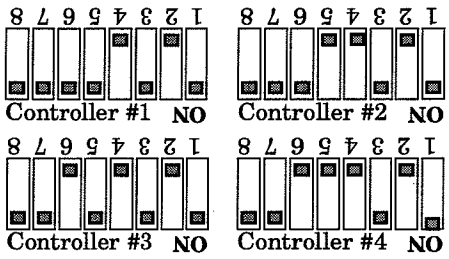
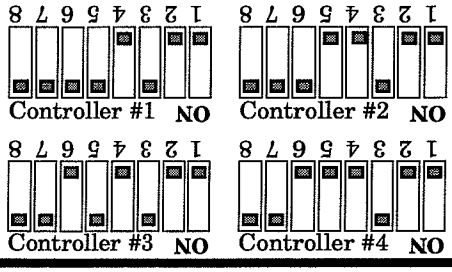
The following table is provided for your information only. The device driver documentation provides controller installation procedures and advises you how to set the DIP switch for your specific installation

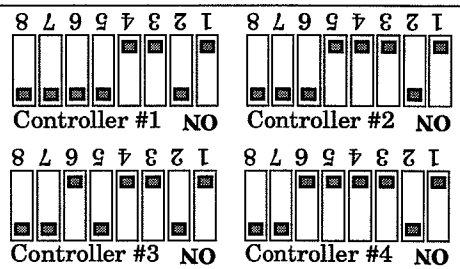
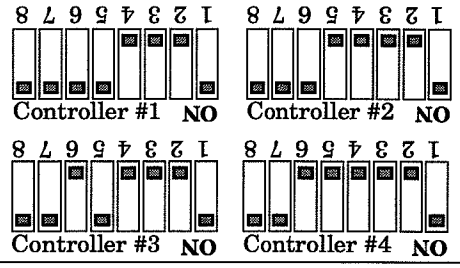
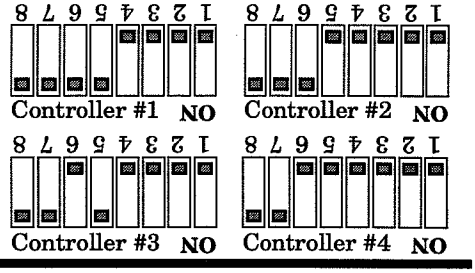
You can use the following table to set the DIP switch, if you did not receive software documentation for some reason or for reference purposes.

For the first controller, select a 68-byte I/O address range. For subsequent controllers, select a 64-byte range.

RocketPort controllers use I/O address ranges at 400 hexadecimal (hex) intervals above the I/O range. Most peripherals use I/O address ranges between 0 and 3FF hex. If you have peripherals installed above 400h, you may experience an I/O conflict. The first controller determines the settings for additional controllers.

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Controller #1 I/O Address Range	DIP Switch Settings Controller #1 determines other controller settings
100 - 143 hex	
140 - 183 hex	
180 - 1C3 hex (Default)	
200 - 243 hex	
240 - 283 hex	
280 - 2C3 hex	

Controller #1 I/O Address Range	DIP Switch Settings Controller #1 determines other controller settings
300 - 343 hex	
340 - 383 hex	
380 - 3C3 hex	

Installing the Controller

Use the following procedure to install the controller, after you set the I/O address on the DIP switch.

1. Turn the power switch for the system unit to the OFF position.
2. Remove the system unit cover.
3. Select a slot to install the controller.
4. Insert the controller in the expansion slot, make sure that it is properly seated.
5. Attach the controller to the chassis with the expansion slot screw.
6. Replace the cover on the system unit.
7. Attach the male end of the RocketPort cable to the controller and the female end to the connector on the interface box labeled *Host*.
8. Connect the peripherals to the interface box.

   If you need more information on this topic, see the following discussion.

After configuring and installing the controller and connecting the peripherals, you can install the custom software for your system.

Attaching the Peripherals

This discussion assumes that you have configured and installed the RocketPort 8 controller and software using one of the following:

- Installation documentation shipped with the RocketPort device driver diskette.
- Documentation downloaded from the Comtrol BBS with a copy of the device driver.

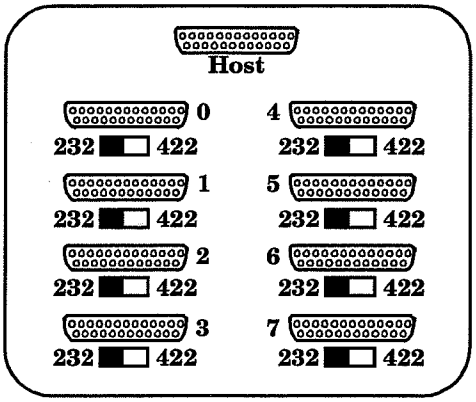
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- In some isolated cases, the previous discussions.

The RocketPort series supports two types of interface boxes:

- An RS-232 mode-only version
- A switch selectable version that supports RS-232 or RS-422 mode

The following figure illustrates the switch selectable interface box that supports RS-232 or RS-422 mode. The RS-232 mode-only interface box is similar, but it is slightly smaller and does not have the switches for selecting different modes.



5.8" x 5.35" x 0.625

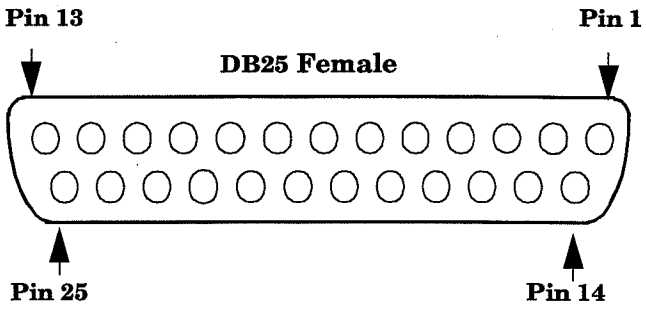
Use the following steps to attach your peripherals:

1. If applicable, set each port to the appropriate communications mode (RS-232 or RS-422) for your peripheral using the slide switch.
2. Connect your peripherals to the interface box. The ports on the interface box are numbered from 0 to 7.
3. Use the following table and figure if you need information about the DB25 connector pinouts.

Connector Pinouts

Pin	RS-232 Signal	RS-422 Signal
1	Not used	Not used
2	TxD	Not used*
3	RxD	Not used*
4	RTS	Not used*
5	CTS	Not used*
6	DSR	Not used*
7	Signal ground	Signal ground*
8	DCD	Not used*
9 through 14	Not used	Not used
15	Not used	RxD+
16	Not used	Not used
17	Not used	RxD-
18	Not used	Not used
19	Not used	TxD+
20	DTR	Not used*
21 through 24	Not used	Not used
25	Not used	TxD-

* All RS-232 signals are present in RS-422 mode.



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