

Scope

This *Reference Card* discusses the interface box that you purchased with your Control™ controller. Use this card to configure ports for RS-232 mode or current loop operation.

Note: The interface box is set to asynchronous RS-232 mode as the default.

Prerequisites

This *Reference Card* assumes that you are familiar with installing equipment for your computer.

The following are required to install this interface box:

- An applicable Control controller
- A Phillips screwdriver to remove the backplate, when configuring current loop mode.
- A probe to move the jumpers during configuration

This *Reference Card* assumes that you have already configured and installed the controller. In addition, it assumes that you have also installed the device driver.

Configuring and installing the interface box is the last step of configuring and installing your Control system.

Specifications

The following table lists specifications for the interface:

Function	Specification
I/O ports	4 or 8 ports, depending on model
Interface	RS-232 and current loop
Default mode	RS-232
FCC Certification	Complies with FCC Class A for section 15 subpart J, conducted and radiated types of interface.
UL recognition	Yes
Dimensions	4-port: 4" x 3.25" x 1.75" 8-port: 4" x 6.25" x 1.75"

Refer to the *Hardware Installation Guide* or *Hardware Reference Card* for specific information for the controller.

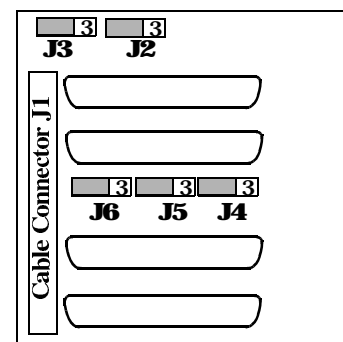
Software specific information and a comprehensive support section can be found in the *Installation Guide* or *Reference Card* for the device driver you ordered.

If you did not order a Control device driver, you may receive a *Programming Guide* that contains programming information for your controller.

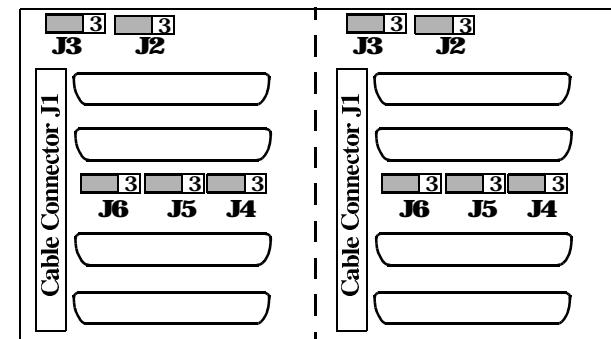
Configuring the Interface Box

If you plan to use RS-232 mode, you can connect your peripherals without configuring the interface box.

If you want to use the interface for current loop operation, you must remove the back cover to configure the interface box. Use the following figures and table to configure your interface box for current loop operation.



4-Port Model



8-Port Model

Note: The figures illustrate RS-232 mode settings. The jumper pins are numbered 1, 2, and 3 from left to right with the cable towards your body.

Port	Jumper	RS-232 (Default)	Current Loop
1	J2	[3]	[1]
2	J3	[3]	[1]
3*	J5	[3]	[1]
	J6	[3]	[1]
4	J4	[3]	[1]
5	J2	[3]	[1]
6	J3	[3]	[1]
7*	J5	[3]	[1]
	J6	[3]	[1]
8	J4	[3]	[1]

* To avoid peripheral damage, make sure that your peripherals require +12V on Pin 9 and -12V on Pin 15 for RS-232 mode or -12V on Pin 15 for current loop operation.

[1] Means that the jumper is installed over pins 2 and 3.

[3] Means that the jumper is installed over pins 1 and 2.

Installing the Interface Box

Use the following procedure to install the interface unit:

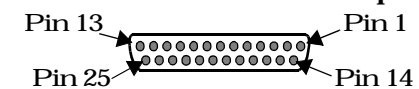
1. Turn the system power off.
2. Plug the interface box cable into the controller's connector.
3. Manually twist the plug's thumbscrews into the connector, being careful not to overtighten.

If you need pinout information for the cable connector that attaches to the controller, see the documentation that came with the controller.

Attaching the Peripherals

Use the following steps to attach your peripherals:

1. With the system power still off, connect your peripherals to the interface box. The ports on the interface box are numbered from 1 to 4 or 1 to 8.
2. Use the following figures and table if you need information about the DB25 connector pinouts.



RS-232	Pin	Current Loop	Pin
Not used	1	Not used	1
Transmit Data (TxD)	2	Signal Ground (GND)	7
Receive Data (RxD)	3	+ Transmit Current Loop Return	9
Request to Send (RTS)	4	- Transmit Current Loop Return	11
Clear to Send (CTS)	5	-12V	15
Data Set Ready (DSR)	6	+ Receive Current Loop Return	18
Signal Ground (GND)	7	- Receive Current Loop Return	25
Data Carrier Detect (DCD)	8		
+12V	9		
-12V	15		
Data Terminal Ready (DIR)	20		
Ring Indicator (RI)	22		

Shielding Cables

The interface falls within the limits for a Class A computing device established by the FCC. To comply with these limits, the serial cables used to connect the controller to external devices should be shielded.

The shield should be connected to a metal or metallized connector shroud on each end of the cable. It is not necessary to connect the chassis ground pin of the DB25 connector.

Warranty and Technical Support

Control Corporation provides:

- A 30-day money-back guarantee
- A five year limited warranty (US and Canada)
- Support for your Control controller for 5 years from the date of purchase.

Check with your distributor for guarantee conditions in countries other than the U.S.A. and Canada.

Limited Warranty

Control Corporation, Inc. ("the Company") and its affiliate (Control Europe, Ltd.) make no representations or warranties, expressed or implied including warranties of merchantability, noninfringement, and fitness for a particular purpose except as provided below

Hardware

Control warrants to the original purchaser that its controller is free of defect in design, materials and workmanship for five years from the date of delivery of a new controller. Control (or its authorized repair center), at its option, will repair or replace, at the business location of Control each part of the controller which is proven to the satisfaction of Control to have been defective in design, material or workmanship.

This warranty shall not apply to any part of the controller which, in the judgment of Control, has been subjected to misuse, negligence, alteration, accident, improper maintenance, or damage by excessive physical or electrical stress. Adjustment of the controller, where warning labels and operation manuals warn against such adjustments, will void this warranty.

This warranty is void if the serial number of the controller has been defaced, altered or removed. This warranty does not apply to expendable components such as fuses or bulbs. Repair and replacement parts will be furnished on an exchange basis and may be either reconditioned or new. All replaced parts or controllers become the property of Control.

The sole remedy for breach of warranty shall be repair, replacement, or refund, at the option of Control, of the defective product as provided follows.

Return Procedure

To qualify for the previously discussed warranty, the original purchaser must follow the procedure outlined below:

1. Control must be notified in writing within thirty (30) days of the date that the defect is discovered. Control

will then issue a Return Material Authorization (RMA) number which the purchaser must include with all correspondence and display on the outside of the shipping container when returning the controller.

2. All controllers must be shipped freight and insurance prepaid, in the original shipping container, or in a container providing equal or better protection, with the RMA number displayed on the outside of the container in a prominent manner.
3. A written description of the defect together with a copy of your receipt or other proof of purchase, and the name of the dealer who sold you the Control product, must be shipped with the controller. All defects must be reproducible at Control's location to qualify for this limited warranty. Ship the controller to:

Control Corporation
Distribution/Repair
1791 Buerkle Circle
White Bear Lake, MN 55110

Control will return a controller which qualifies under this warranty, freight and insurance prepaid. Control will repair or replace controllers that do not qualify under the terms of this warranty at the option of the purchaser, in which case the purchaser will pay the cost of repair or replacement, and return freight and insurance.

This limited warranty is in lieu of all other warranties and conditions expressed, implied or statutory including merchantability, fitness for purpose, non-infringement, course of dealing, trade or performance and all other liabilities of Control all of which are hereby disclaimed.

In no event will Control be liable for damages, including lost profits, lost savings or other special, punitive, incidental, or consequential damages arising out of the use of or inability to use the controller, even if Control or an authorized dealer has been advised of the possibility of such damages, or for any claim by any other party. This warranty gives you specific legal rights and you may also have other rights that vary from state to state (U.S.) or in your home country.

Limited Liability

Independent of the warranty or any other agreement between you and Control, regardless of the basis for any claim, neither Control nor anyone else who has been involved in the creation, production, or delivery of this software or hardware shall be liable for any direct, indirect, consequential or incidental damages; Control's maximum liability shall be limited to refund of the purchase price. Some consumer laws may not allow the limitation or exclusion of incidental or consequential damages for consumer products, so the above limitations or exclusions may not apply to you. The price of the materials and programs reflects this allocation of risk.

Technical Support

Control has a staff of support technicians available to help you. U.S. telephone support is available from 8 AM to 6 PM Central time, Monday through Friday (holidays excluded), at the phone number listed below. Before you call, please have the following information available: controller model, interface type, I/O address selection, IRQ used, operating system type and release, device driver release number, and computer make, model, and processor speed.

Control Headquarters

Phone: (612) 631-7654
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Web site: <http://www.control.com>
FTP site: <ftp://ftp.control.com>
telnet: [www.control.com](telnet://www.control.com) (or telnet 204.73.219.7)

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Web site: <http://www.control.co.uk>

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6222

RS-232/Current Loop Interface Reference Card (6222)

Hostess® 4/8
Hostess 550 4/8
Hostess 186 4/8
Smart Hostess 8