

Current Loop Interface Reference Card

Hostess 4/8, Hostess 550 4/8, Hostess 186 4/8, Smart Hostess 8

Scope

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

Note: *The interface box is set to Active Transmit (Tx)/Passive Receive (Rx) as the default.*

Audience

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

Prerequisites

The following are required to install this interface box:

- An applicable Control controller
- Phillips screwdriver to remove the backplate, when configuring current loop mode.
- Optionally, tweezers 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 box.

Function	Specification
I/O ports	4 or 8 ports, depending on the model
Interface	Current loop
Default mode	Active Tx/Passive Rx
Dimensions	4-Port: 4" x 3.25" x 1.75" 8-Port: 4" x 6.25" x 1.75"

If you want information about the controller, refer to the appropriate controller *Reference Card* or *User's Guide*.

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 Active Tx/Passive Rx operation, you can connect your peripherals without configuring the interface box.

If you want to use the interface for any other current loop operation, you must remove the back cover to configure the interface box.

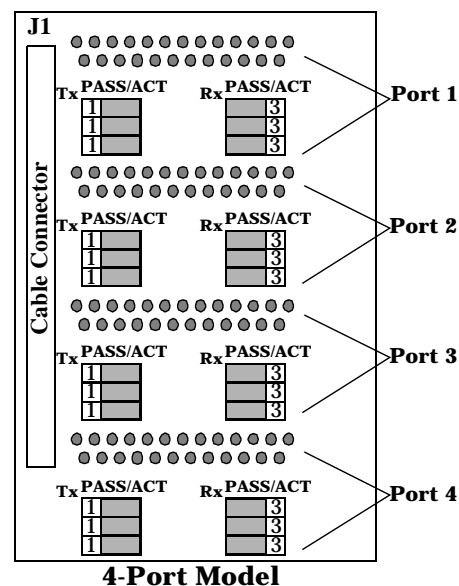
The following are definitions for Active and Passive Tx/Rx:

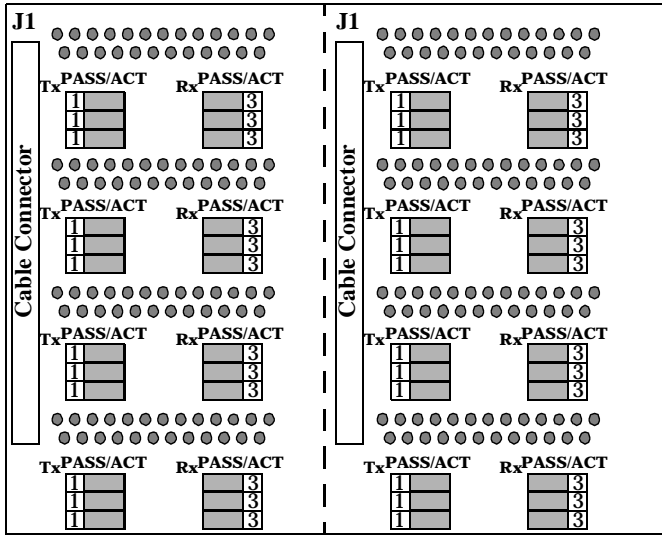
- **Active Tx** - 20mA supplied by a port
- **Active Rx** - 20mA supplied by a port
- **Passive Tx** - 20mA supplied by a device to a port (the transmitter is optically isolated)
- **Passive Rx** - 20mA supplied by a device to a port (the receiver is optically isolated)

Warning: *If you plan to run test software, the interface box must be configured either as Active Tx/Passive Rx or Passive Tx/Active Rx.*

Never install a loopback plug with a port set for Active Tx/Active Rx.

Use the following figures to configure your interface box for current loop operation.





8-Port Model

Note: The figures illustrate Active Tx/Passive Rx settings, which are the default. The jumper pins are numbered 1, 2, and 3 from left to right with the cable towards your body.

The following figure shows how to configure Transmit (Tx) and Receive (Rx) jumpers for either active or passive operation (applies for all of the ports). The shaded areas represent jumpered pins.



Installing the Interface Box

This discussion assumes that you have configured the interface box, if necessary. Use the following procedure to install the interface box:

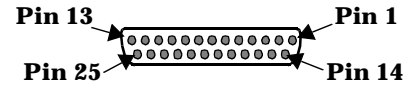
1. Turn the system power off.
2. Plug the interface box cable into the controller's connector.
3. **Manually**, twist the plug's thumbscrews into the connector.

If you need pinout information about the cable connector that attaches to the controller, see the *Hardware Reference Card* or *User's Guide* for your controller.

Attaching the Peripherals

This discussion assumes that you have configured and installed the interface box. 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 figure and table if you need information about the DB25 female connector pinouts.



Pin	Current Loop
9	+ Transmit Current Loop Return
11	- Transmit Current Loop Return
18	+ Receive Current Loop Return
25	- Receive Current Loop Return

Contacting Control

Use one of the following methods to contact Control Corporation.

Corporate Headquarters:

WEB site: www.comtrol.com
email: support@comtrol.com

FAX: (612) 631-8117

Phone: (612) 631-7654

BBS (for driver updates): (612) 631-8310

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

FTP site (for driver updates): <ftp://ftp.comtrol.com>

Control Europe:

email: support@comtrol.co.uk or info@comtrol.co.uk

BBS: +44 (0) 1869 243687

Note: The BBS supports modem speeds up to 14.4 Kbps with 8 bits and no parity.

FAX: +44 (0) 1869 323211

Phone: +44 (0) 1869 323220

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

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