Hostess® and Hostess *550* *4/8-Port* *Hardware Installation Card*

Scope

This *Hardware Installation Card* discusses the following topics for the Hostess and Hostess *550*.

- Installation overview
- Identifying your controller
- Setting the base I/O address and IRQ switches
- Daisy-chaining IRQs
- Installing an upgrade kit
- Installing the controller
- Specifications
- Troubleshooting and placing a support call

The Comtrol web/ftp site contains additional information:

- Signal information for the 100-pin connector on the controller
- Connector information for your interface.
- Building loopback plugs
- Additional device drivers
- Software installation documentation

Note: *Call Technical Support if you require a Hostess Series and Hostess 550 Series Programming Guide.*

Installation Overview

Installation follows these general steps:

1. Set the base I/O address and IRQ switches to unused values for your machine.
2. Optionally, install the upgrade kit.
3. Install the controller board.
4. Configure and attach the interface box, if applicable.

   Note: *See the* ***Interface Reference Card*** *to configure the interface (if applicable).*
5. Attach peripherals to the interface box.

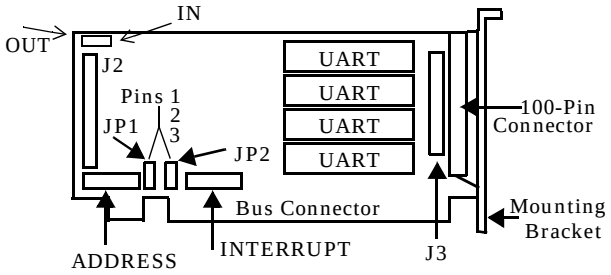
   Note: *You must provide the serial cables to connect the peripheral devices to the controller.*
6. Install the device driver. You may need to download a driver and the software installation documentation at:

   www.comtrol.com or **ftp.comtrol.com**

Identifying Your Controller

The Hostess and Hostess *550* controllers are similar, except for the UARTS they support. The Hostess series supports the 16450 UART, while the Hostess *550* series supports the 16550 UART.

Throughout this document, both products are referred to as the *controller*, unless you need to know specific information regarding a specific model.



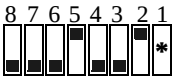
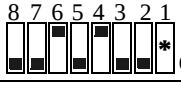
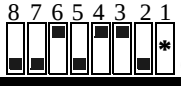
You may need to know the position of the controller's basic parts, such as:

- The J2 and J3 sockets, which are used to mount a 4-port module, creating an 8-port controller.
- The JP1 jumper, which sets the controller to a 4-port controller or to an 8-port controller.
- The JP2 jumper, which permits you to set IRQ 7.
- The ADDRESS switch, which sets the I/O address that you want to use.
- The INTERRUPT switch, which sets the IRQ and the mask/poll register.
- The Out and In headers for daisy-chaining multiple controllers

Setting the Base I/O Address

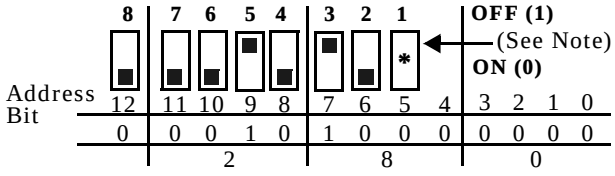
Use the following table to set the base I/O address. Make sure that you select unused address in your system. If you are unsure what settings are available, refer to your system documentation.

Note: *The default I/O address from the factory is 280.*

Base Address	ADDRESS Switch Setting	4-Port Address Range	8-Port Address Range
240		240 - 25F hex	240 - 27F hex
280 Default		280 - 29F hex	280 - 2BF hex
500		500 - 51F hex	500 - 53F hex
580		580 - 59F hex	580 - 5BF hex

***** *Switch 1 must be OFF for an 8-port controller and ON for a 4-port controller when using these addresses.*

For additional base I/O address selections, use the following figure to calculate unlisted addresses.

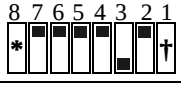
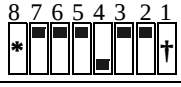
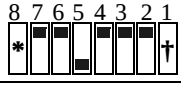
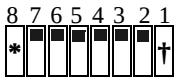
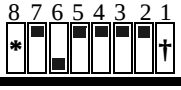


***** *Switch 1 must be OFF for an 8-port controller and must be decoded for a 4-port controller.*

Setting the IRQ

Use the following table to set your controller to an unused IRQ value for your system.

Note: *The default IRQ setting from the factory is 3, which may conflict with COM2 and COM4.*

IRQ	INTERRUPT	IRQ	INTERRUPT
2/9††		**3** Default	
4		5	
7	 **Note:** *You must also move the jumper on JP2 to Pins 2 and 3.*		
10		11	

***** *Switch 8 must be OFF for an 8-port controller and ON for a 4-port controller.*

† *Switch 1 sets mask enable.*

*Set Switch 1 to **OFF** for the following operating systems:*

- *DOS*
- *OS/2®*
- *QNX®*
- *Windows® 95, Windows 98, and Windows NT*

*Set Switch 1 to **ON** for the following operating systems:*

- *AT&T®*
- *INTERACTIVE® 386/ix*
- *Microport V/386*
- *SCO® Xenix®*
- *SCO Unix® and SCO OpenServer™*
- *SunOS™*

†† *IRQ2 is the hardware interrupt, while IRQ9 is the software interrupt.*

The mask register is an 8-bit register that allows you to disable interrupts for each port individually or in any combination. Any port interrupt can be masked or disabled by writing a 0 to the corresponding bit in the mask register. The interrupt is enabled by writing a 1.

- If position 1 of the interrupt switch is ON, the mask register is enabled. This allows you to individually mask the interrupts received from the I/O ports.
- If position 1 is OFF, the mask register is disabled and the interrupts can not be masked individually.

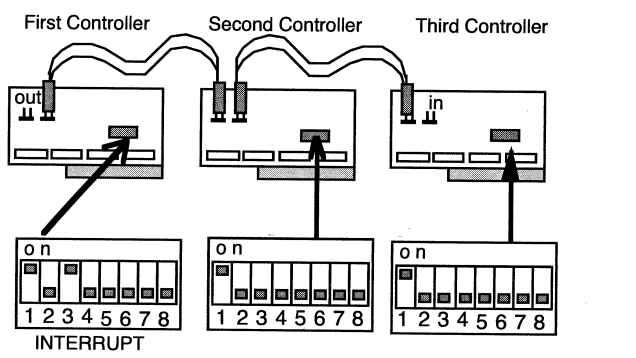
Daisy-Chaining Controllers

If you have more than one controller installed in your system, you can choose a different interrupt line for each controller by making a different selection on each INTERRUPT switch.

To use the same interrupt line for all of the controllers in your system, perform the following steps:

1. Set the IRQ on the first controller.
2. Connect the controllers together using daisy-chain connections. The daisy-chain connections are made from ribbon cable, available on request from Comtrol.

Note: *You can daisy-chain up to four Hostess or Hostess 550 series controllers.*



Installing the Upgrade Kit

To upgrade an existing 4-port controller to an 8-port controller, use the following steps.

1. Purchase an upgrade kit and an 8-port interface from your distributor or from Comtrol Corporation.
2. Turn off your system.
3. Remove the 4-port controller from your system.
4. Move JP1 from Pins 2 and 3 to Pins 1 and 2.
5. Set Switch 1 on the ADDRESS switch block to the OFF position.
6. Set Switch 8 on the INTERRUPT switch block to the OFF position.
7. Connect the module to the controller.
   a. Align the module's P2 connector to the controller's J2 socket, and P3 to J3.
   b. Press down, putting pressure directly over the module's connectors until it snaps into place.
8. Replace the controller in your system. Attach the retaining bracket to the system unit chassis.
9. Plug the interface cable into the 100-pin connector.
10. Connect your peripherals to the 8-port interface. If you need information for building cables, see the *Interface Reference Card* that came with the interface.
11. Reinstall the device driver.

Installing the Controller

If you have not done so already, set the switches on the controller. If the switches have already been set, use the following steps to install the controller.

Warning *Static electricity may damage the controller. When touching and installing the controller, wear a grounding strap. Hold the controller only by its edges or the mounting bracket.*

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. Remove the expansion slot cover.
5. Insert the controller in the expansion slot, making sure that it is properly seated.
6. Attach the controller to the chassis with the expansion slot screw. Repeat Steps 3 through 5 for each controller.
7. Replace the cover on the system unit.

Note: *If installing in an EISA system, you may need to use the EISA configuration files on the diskette. See the* ***readme*** *file in the EISACFG directory for configuration information.*

Once the controller or controllers are installed, you can connect your peripherals.

Specifications

The following tables list the controller's conditions and specifications.

Environmental Condition	Value
Air temperature: System on System off	 0 to 40°C -20 to 85°C
Humidity (non-condensing): System on System off	 8% to 80% 20% to 80%
Altitude	0 to 10,000 feet

Electromagnetic Compliance	Status
Emission: Canadian EMC requirements CISPR-22/EN55022 Class A FCC PART 15: Class A	Yes
Immunity: EN50082: 801-2 ESD, 801-3 RF, 801-4 FT	Yes
UL Recognized	Yes

Card	Specification
Baud rate:	50 to 115.2K baud
Bus interface	ISA
Data bits	5, 6, 7, or 8
Current consumption: 4-Port 8-Port	*+5V* / *+12V* / *-12V* 200 mA / 50 mA / 80 mA 250 mA / 105 mA / 160 mA
Heat output: Hostess 4-port Hostess 8-port Hostess *550* 4-port Hostess *550* 8-port	 6.7 BTU/HR 15.1 BTU/HR 8.7 BTU/HR 14.9 BTU/HR
Note: *Interface heat output is approximately 25% of this total.*	
Hostess cards/system	4
I/O port address default	280 hex
I/O ports/expansion slot	From 4 to 8
Interface	See the documentation that came with your Interface Box.
Interrupt (IRQ) Hardware selectable	2/9*, 3, 4, 5, 10, and 11 Optionally, IRQ7 with JP2 Default: 3 * IRQ9 is the software interrupt for IRQ2.
Mean time between failures (MTBF): 4-port 8-port	 38.6 years 18.3 years
Modem control *Depends on the interface.*	RTS, CTS, DSR, DCD, DTR, RI
Stop bits	1, 1.5, or 2
Surge protection	Provides ESD surge protection exceeding 10 KV.
UART: Hostess Hostess *550*	 16C450 16C550

Troubleshooting

If installation fails or you are trying to resolve a problem, you should try the following before calling the Comtrol technical support line:

- Reinstall the controller and device driver, selecting a different I/O address range and IRQ.
- Check the signals between your peripherals and the interface to verify that they match.
- Check to make sure the cables are connected properly.
- Reseat the controller in the slot (power must be OFF).
- Reboot the system.

If you have not been able to get the controller operating:

1. Turn off your PC.
2. Boot the PC from the diagnostic diskette and follow the instructions.

Technical Support

Comtrol has a staff of support technicians available to help you. Before you call, please have the following information available:

Item	Your System Information
Model number	
Serial number	
Interface type	
I/O address and IRQ	
Operating system type and release	
Device driver version	
PC make, model, and speed	
List other devices in the PC and their addresses	

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