# Hardware Reference Card

#### Hostess *550* 2

#### Scope

This *Reference Card* discusses the following topics for the Hostess and Hostess *550*:

- Identifying the controller
- Configuring the controller for COM mode
- Installing the controller (COM mode)
- Troubleshooting and placing a support call

It also provides specifications for the controller and signal information about the DB9 connectors on the controller.

If you want to use the controller in COM mode, use this *Reference Card* to configure and install the controller.

If you plan on using a Comtrol device driver, use the documentation that came with the device driver to configure and install the controller or controllers.

If you plan on using Hostess mode and writing your own device driver, use the *Hostess/Hostess* 550 *Programming Guide*.

#### **Prerequisites**

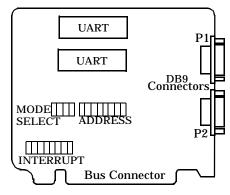
The following are required to use this controller:

- An ISA-based machine with at least one high-density diskette drive, 512K bytes of RAM, and an operating system.
- Serial cables to connect the peripheral devices to the controller.

# **Identifying Your Controller**

The controllers are similar except for the UART that they support. The Hostess series supports the 16450 UART and the Hostess 550 series supports the 16550 UART.

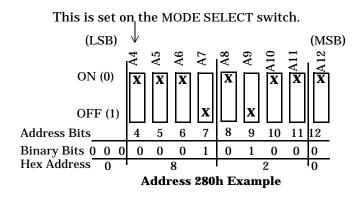
Throughout this card, both controllers are referred to as the controller, unless you need to know specific information about a specific model.



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

- The INTERRUPT switch, which sets the IRQ and the mask/poll register.
- The MODE SELECT and ADDRESS switches, which set the controller's mode (Hostess mode or COM mode) and the I/O base address. The following example provides basic I/O address switch setting information.

**Note:** For IRQ and common I/O switch settings for Hostess mode, see the documentation that came with the device driver.

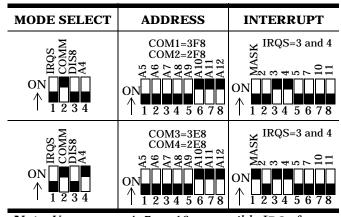


# **Configuring the Controller for COM Mode**

You can set the controller to operate as a COM1/COM2 controller or as a COM3/COM4 controller, which uses standard or nonstandard interrupts. Use the following table to set your controller or controllers to COM mode using standard interrupts.

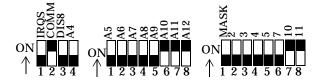
**Note:** Use the documentation that came with the device driver or the Hostess/Hostess 550 Programming Guide to use Hostess mode.

**Table 1. COM Mode Switch Settings** 



**Note:** You can use 4, 7, or 10 as possible IRQs for COM1 and COM3 and 2, 3, 5, or 11 as possible IRQs for COM2 and COM4.

To select nonstandard IRQs, set the MODE SELECT and ADDRESS switches as illustrated in the previous table, but change the interrupt switch (bits 2 through 8) to select the correct interrupts. For example, the following figure illustrates switch settings for a controller with COM1 and COM2 with IRQs of 10 and 11.



It is possible to share interrupts while using the COM address. This is a special mode and custom software should be written to determine which port generated the interrupt (2, 3, 4, 5, 7, 10, or 11).

## **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.

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

## **Specifications**

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

**Table 2. Environmental Conditions** 

Condition	Values
Air Temperature: System on	0 to 70° C
System off	-65 to 150° C
Humidity: System on	8% to 80%
System off	20% to 80%
Altitude	0 to 10,000 feet 0 to 3,048 meters

**Table 3. Controller Specifications** 

Function	Specification
I/O ports/expansion slot	2 ports per slot
Controllers per system	Up to 4 (space and operating system permitting)

**Table 3. Controller Specifications (Continued)** 

Function Specification  Power requirements +5 VDC 214 mA +12 VDC 34 mA -12 VDC 52 mA	
+5 VDC 214 mA +12 VDC 34 mA	
+5 VDC 214 mA +12 VDC 34 mA	
-12 VDC 52 mA	
Heat output 7.2 BTU/HR	
Mean time between failures 71.6 years	
Mean time to repair 5 days	
Interface RS-232	
I/O port address  Set with ADDRESS sw Default set to 0280 ho	
UART	
Hostess 16C450	
Hostess 550 16C550	
Hardware interrupt Set with INTERRUPT	
(Default is 3) switch (IRQ2 through 10, and 11)	5, 7,
Baud rate 50 through 115.2K bit	/sec
Data bits 5, 6, 7, or 8	
Stop bits 1, 1.5, or 2	
Modem control RTS, CTS, DSR, DCD, and RI	DTR,
Bus interface ISA	
Dimensions 4.25" by 5.5"	

#### 9-Pin Connectors Pinout Information

The following figure and table provides detailed information about the 9-pin connectors for the controller. You can use this information if you are building your own interfaces.



**Table 4. DB9 Signals** 

Pin	RS-232 Signal
1	DCD
2	RxD
3	TxD
4	DTR
5	Gnd
6	DSR
7	RTS
8	CTS
9	RI

#### **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 controller connectors to verify that they match.
- Check to make sure the cables are connected properly.
- Reseat the controller in the slot (the power should be off).
- Reboot the system.

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

- 1. Turn off your PC and insert the diagnostic diskette.
- 2. Boot the PC and follow the instructions provided by the diagnostic diskette.

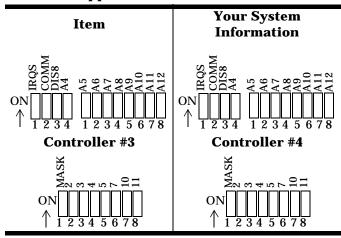
### **Placing a Support Call**

Before you place a technical support call to Comtrol, please make sure that you have the following information. The following table provides you with an area to enter the required information.

**Table 5. Support Call Information** 

Item	Your System Information
Controller type	
I/O address	
Interrupt (IRQ) number	
Operating system type and release	
Device driver release number	
PC make, model, and speed	
List of other devices in	
the PC and their addresses	
List any error messages	
from the system, device	
driver, or diagnostic	
software	
Mark your selections	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SON 1 2 3 4 1 2 3 4 5 6 7 8
Controller #1	Controller #2
ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8

**Table 5. Support Call Information (Continued)** 



After you have gathered this information, contact Comtrol using one of the following methods:

Email: support@Comtrol.com

FAX: (612) 631-8117 (US) or (44) 869-323-211 (UK) Phone: (612) 631-7654 (US) or (44) 869-323-220 (UK)

FTP: ftp.comtrol.com URL: www.comtrol.com

Comtrol supports a BBS that provides device driver updates for you.

BBS: (612) 631-8310

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

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

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