Comtrol

Hostess™ 550 Series
Device Driver for SCO™ UNIX®
Software Installation Documentation

Scope

Use this reference card to install the Hostess® device driver software and controller board hardware. This device driver can support up to four of the following Comtrol Hostess controller boards:

- Hostess *550* 2-port
- Hostess *550* 4-port with 100-pin or RJ45 connectors
- Hostess *550* 8-port with 100-pin or RJ45 connectors
- Hostess *550* 16-port

To use this device driver, you must have the SCO UNIX operating system installed on an ISA- or EISA-bus machine. The installation follows these general steps:

1. Remove existing Comtrol drivers. (Recommended.)
2. Install the device driver.
3. Configure and install the controller board.
4. Configure and attach the interface box (if applicable).
5. Enable the ports on the controller.

Note: For more information, see the hardware documentation for your controller board and interface box.

Removing the Device Driver

Follow these steps to remove an existing device driver:

1. Boot the system, log in as the system administrator to **root**, and invoke the **custom** utility.
2. Select the **Remove** option and press **Enter**.
3. Select **Hostess 550 Device Driver** and press **Enter**.
4. Select the **Hostess 550 Device Driver** package and press **Enter**.
5. Select **Yes** to verify the removal. Press **Enter**.
6. Type **y** to boot the kernel by default. Press **Enter**.
7. Type **y** to rebuild the kernel environment, then **Enter**.
8. The following message is displayed:

   Setting up new kernel environment
   Press any key to continue.
9. Select **Quit** and press **Enter**.
10. Select **Yes** and press **Enter**.

    Note: Make sure that **custom** properly removes the old device driver before performing step 11.
11. At the system prompt, type the following:

    rm /etc/perms/h550   **(Press Enter.)**
12. Reboot your system. The device driver is removed after the kernel is rebooted.

Installing the Device Driver

Two device drivers for the SCO UNIX operating system, **sio** and **pa**, come installed in the system and cannot be removed:

- **sio** (serial I/O device)

  IRQ3 - reserved for the second communications port

  IRQ4 - reserved for the first communications port

- **pa** (parallel I/O device)

  IRQ7

The **sio** driver is configured to use interrupt vectors 3 and 4. You can reserve one of these vectors for the controller only if the corresponding communication port is not installed in your system.

Unless the **pa** driver can be removed from the kernel, or its interrupt vector can be changed, interrupt vector 7 cannot be used by the controller.

Use the following procedure, which is based on the SCO UNIX operating system (3.2.4) to install the device driver:

1. Boot the system, log in as the system administrator to **root**, and invoke the **custom** utility.

   For more information about **custom**, see your system documentation.

2. Select the **Install** option and press **Enter**.

3. Select the **A New Product** option and press **Enter**.

4. Select the **Packages** option and press **Enter**.

5. Insert the device driver diskette into the floppy drive and press **Enter**.

6. Select the device driver to install and press **Enter**.

7. Select **Continue**. (The disk is already in the drive.)

8. Select the number of ports on the controller (4, 8, or 16) and press **Enter**.

9. Enter the base I/O address of the controller (in hexadecimal) and press **Enter**.

10. Enter an unused interrupt vector number for the controller and press **Enter**.

   Note: The device driver may suggest an IRQ that is in use. If you choose an existing IRQ, the system may allow you to change it.

11. Enter **y** or **n** to verify the configuration.

   You will then be asked if you want to configure another controller board. Repeat steps 9 - 11 for each controller (maximum 4). Type **n** and press **Enter** when all of the controllers are configured.

   The following message is displayed:

   The UNIX Operating System will now be rebuilt.
   This will take a few minutes. Please wait.

12. Type **y** to boot the kernel by default. Press **Enter**.

13. Type **y** to rebuild the kernel environment, then **Enter**.

14. The following message is displayed:

   Setting up new kernel environment
   Press any key to continue.

15. Select **Quit** and press **Enter**.

16. Select **Yes** and press **Enter**.

17. Remove the driver diskette from the floppy drive.

18. Power off your system.

After the device driver is installed, use the appropriate tables in the following sections to configure the controller. The configuration is based on your selection during the device driver installation. For additional address settings, see the documentation that came with your controller.

Note: Install the controller board after you set the DIP switches. Do not change the DIP switch settings while the board is in the computer and powered up.

Configuration

Power up and reboot the system.

After you reboot the system, the following message should be displayed:

Hostess 550 Board Setup
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Immediately following this message, each Comtrol controller found in the system is listed in this format:

Hostess 550 board at *xxx* IRQ# has *y* ports starting at *ttyhzz*

where *xxx* is the base address, *#* is the interrupt vector, *y* is the number of ports, and *ttyhzz* is the name of the first port on the controller.

When installation is complete, use the following information to enable the ports.

Enabling Ports

The following table shows the default device names assigned to each non-modem and modem serial port on the controller board:

Device Names

Controller	Non-Modem	Modem
First	ttyh00-ttyh15	ttyH00-ttyH15
Second	ttyh16-ttyh31	ttyH16-ttyH31
Third	ttyh32-ttyh47	ttyH32-ttyH47
Fourth	ttyh48-ttyh64	ttyH48-ttyH64

The non-modem names allow communications with a serial device over a simple 3-wire connection consisting of the transmit and receive data data lines and signal ground. The modem names require modem control to function properly. Specifically, the carrier detect

signal must be present before the serial port will become active.

Once the controller is found, you can enable the individual ports using the **enable** command. Consult your system documentation for further information on the **enable** command. The following example enables port **ttyh00** and appends the changes to the **/etc/inittab** file:

enable ttyh00

With the device driver installed and the communication ports enabled, the controller is now ready for use.

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