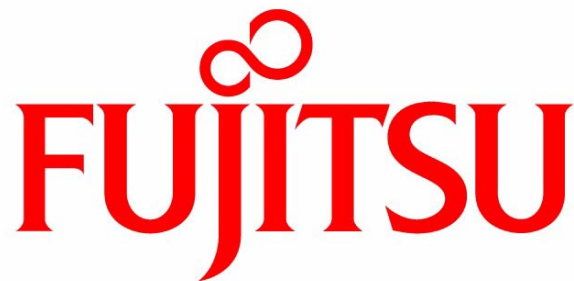




U-SCAN[®]
Hardware Manual

FUJITSU



Title:	U-Scan® Hardware Manual
Date:	July 2, 2004
Purpose:	Reference Guide and Training Manual
Audience:	Technicians

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Introduction

Terminology

The following terms are used in this document:

Term	Also Known As
Attendant Station	Cashier Station
Customer Station	Robot Station
Attendant	Cashier
TECHNITROL Bill Dispenser	G&D Bill Dispenser
CM-1 Coin Dispenser	KORUS Coin Dispenser
EFT	Debit card reader Electronic funds transfer
MAG-TEK MSR	Credit card reader Magnetic stripe reader

Front Matter Pages

The Devices section of the **Technical Training Guide** begins with front matter pages containing reference information for all the U-Scan® devices.

Heading	Content
COM Ports	A table listing the different port settings for all the devices.
Error Messages	A table describing the different error messages when testing a device.
Stop the Attendant Software	A procedure used when testing a Attendant Station device.
Stop the Customer Software	A procedure used when testing a Customer Station device.

Device Subsections

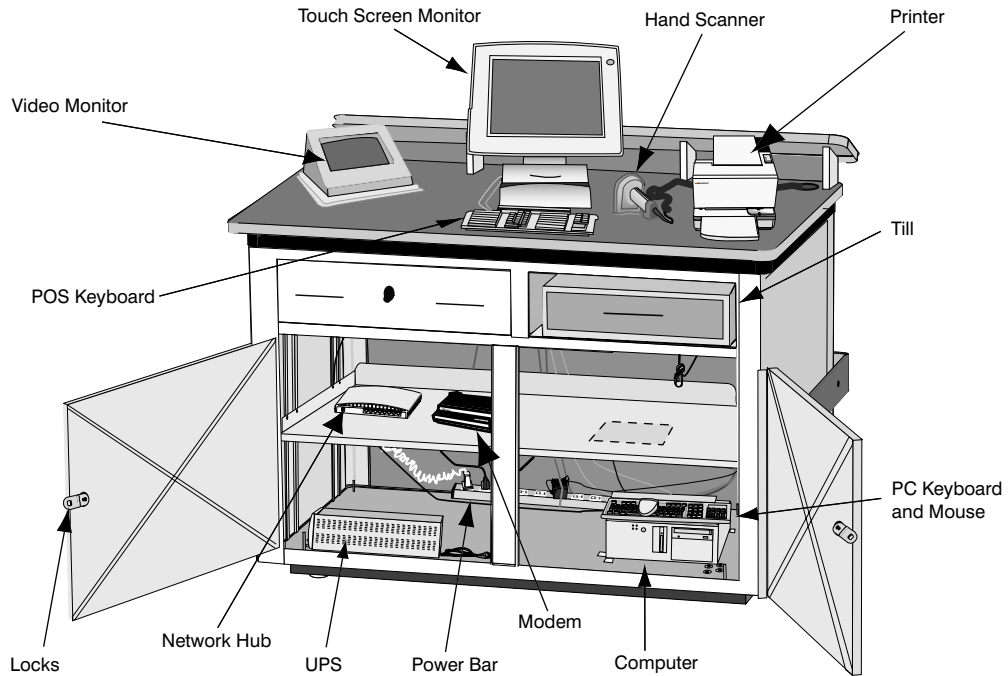
The front matter pages are followed by tabbed subsections, one for each device. Here is an example using the Bill Dispenser to illustrate how the manual is set up:

Heading	Content
Testing the Bill Dispenser	A testing procedure that can be followed for any Bill Dispenser model, like the DIEBOLD or TECHNITROL.
Troubleshooting the DIEBOLD	A troubleshooting procedure specific to the DIEBOLD Bill Dispenser model. Perform the tasks in this section in sequence if you experience problems with the device. These tasks will help you to identify and solve the problem.
Troubleshooting the TECHNITROL	A troubleshooting procedure specific to the TECHNITROL Bill Dispenser model. Perform the tasks in this section in sequence if you experience problems with the device. These tasks will help you to identify and solve the problem.
Additional Information	May contain diagrams, tips, or other helpful information for studying the Bill Dispenser. May or may not be model-specific.

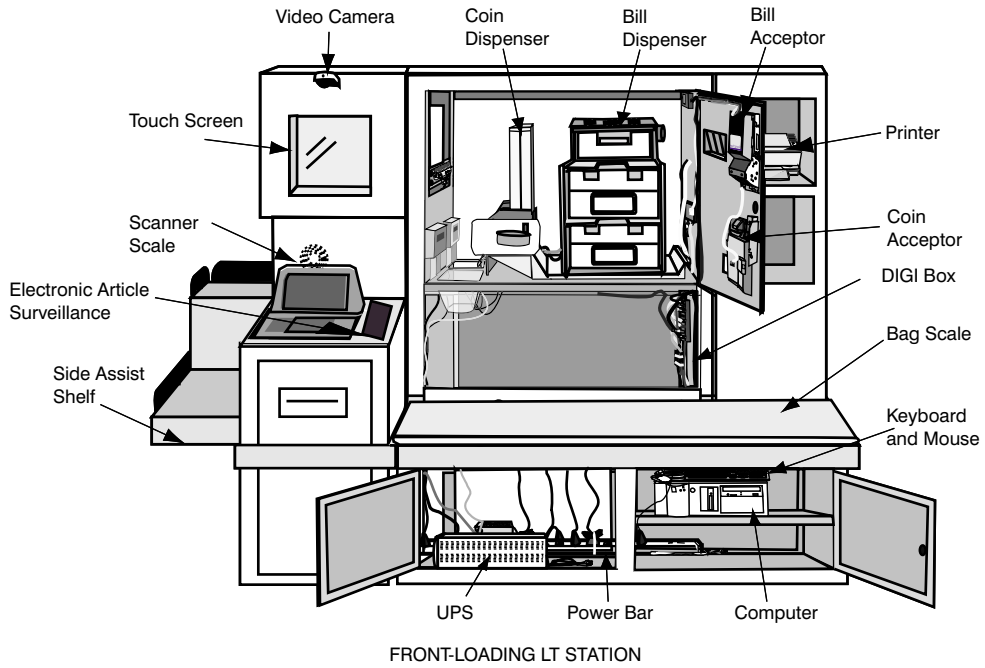
U-Scan Components

Use the following diagrams to identify that Attendant Station and Customer Station components.

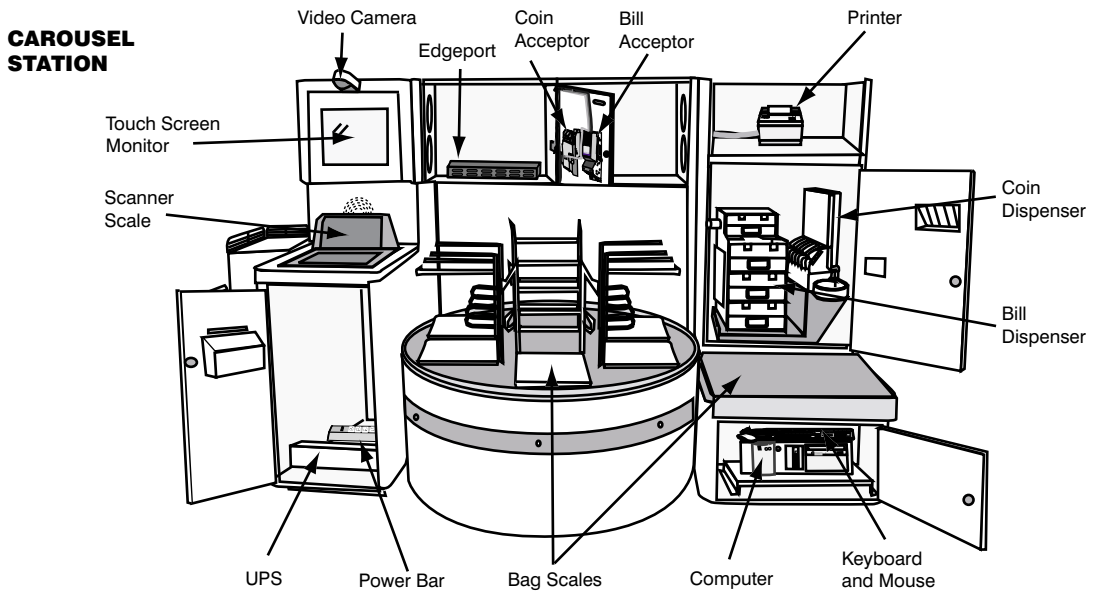
Attendant Station Components



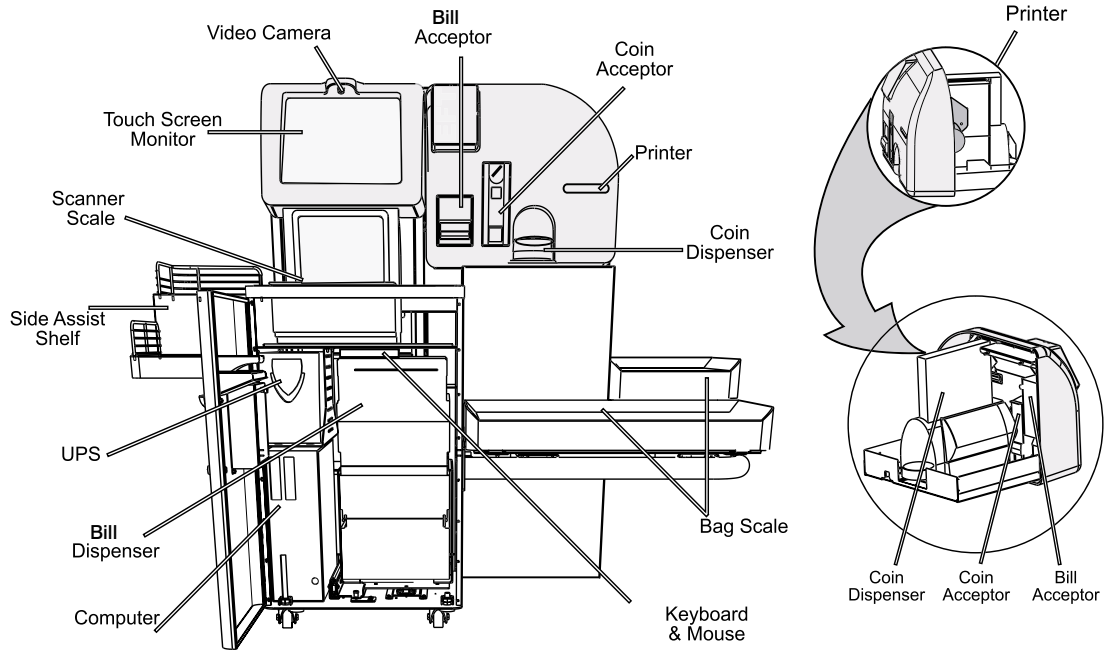
Customer Station Components (LT Model)



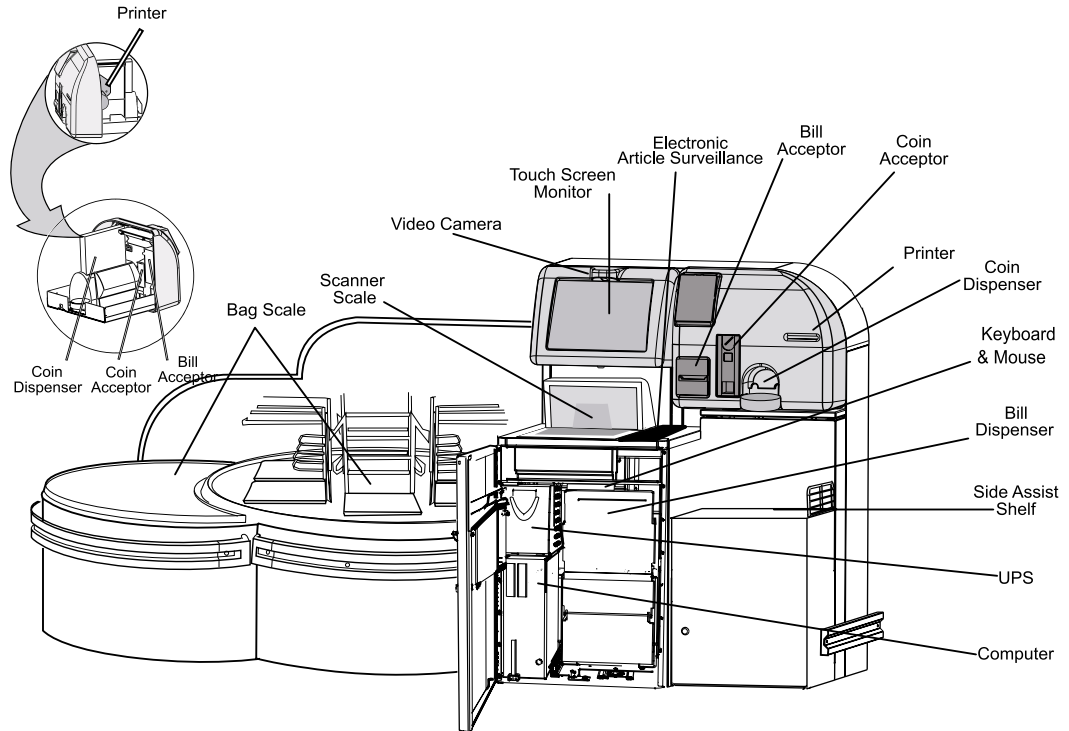
Customer Station Components (Carousel Model)



Customer Station Components (NextGen Model)



Customer Station Components (NextGen6 Model)



The NextGen 6 system combines the features of the NextGen system with the functionality of the Carousel Station. All device locations and access panels are the same as the NextGen. The main difference between the two systems is the use of two Bag Scales: a rotating Bag Scale and a stationary Bag Scale. SCALETRON weigh bars are used for the stationary Bag Scale.

Troubleshooting and calibration procedures for the **stationary** Bag Scale are the same as the NextGen. Troubleshooting and calibration procedures for the **rotating** Bag Scale are the same as the Carousel. Refer to the SCALETRON Bag Scale section of the Technical Training Guide for all procedures.

NOTE: *An optional side shelf for a CATALINA Printer can be added to the left of the Monitor.*

Safety Precautions

Always follow the safety precautions below when you service the U-Scan system.



For your safety, connect equipment requiring electrical power to a properly wired and grounded outlet.



Always power down the U-Scan system before connecting or disconnecting cables between subassemblies and/or Network Hubs and/or the Store Controller.



The use of controls of adjustments or the performance of procedures other than those specified herein may result in exposure to hazardous conditions.



Do not attempt to open or otherwise service any subassemblies in the U-Scan system. Performing maintenance procedures outside the scope of this document may violate laser and electrical safety regulations.

Device Tester

The **Device Tester** allows you to test the Customer Station or Attendant Station devices. The following pages contain procedures for stopping the U-Scan software and accessing the **Device Tester**. **You cannot access the Device Tester when the U-Scan software is running.** Refer to for a list of devices and the appropriate DLL settings.

Stop the Attendant Station Software

- 1 At the Attendant Station, close the Customer Station to the public.
 - 2 Access the **Manager** menu.
 - a Turn the manager key to the **ON** (1) position.
 - b Touch **Manager**.
The **Manager** menu appears.
NOTE: *If the key was already turned to the **ON** (1) position, the **Manager** menu may not display. In this case, turn the key to the **OFF** (0) position, then **ON**.*
- OR**
- a Touch **Manager**.
The **Password** screen appears.
 - b Enter the manager password, then touch **Done**.
The **Manager** menu appears.
- 3 Click **Exit C:\>**.
The message **Are you sure?** appears in the **Exit Cashier** window.
 - 4 Click **Yes**.
The **Launchpad** appears.
-

Stop the Customer Software from the Attendant Station

- 1 At the Attendant Station, close the Customer Station to the public.
- 2 Access the **Manager** menu.
 - a Turn the manager key to the **ON** (1) position.
 - b Touch **Manager**.
The **Manager** menu appears.
*NOTE: If the key was already turned to the **ON** (1) position, the **Manager** menu may not display. In this case, turn the key to the **OFF** (0) position, then **ON**.*
- OR**
- a Touch **Manager**.
The **Password** screen appears.
- b Enter the manager password, then touch **Done**.
The **Manager** menu appears.
- 3 Click **Functions**.
The **Functions** window appears.
- 4 Touch the **Toolbox** button of the lane you want to close.
At the corresponding Customer Station, the **Maintenance Mode** screen appears.
- 5 Click **Done**.
- 6 Turn the manager key to the **OFF** (0) position.
- 7 On the **Manager** menu, click **Done**.
- 8 Go to the Customer Station.
- 9 On the **Maintenance Mode** screen, touch **STOP ROBOT**. Touch **YES** to confirm the request.
The **Customer Launchpad** appears.
- 10 On the **Customer Launchpad**, click **Device Tester**.
- 11 Enter the password (**1379**).
- 12 Click **OK**.
The **Unit Tests** window appears.

Stop the Customer Software from the Customer Station

- 1 Locate the Computer keyboard at the Customer Station.
- 2 Press **ALT+TAB**.
The **Robot Control** window appears.
- 3 Select the **Robot Control** icon.
- 4 Click **Stop Robot**.
The **Launchpad** appears.
- 5 Click **Device Tester**.
- 6 Enter the password (**1379**).
The **Unit Tests** window appears.

NOTE: *The **Device Tester** password may be different in your store.*

Using the Device Tester

1. Stop the Customer or Attendant Station Software

Refer to the appropriate procedure above to stop the Customer or Attendant Station software.

2. Access the Device Tester

- 1 On the **Launchpad**, click **Device Tester**.
 - 2 Enter the password (**1379**).
 - 3 Click **OK**.
The **Device Test** window appears.
-

3. Check the Settings

- 1 In the **Unit Tests** window, click the tab for the device you wish to test.
 - 2 Check that the DLL is set to the correct device model.
-

4. Change the Settings (If Necessary)

NOTE:

- 1 Stop the device (from the software).
 - 2 Press **ALT + [*]** (the * key is on the number pad).
Change becomes enabled.
 - 3 Click **Change**.
 - 4 Click the arrow key to display the **DLL Location** drop-down menu.
 - 5 Select the appropriate DLL for the device.
NOTE: *If the appropriate DLL is not in the drop-down list, click **Browse**, then select the correct DLL.*
 - 6 Click **Apply**.
-

Error Messages

The following table describes error messages that appear in the **Unit Test** and the Attendant **Device Test** utilities. For other device errors (i.e., beeping or pole display messages) consult the “Additional Information” section for that device.

Test Messages Box

The **Test Messages** box is located in the bottom part of the **Unit Test** or Attendant **Device Test** window. On the left side of the window is the Message box. The right side of the window contains a series of buttons which vary from test to test.

- 1 Click **Start** in the **Tests** box to start each test. The message **DEVICE::ONLINE** appears.
- 2 If the message **DEVICE::ONLINE** does not appear, then there may be a:
 - Faulty DLL
 - Device not connected to the Customer Station Edgeport
 - Device malfunction

If this occurs, follow the Troubleshooting procedure for the device. If you are unable to resolve the problem, call the Support Center at 1-800-204-0608.

NOTES: *Select the tabs to move from device to device.*

*All testing errors are entered in the **Error Log**. If errors occur while testing, you are prompted to view the log as you exit the testing utility.*

Sometimes a mechanical error can be reported even when the device is working.

Error Messages for Customer Station Devices

Device	Error Message	Explanation
Bag Scale	SCALE (OVERWEIGHT)	The weight is too heavy for the Bag Scale to calculate. Remove weight and rezero the scale.
	SCALE (UNDERWEIGHT)	The Bag Scale indicates a weight lower than zero. The bag platter may be off or touching the sides of the Customer Station. Rezero the scale.

Error Messages for Customer Station Devices

Device	Error Message	Explanation
	SCALE (REZERO_FAILURE)	Rezeroing the Bag Scale has failed. Recalibrate the Bag Scale. If this doesn't correct the problem, the device may need to be replaced.
	MECHANICAL_ERROR	A general message that the device has failed and may need to be replaced.
Bill Acceptor	BILL_ACCEPTOR::BILL_REJECTED	Bills can be rejected if they are not in good condition.
	BILL_ACCEPTOR(NEEDS_CLEANING)	The Bill Acceptor's sensors are dirty and cannot read the inserted bill. Clean the device and try again.
	BILL_ACCEPTOR::FULL_OR_OPEN	The bill stacker is full or open. Empty the bill stacker and then close it. Test the Bill Acceptor.
	MECHANICAL_ERROR	There could be a problem with serial communications, power connections, or the device needs to be replaced.
Bill Dispenser	BILL_TRAY_EMPTY	Indicates that there are no bills in one of the trays or in the device altogether. Refill the Bill Dispenser and try again.
	DISPENSE_LIMIT_EXCEEDED	Indicates that the amount of money to be dispensed exceeds the allowable limit. This limit is configurable. Try dispensing a smaller amount.
	MECHANICAL_ERROR	The problem could be with the Serial Communications or the Power Cable, the dll file may be incorrect, or the device may need to be replaced.
	BILL_TRAY_LOW	Indicates that the Bill Dispenser is low on bills.
Coin Acceptor	MECHANICAL_ERROR	A general message that the device has failed and may need to be replaced.
Coin Dispenser	DEVICE::OFFLINE {COIN_DISPENSER}	An error occurred during testing.
	COIN_DISPENSER(LOW)	The Coin Dispenser is low on coins. Refill the device and try again.

Error Messages for Customer Station Devices

Device	Error Message	Explanation
	MECHANICAL ERROR	A general message that the device has failed and may need to be replaced.
Scanner Scale	SCANNER(GOTBADUPC, ZS)	Indicates that someone tried to scan a bad bar code. Use another bar code to test the Scanner Scale.
	SCANNER::GOTUPC_WHILE_DISABLED{XXXXXXXXXX XX}	This does not indicate a malfunction. This indicates that a bar code was read before the Scanner Scale was enabled in the Device Unit Testing Utility.
	SCANNER(CONTROL_BARCODE, ZS, ZS)	Indicates that the bar code scanned was a test bar code as entered in the Customer Station's Registry.
MAGELLAN	SCALE(OVERWEIGHT)	The weight is too heavy for the Scanner Scale to calculate. Remove the weight and rezero the scale.
	SCALE(UNDERWEIGHT)	The Scanner Scale is indicating a weight lower than zero. Rezero the scale.
	SCALE(REZERO_FAILURE)	Rezeroing the Scanner Scale failed. The device may need to be replaced.
	SCALE(MECHANICAL_ERROR)	A general message that the device has failed and may need to be replaced.

Error Messages for Attendant Station Devices

Device	Error Message	Explanation
Hand Scanner <i>Note</i> <i>The error messages are the same as the MAGELLAN Scanner Scale messages.</i>	SCANNER (GOTUPC_ WHILE _DISABLED, UPC)	This does not indicate a malfunction. Indicates that a bar code was read before the Hand Scanner was enabled in the Device Unit Testing utility.
	SCANNER(GOTABADUPC, ZS)	Indicates that someone tried to scan a bad bar code. Use another bar code to test the Hand Scanner.
	SCANNER (CONTROL_ BARCODE, ZS,ZS)	Indicates that the bar code scanned was a test bar code entered in the Attendant Station registry. Call the Support Center.
SEM Beeper	Problems with Beeper	Indicates that the SEM beeper is not responding due to communication problems or a faulty SEM module.

Device Interfacing

Function

- Provides additional COM ports needed to connect the Customer or Attendant Station devices to the Computer.

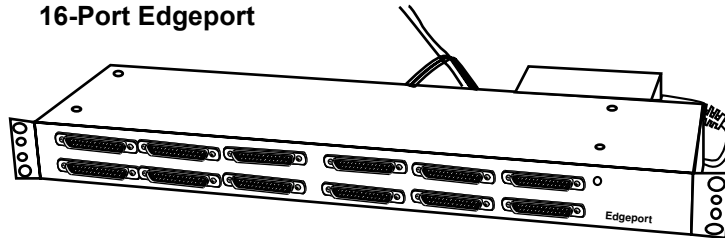
Models

- 4-port and 16-port Edgeport™ (manufactured by Inside Out Networks)

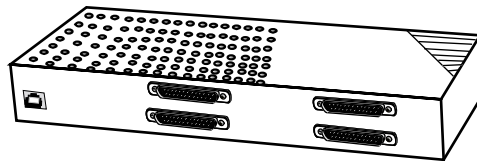
Edgeport™

The Edgeport connects to the upper USB port of the Computer. The Edgeport supplies 16 extra COM ports at the Customer Stations or four extra COM ports at the Attendant Station.

16-Port Edgeport

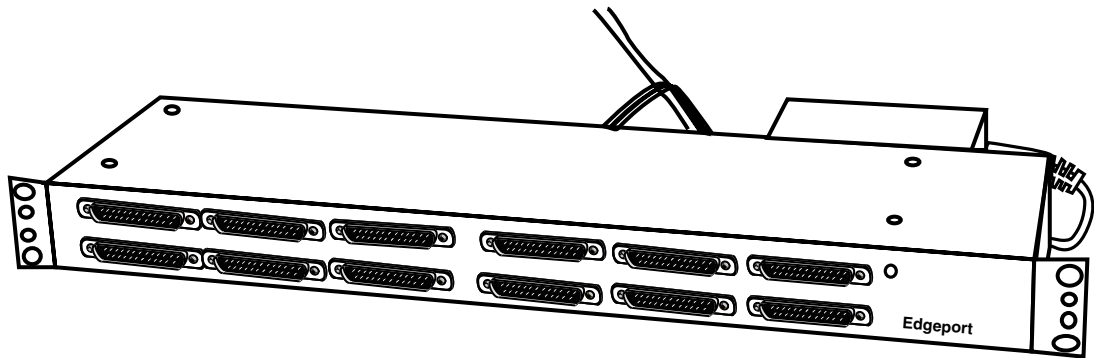


4-Port Edgeport

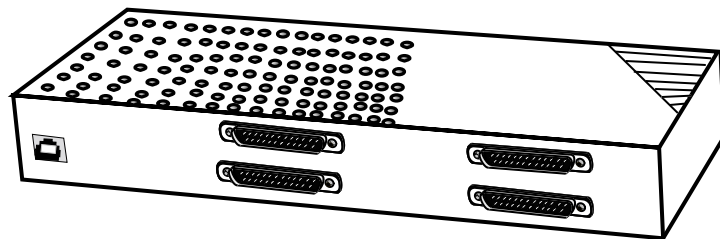


INSIDE OUT NETWORKS Edgeport

Edgeport 16 (Customer Station)



Edgeport 4 (Attendant Station)



Features:

- USB 1.0 and 1.1 compatibility; backwards compatibility for version 2.0
- Plug-and-play compliant
- Maximum 230 Kbps baud rate (per port)
- Tri-state LED shows device status and COM port activity
- Automatic port reacquisition

NOTE: Refer to "COM Port Settings" in the Introduction for port assignments.

Technical Specifications

Environment

- Temperature: 32°F to 131°F (0°C to 55°C)
- Relative Humidity: 0 to 95% non-condensing

Power Supply Requirements

- Input: 100 to 240 V, 50 to 60 Hz, 0.7 A
- Output: 5 V, 3 A

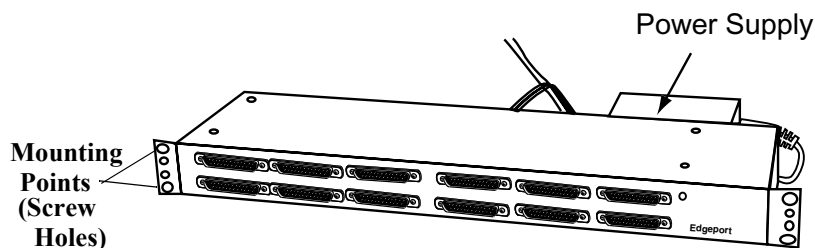
Communication

- USB connection to Computer

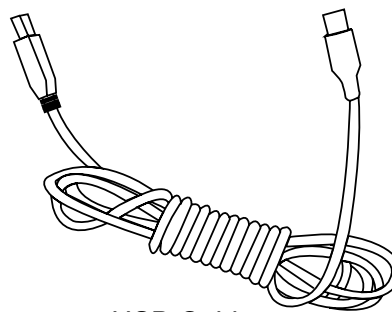
Components of the Edgeport

The Edgeport includes the following components:

- Edgeport USB-to-serial converter
- USB cable
- Power supply



Edgeport



USB Cable

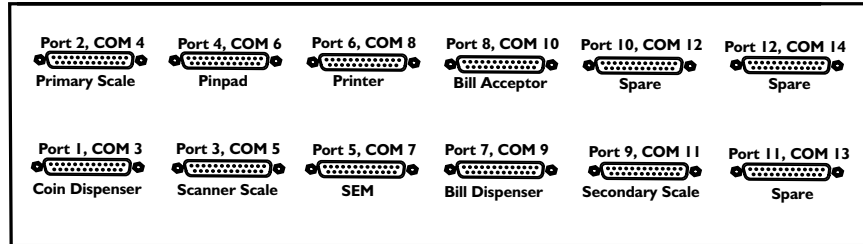
NOTE: *Special drivers have to be installed on the software image for the Edgeport in Windows NT. In Windows 2000, the drivers install automatically when the Edgeport is first connected.*

*If a device does not work in a certain Port, plug that device into another Port. Only swap the cables directly. **EXAMPLE:** Plug the Primary Scale from Port 2 into Port 6, and plug the Printer from Port 6 into Port 2.*

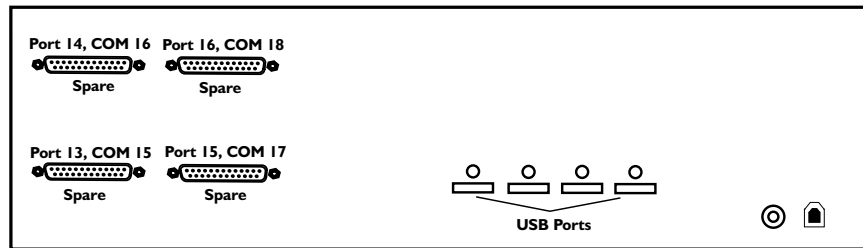
Standard Edgeport Configuration

The COM Port settings listed below represent a generic configuration. **Your store's configuration may not be exactly as shown below.** Contact the project manager for specific system configurations.

Edgeport 16 (Customer Station)

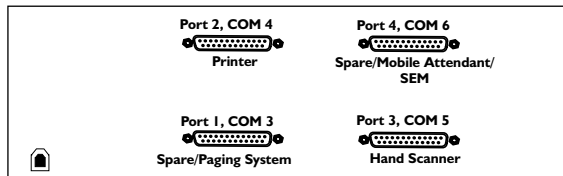


Back of EDGEPORT



Front of EDGEPORT

Edgeport 4 (Attendant Station)



Testing the Edgeport COM Ports

- 1 Go to **Start>Programs**.
 - 2 Click **Inside Out Networks Utilities**.
The **Edgeport Properties** box appears.
NOTE: *If the Edgeport utility is not present, install the drivers.
Refer to the appropriate Edgeport driver installation
instructions in “[Additional Information for the Edgeport.](#)”*
 - 3 Select the **General** tab.
 - 4 Select the COM port or series of COM ports that you want to test.
 - 5 Touch **Test Ports**.
The **Confidence Test** dialog box appears.
 - 6 Touch **Test Ports** again.
The ports are tested and the status of each port (i.e. **Passed**)
appears.
 - 7 Ensure that all ports pass the test.
 - 8 If any ports fail, refer to “[Edgeport Common Problems and Solutions.](#)”
-

Edgeport Common Problems and Solutions

This section provides basic steps for resolving common problems. Refer to “Troubleshooting the Edgeport (All Environments)” for the full troubleshooting procedures.

Issue	Possible Cause(s)	Solution
All devices are OFFLINE or no ports are available.	<ul style="list-style-type: none">• The Edgeport is unplugged.• The BIOS IRQ for Edgeport is not enabled (PII only).• The Edgeport drivers are not installed.	<ul style="list-style-type: none">• Verify the cable connections.• Verify the BIOS settings.• Reinstall the Edgeport drivers.• Replace the Edgeport.
One of the devices is OFFLINE or one port is not present.	<ul style="list-style-type: none">• The device is defective.• One of the Edgeport ports is not working.	<ul style="list-style-type: none">• Verify the device functionality.• Connect the device to another port.• Test the ports in the Edgeport.exe utility.• If no other ports are available, replace the device.
Some COM ports are missing or are assigned incorrectly.	<ul style="list-style-type: none">• The Edgeport driver was not reinstalled after the Edgeport was replaced.• The Edgeport ID does not match the driver installed on the Computer.	<ul style="list-style-type: none">• Verify the port assignments in the Edgeport.exe utility.• Remove all Edgeport drivers.• Remove all COM Ports.• Reinstall the Edgeport drivers.• Replace the device.

Troubleshooting the Edgeport (All Environments)

1. Inspect the Cable Connections

- 1 Locate the USB connectors on the Computer.
 - 2 Verify that the Edgeport is properly connected to the upper USB connector.
 - 3 Locate the Edgeport inside the Attendant Station or Customer Station casing. (If necessary, refer to the graphics in “Introduction to Device Interfacing: Edgeport.”)
 - 4 Verify that all the devices are connected properly to the appropriate ports. If necessary, use the **Device Tester** as a reference.
-

2. Verify the Functionality of Any Suspect Ports

- 1 Disconnect the device from the suspect port on the Edgeport.
 - 2 Disconnect a device from any other good port on the Edgeport.
 - 3 Connect the device from the suspect port to the good port on Edgeport.
 - 4 Press **ALT+TAB** to access the **Launchpad**.
 - 5 Touch **Device Tester** to access the Device Tester.
 - 6 In the **Device Tester**, change the COM port settings to reflect the current Edgeport configuration.
 - 7 Test the device to determine if the Edgeport port is defective.
-

Troubleshooting the Edgeport (Pentium 4/Windows 2000 Environment)

1. Verify the Edgeport Software Settings

- 1 Right-click **My Computer**, then select **Properties**.
The **System Properties** dialogue box appears.
- 2 Click the **Hardware** tab.
- 3 Click **Device Manager**.
The **Device Manager** window appears.
- 4 Double-click **Multi-port serial adapters**.
- 5 Ensure that the **Inside Out Networks Edgeport/416** driver is installed and working properly.
- 6 Double-click **Ports**.
- 7 Ensure that COM Ports 3 to 18 are present and working properly.

Additional Information for the Edgeport

This section contains the following information:

- [Installing a New Edgeport Driver \(Pentium 4, Windows 2000\)](#) (page 9):
Procedure for removing any previously installed drivers for an Edgeport and installing a new Edgeport driver.

Installing a New Edgeport Driver (Pentium 4, Windows 2000)

1. Remove the Multiport Drivers

- 1 Go to **Start>Settings>Control Panel>System**.
 - 2 Click the **Hardware** tab.
 - 3 Click **Device Manager**.
The **Device Manager** screen appears.
 - 4 Click the **Multi-port serial adapters** icon once to expand it.
 - 5 Highlight the first icon (labeled **Inside Out Networks Edgeport/416** or **Digi ClassicBoard**).
 - 6 Right-click the icon and select **Uninstall**.
 - 7 Click **OK**.
 - 8 Perform step 5 to step 7 for the second icon if you are removing the Edgeport driver.
-

2. Install the Edgeport Driver

NOTE: *The latest Edgeport drivers are available on the FTP site. If the drivers on your Boot or Multi Pack Setup CD-ROM are not the latest version, download the drivers from the FTP site.*

- 1 Close any applications that are running on the Computer.
- 2 Go to **My Computer>(C:)>Storage>Drivers>Edgeport**.
- 3 Double-click **ip4n5213.exe**.
The **Notification of driver** dialog box appears.
- 4 Click **Next**.
The **Inside Out Networks' Software License Agreement** dialog box appears.
- 5 Click **YES**.
The **Inside Out Networks' Release Notes** dialog box appears.

Additional Information for the Edgeport (Cont'd)

- 6 Click **Next**.
The **Confirmation of drivers successfully installed** dialog box appears.
- 7 Click **OK**.
- 8 Disconnect and then reconnect the USB cable from the Edgeport to the Computer. This allows the upgraded driver to detect the Edgeport and the correct COM Port settings.
- 9 Go to **Start>Programs>Inside Out Network Utilities>Edgeport Configuration Utility**.
- 10 Click the + beside **Edgeport/416 [SV13727815]**.
- 11 Verify the COM Ports.

NOTE: *Port 1 is COM3; Port 2 is COM4, etc.*

Bag Scale

Testing the Bag Scales in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Check the Settings

See “Check the Settings” in “Using the Device Tester” in the Introduction.

3. Test the Device

NOTE: For an explanation of error messages see “Bag Scale Error Messages” on the next page. Error messages are also stored in the **Eventlog Viewer** and can be viewed when you exit the **Device Tester**.

1 Click **Start**.

2 Click **Enable Scale**.

The current weight is displayed in the **Messages** box.

NOTE: If the **Enable Scale** button is disabled, the current weight is already displayed in the **Messages** box.

3 Put an object on the Bag Scale and read the weight.

4 Weigh the object on different areas of the Bag Scale to ensure that the weight is constant and accurate.

5 Click **Stop**.

Bag Scale Error Messages

Refer to the table below for an explanation of Bag Scale error messages.

Error Message	Explanation
SCALE (OVERWEIGHT)	The weight is too heavy for the Bag Scale to calculate. Remove weight and rezero the scale.
SCALE (UNDERWEIGHT)	The Bag Scale indicates a weight lower than zero. The bag platter may be off or touching the sides of the Customer Station. Rezero the scale.
SCALE (REZERO_FAILURE)	Rezeroing the Bag Scale has failed. Recalibrate the Bag Scale. If this doesn't correct the problem, the device may need to be replaced.
MECHANICAL_ERROR	A general message that the device has failed and may need to be replaced.

SCALETRON Bag Scale

Troubleshooting the Rotating SCALETRON

1. Follow the Testing Procedure

See “Testing the Bag Scale.”

2. Check the Power

- 1 Remove the bag platter.
 - 2 Ensure that the power cord is connected to the device.
 - 3 Ensure that the power adapter is connected to the power bar.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the device.
 - 2 Ensure that the data cable is connected to Port 2 on the DIGI Box.
 - 3 Replace the bag platter.
-

4. Check the Bag Scale Platter

Ensure that the bag platter is not touching the Customer Station casing.

5. Verify the LED Status

- 1 Remove the bag platter.
 - 2 Locate the LED inside the circuit board housing.
NOTE: There is a cut-out for the LED. Do not open the circuit board housing.
 - 3 Verify the LED status.
 - a Ensure that the Error LED is off.
 - b Ensure that the Active LED is flashing.
-

Troubleshooting the Rotating SCALETRON (Cont'd)

6. Reset the Bag Scale

- 1 If there are bag racks on the Bag Scale, remove them.
OR
If there are no bag racks, remove the bag platter.
 - 2 Access the **Device Tester**. (See “Testing the Carousel SCALETRON.”)
 - 3 Use the **Id** drop-down list in the **Unit Tests** window to select the rotating Bag Scale (1).
 - 4 Click **Start**.
 - 5 Click **More**.
 - 6 In the **Command** list, select **Z**.
 - 7 Click **ZERO** to reset the Bag Scale.
 - 8 Click **CANCEL** to exit.
 - 9 Replace the bag racks or the bag platter.
 - 10 If necessary, touch the **Rotating Siren** at the Attendant Station to clear the weight violation.
-

7. Verify the Registry Settings

Call the U-Scan Support Center at 1-800-204-0608 for the Registry Settings.

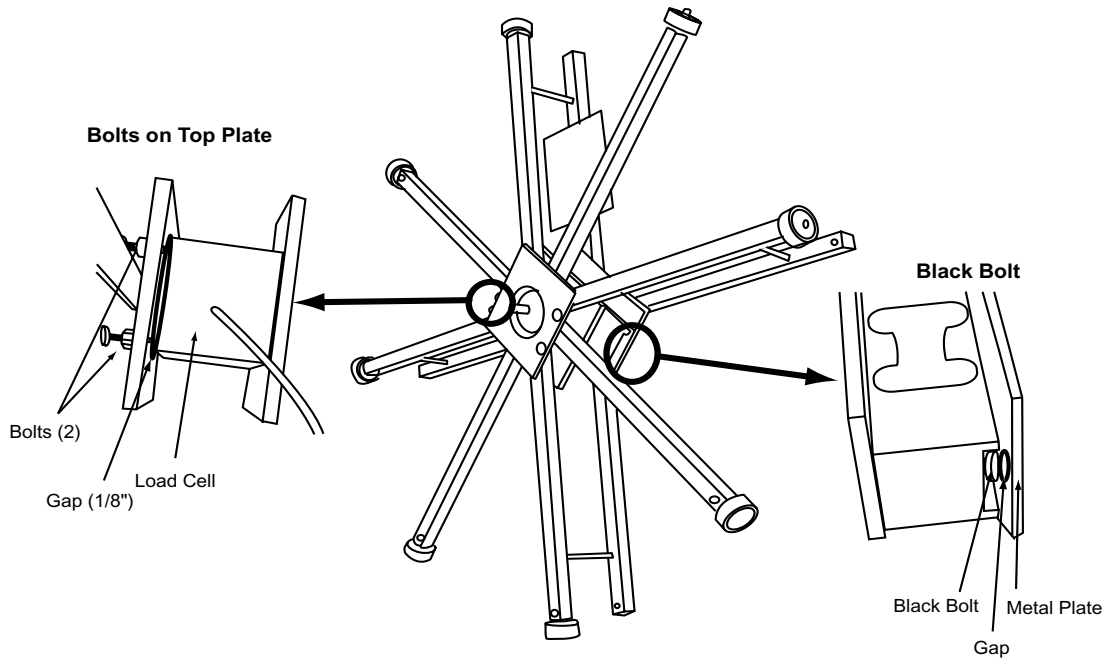
8. Verify the Overload Stops and Center Bolt

NOTE: *Only adjust the overload stops if they are touching the Bag Scale.*

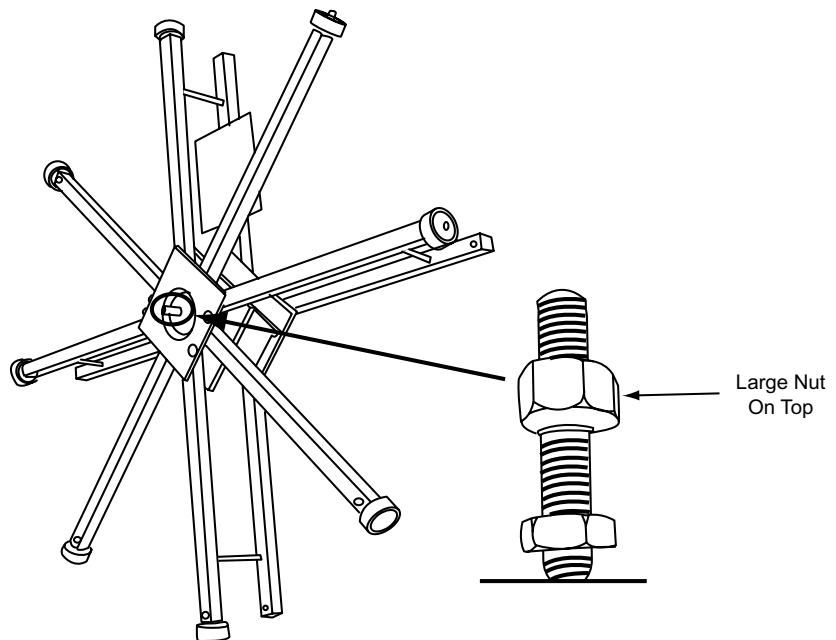
- 1 Remove the Bag Scale platter.
- 2 Lift the Bag Scale out of the casing.
- 3 Ensure that the two bolts on the top plate are NOT touching the top of the load cell. The gap between the bottom of the bolts and the top of the load cell should measure approximately 1/8”.

Troubleshooting the Rotating SCALETRON (Cont'd)

- 4 Ensure that the black bolt is NOT touching the bottom metal plate. The gap between the bolt and the bottom plate should measure approximately 1/8". Refer to the diagram below.

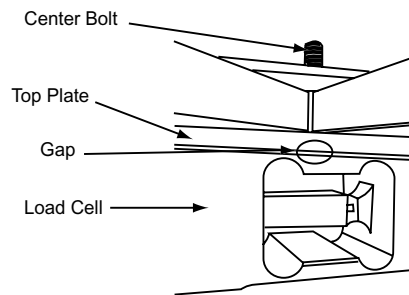


- 5 Ensure that the center bolt is not installed upside down. The larger nut should be on top.



Troubleshooting the Rotating SCALETRON (Cont'd)

- 6 If the center bolt is installed upside down, perform these steps:
 - a Remove the washers from the bolt.
 - b Use an adjustable wrench to remove the bolt. Grasp **the bottom nut ONLY** with the wrench.
 - c Twist the bottom nut.
 - d Remove the bolt.
 - e Reverse the bolt so that the larger nut is on top.
 - f Use an adjustable wrench to tighten the bolt. Grasp **the bottom nut ONLY** with the wrench.
- 7 Ensure that the center bolt does not protrude through the top plate. You should **not** be able to see the center bolt in the gap between the top plate and the load cell.



- 8 Replace the Bag Scale inside the casing.
- 9 Replace the Bag Scale platter.
- 10 Recalibrate the Bag Scale.

9. Calibrate the Bag Scale

NOTE: 1. You must use a **minimum of 54.4 kg (120 lbs.)** to calibrate the rotating Bag Scale. We recommend **91 kg (200 lbs.)**.
2. Never use water bottles or any container filled with liquid for calibration.

To determine the exact weight of the item:

- 1 At a Customer Station, weigh the item on the Scanner Scale.
- 2 For each item you add, record the weight shown on the Scanner Scale until you have a minimum weight of 200 lbs. (91 kg).
- 3 Remove all items including the bag racks from the rotating Bag Scale.

To calibrate the rotating Bag Scale:

- 4 On the Customer Station **Launchpad**, click **Device Tester**.

Troubleshooting the Rotating SCALETRON (Cont'd)

- 5 Enter **1379** in the **Pinpad** box.
 - 6 In the **Unit Tests** window, click the **Bag Scale** tab.
 - 7 In the **Id** list, select **1** for the rotating Bag Scale.
 - 8 Under **Test Bag Scale**, click **Start**.
The **Messages** box indicates if the device is online and if there is a weight change.
 - 9 Click **More**.
The **SCALETRON Unit** dialog box appears.
 - 10 In the **Command** list, select **C**.
 - 11 Click **Calibrate**.
 - 12 On the keyboard, press **ENTER**.
The **Messages** box displays **Place weight on scale 1**.
 - 13 Place the correct weight (200 lbs./91 kg) on the Bag Scale.
 - 14 Click **OK**.
 - 15 On the Pinpad, enter five digits for the exact weight of the item on the Bag Scale.
EXAMPLE: 020.00 for 20 lbs.; 200.00 for 200 lbs.; 091.00 for 91 kg
 - 16 Click **OK**.
The message **Calibration complete** displays. **Done** also appears in the **Terminal Mode** window.
NOTE: *If the calibration was not successful, the message **Remove items from scale** displays and the calibration routine restarts.*
 - 17 Replace the bag racks on the Bag Scale. **Do NOT zero the Bag Scale**.
 - 18 Go to the Attendant Station and touch the **Rotating Siren** to clear the weight violation.
-

Testing the SCALETRON Solo Bag Scale in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Check the Settings

- 1 In the **Unit Tests** window, click the **Bag Scale** tab.
 - 2 Check that the DLL is set to the correct Bag Scale model.
-

3. Change the Settings

NOTE: *Only change the settings if the DLL or COM port is incorrect. Refer to “COM Port Settings” at the beginning of this manual for generic port and DLL settings.*

- 1 Stop the device (from the software).
- 2 Press ALT + [*] (the * key is on the number pad).
The **Change** button is enabled.
- 3 Click **Change**.
- 4 Click the arrow key to display the DLL Location drop-down menu.
- 5 Select the appropriate DLL for the device.

NOTE: *If the appropriate DLL is not in the drop-down list, click **Browse**, then select the correct DLL.*

- 6 Click **Apply**.
-

Testing the SCALETRON Solo Bag Scale in the Device Tester (Cont'd)

4. Test the Device

NOTE: For an explanation of error messages see “Error Messages” at the beginning of this section. Error messages are also stored in the **Eventlog Viewer** and can be viewed when you exit the **Device Tester**.

- 1 Click **Start**.
 - 2 Click **Enable Scale**.
The current weight is displayed in the **Messages** box.
NOTE: If the **Enable Scale** button is disabled, the current weight is already displayed in the **Messages** box.
 - 3 Put an object on the Bag Scale and read the weight.
 - 4 Weigh the object on different areas of the Bag Scale to ensure that the weight is constant and accurate.
 - 5 Click **Stop**.
-

Troubleshooting the Stationary SCALETRON

1. Follow the Testing Procedure

See “Testing the Bag Scale.”

2. Check the Power

- 1 Remove the bag platter.
 - 2 Ensure that the power cord is connected to the device.
 - 3 Ensure that the power adapter is connected to the power bar.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the Bag Scale.
 - 2 Ensure that the data cable is connected to COM 2 for the Carousel, and to COM 4 for the Solo.
 - 3 Replace the bag platter.
-

4. Check the Bag Scale Platter

- 1 Ensure that the bag platter is not touching the Customer Station casing.
 - 2 Ensure that the bag platter is aligned with the rubber shock absorbers on the Bag Scale.
-

5. Verify the LED Status

- 1 Remove the bag platter.
- 2 Locate the LED inside the circuit board housing.
NOTE: *There is a cut-out for the LED. Do not open the circuit board housing.*
- 3 Verify the LED status.
 - a Ensure that the Error LED is off.
 - b Ensure that the Active LED is flashing.

Troubleshooting the Stationary SCALETRON (Cont'd)

6. Reset the Bag Scale

- 1 If there are bag racks on the Bag Scale, remove them.
OR
If there are no bag racks, remove the bag platter.
 - 2 Access the **Device Tester**.
 - 3 Select the stationary Bag Scale (2) from the **Id** list in the **Unit Tests** window.
 - 4 Click **Start**.
 - 5 Click **More**.
 - 6 In the **Command** list, select **Z**.
 - 7 Click **ZERO** to reset the Bag Scale.
 - 8 If necessary replace the bag racks or the bag platter.
 - 9 If necessary, touch the **Rotating Siren** at the Attendant Station to clear the weight violation.
-

7. Calibrate the Bag Scale

- NOTE:** 1. Use 80 lbs. (37 kg) or more to calibrate the Bag Scale.
2. Never use water bottles or any container filled with liquid for calibration.

To determine the exact weight of the item:

- 1 At a Customer Station, weigh the item on the Scanner Scale.
- 2 For each item added, record the weight shown on the Scanner Scale until you have a minimum weight of 80 lbs. (37 kg).
- 3 If there are bag racks on the Bag Scale, remove them. If there are no bag racks, remove the bag platter.

To calibrate the stationary Bag Scale:

- 4 On the Customer Station **Launchpad**, click **Device Tester**.
- 5 Enter **1379** in the **Pinpad** box.
- 6 In the **Unit Tests** window, click the **Bag Scale** tab.
- 7 In the **Id** list, select **2** for the stationary Bag Scale.
- 8 Under **Test Bag Scale**, click **Start**.
The **Messages** box indicates if the device is online and if there is a weight change.
- 9 Click **More**.
The **SCALETRON Unit** dialog box appears.

Troubleshooting the Stationary SCALETRON (Cont'd)

- 10 In the **Command** list, select **C**.
 - 11 Click **Calibrate**.
 - 12 On the keyboard, press **ENTER**.
The **Messages** box displays **Place weight on scale**.
 - 13 Place the correct weight (minimum 80 lbs/37 kg) on the Bag Scale.
 - 14 Click **OK**.
 - 15 On the Pinpad, enter **0** and the exact weight of the item on the Bag Scale.
EXAMPLE: 080.00 for 80 lbs. or 037.00 for 37 kg
 - 16 Click **OK**.
The message **Calibration complete** displays. If the calibration was successful, the word **Done** also appears in the **Terminal Mode** window.
 - 17 Replace the bag racks or bag platter. **Do NOT zero the Bag Scale**.
 - 18 Go to the Attendant Station and touch the **Rotating Siren** to override the weight violation.
-

Upgrading the SCALETRON Bag Scale to Software Version 2.6

Use the following procedure to flash the rotating or stationary SCALETRON Bag Scales (firmware flash version 2.6).

Requirements for this procedure:

- The U-Scan software must be installed.
- The U-Scan software must be version 393 or under.
- The Bag Scales must function and come online in the Device Tester.
- A Phillips screwdriver.
- A small flat-head screwdriver.

1. Evaluate the SCALETRON Settings

- 1 Evaluate the configuration of the Carousel or Solo Customer Station where the Bag Scales are installed.
- 2 Stop the Customer Station software.
 - a Press **ALT+TAB**, then select **Robot Control**.
The **Robot Control** window appears.
 - b Touch **Stop Robot**.
- 3 Access the **Device Tester**.
 - a Press **ALT+TAB** until **Launchpad** is highlighted in the menu.
The Launchpad appears.
 - b Touch **Device Tester**.
- 4 Enter the password (**1379**).
The **Device Tester** is accessed.
- 5 Click the **Bag Scale** tab.
- 6 In the **ID identifier** box, note the COM ports for the Carousel Bag Scale (scale ID 1) and the Solo Bag Scale (scale ID 2).
- 7 Touch **Other**.
The **Scaleton Dialog** box appears.
- 8 In the **Command** drop-down list, select **V**.
The button changes to read **Version**.
- 9 In the **ID identifier** box, select **1**.

Upgrading the SCALETRON Bag Scale to Software Version 2.6 (Cont'd)

- 10 Touch **Version**.
The version information appears.
- 11 Note the version number.
- 12 In the **ID identifier** box, select **2**.
- 13 Repeat step **10** and step **11** for scale ID **2**.

IF	THEN
The version of one or both Bag Scales is lower than 2.6 or higher	go to step 14 to continue the procedure to flash the Bag Scale(s).
The version is 2.6 for both Bag Scales	the procedure is complete.

- 14 Touch **Cancel** to exit the **Scaleton** dialog box.
- 15 Touch **Stop** to stop the **SCALETRON Unit Tester**.
- 16 Touch **OK**.
The **Device Tester** exits.
- 17 Touch **Exit Launchpad**.
The **Launchpad** exits.

2. Perform the Upgrade

- 1 Copy the **SCALETRON.zip** file onto a diskette.
- 2 Go to the Customer Station that you will upgrade.
- 3 Insert the diskette into the disk drive.
- 4 Go to the A drive and select **SCALETRON.zip**.
- 5 Extract the **SCALETRON.zip** file to the **S_TRON** folder.
- 6 Go to **C:\S_TRON**.
- 7 Delete the **ST300-27.hex** file.
- 8 Select **STUPGRDE.EXE**, then press **ENTER**.
A warning message appears.
- 9 After the warning messages appear, press **ENTER** again.
The upgrade program launches.

Upgrading the SCALETRON Bag Scale to Software Version 2.6 (Cont'd)

- 10 Verify that the upgrade proceeds properly.
When the upgrade is complete, an **Upgrade Complete** message box appears.
 - 11 Click **OK**.
The upgrade utility begins to flash the second Bag Scale.
 - 12 When the upgrade process is complete, click **OK**.
The upgrade utility closes.
 - 13 Delete the S_TRON folder.
-

3. Test the Upgrade

- 1 Access the **Device Tester**.
- 2 Click the **Bag Scale** tab.
- 3 Click **Other**.
- 4 In the **Command** drop-down list, select **V**.
- 5 Ensure that the version is **2.6** for the Bag Scale(s).
- 6 In the **Command** drop-down list, select **R**.
- 7 Ensure that the range is correct for the Bag Scale(s).
- 8 Calibrate the Bag Scale(s). Refer to “[Calibrate the Bag Scale](#)” in “[Troubleshooting the Rotating SCALETRON](#)” or “[Troubleshooting the Stationary SCALETRON](#).”

Updating the SCALETRON Bag Scale to Software Version 2.9

Perform the following procedure to upgrade the SCALETRON Bag Scales to firmware version 2.9.

Requirements:

- U-Scan software installed
- U-Scan software version 394 or higher
- Bag Scales online in the **Device Tester**
- Standard jumper for each Bag Scale
- Phillips screwdriver
- Small flat-head screwdriver.

1. Evaluate the SCALETRON Settings

- 1 Go to the Customer Station.
- 2 Stop the Customer Station software.
 - a Press **ALT+TAB**, then select **Robot Control**.
The **Robot Control** window appears.
 - b Click **Stop Robot**.
- 3 Access the **Device Tester**.
 - a Press **ALT+TAB** until **Launchpad** is highlighted in the menu.
The Launchpad appears.
 - b Click **Device Tester**.
- 4 Enter the password (**1379**).
The **Device Tester** is accessed.
- 5 Click the **Bag Scale** tab.
- 6 In the **ID identifier** box, note the COM ports for scale ID 1 and scale ID 2.

NOTES: *Scale ID 1 corresponds to the rotating Bag Scale at a **Carousel Station** or the lower Bag Scale at a **U-Scan3 or 5 Station**.*

There is no scale ID 2 for a U-Scan1 Station.

Updating the SCALETRON Bag Scale to Software Version 2.9 (Cont'd)

- 7 Click **Other**.
The **Scaleton Dialog** box appears.
- 8 In the **Command** drop-down list, select **V**.
The button changes to read **Version**.
- 9 In the **ID identifier** box, select **1**.
- 10 Click **Version**.
The version information appears.
- 11 Note the version number.
- 12 If there is a second Bag Scale, select **2** in the **ID identifier** box.
- 13 Repeat step **10** and step **11** for scale ID 2.

IF	THEN
The version of one or both Bag Scales is 2.6 or 2.7 AND the software version is 394 or higher	go to step 14 to continue the procedure to flash the Bag Scale(s).
The version of one or both Bag Scales is 2.6 AND the software version is 393 or lower	refer to " Upgrading the SCALETRON Bag Scale to Software Version 2.6. "
The version is 2.9 for both Bag Scales	the procedure is complete.

- 14 Touch **Cancel** to exit the **Scaleton** dialog box.
- 15 Touch **Stop** to stop the **SCALETRON Unit Tester**.
- 16 Touch **OK**.
The **Device Tester** exits.
- 17 Touch **Exit Launchpad**.
The **Launchpad** exits.

2. Perform the Upgrade

- 1 Copy the scale29.exe file from the FTP site onto a diskette. The FTP site is located in the following folder:
Separated manual_fast download time\Hardware devices\Bag Scale\Scaleton\Scaleton firmware 2.9
- 2 Go to the Customer Station that you will upgrade.

Updating the SCALETRON Bag Scale to Software Version 2.9 (Cont'd)

- 3 Insert the diskette into the disk drive.
NOTE: *Pentium 4 Customer Station Computers do not have an A drive. If you are upgrading a Customer Station with a P4 Computer, first copy the file on the Attendant Station, then transfer it to the Customer Stations over the network.*
- 4 Go to the A drive and select **scale29.exe**.
- 5 Double-click the file.
The **WinZip Extractor** dialog box appears.
- 6 Click **Unzip**.
The message **2 files unzipped successfully** appears.
- 7 Click **OK**.
- 8 Close the **WinZip Extractor** dialog box.
- 9 Go to C:\S_TRON.
- 10 Select **STUPGRDE.EXE**, then press **ENTER**.
A warning message appears.
- 11 Press **ENTER** again.
The upgrade program launches.
- 12 Verify that the upgrade proceeds properly.
When the upgrade is complete, an **Upgrade Complete** message box appears.
NOTE: *If there is only one Bag Scale, the upgrade utility closes automatically.*
- 13 Click **OK**.
The upgrade utility begins to flash the second Bag Scale.
- 14 When the upgrade process is complete, click **OK**.
The upgrade utility closes.
- 15 Delete the S_TRON folder.

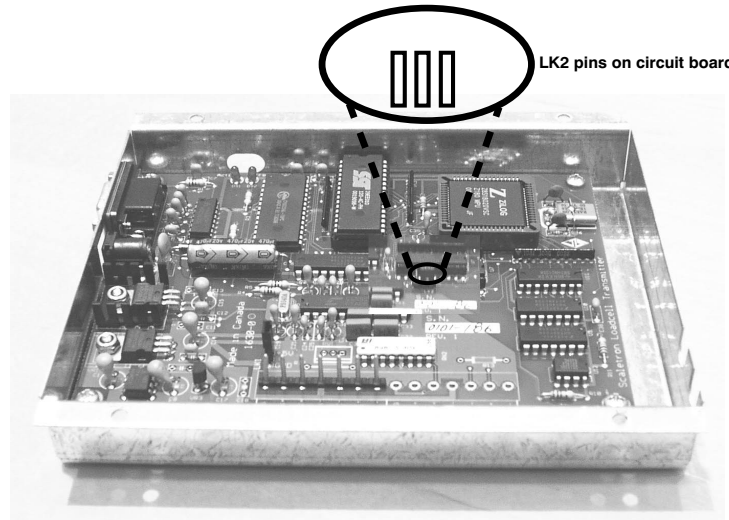
3. Set the Scale Range (Maximum Capacity)

NOTE: *You can no longer set the Bag Scale range from the **TEST** mode or the **COMMAND** mode.*

- 1 Remove the bag platter.
- 2 Locate the loadcell transmitter circuit board.
- 3 Remove the power and communication cables.
- 4 Remove the cover to the loadcell transmitter circuit board.

Updating the SCALETRON Bag Scale to Software Version 2.9 (Cont'd)

- 5 Refer to the diagram below to locate the **LK2** hardware link on the loadcell transmitter circuit board.

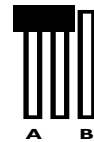


IF	THEN
You are setting the Bag Scale range (maximum scale capacity) for the Carousel Station rotating Bag Scale	refer to the diagram “LK2 Jumper Position for Scale Range of 300 lbs.” for the jumper position.
You are setting the scale range (maximum scale capacity) for the Carousel stationary Bag Scale or the U-Scan1, 3, or 5 Bag Scales	refer to the diagram “LK2 Jumper Position for Scale Range of 150 lbs.” for the jumper position.

LK2 Jumper Position for Scale Range of 150 lbs. (Stationary or Solo Bag Scale)



LK2 Jumper Position for Scale Range of 300 lbs. (Rotating Bag Scale)



NOTE: A Rev.0 loadcell transmitter circuit board has different markings for LK2. The position marked “Test” is for a range of 150 lbs.

- 6 Place the jumper on the appropriate pins.

Updating the SCALETRON Bag Scale to Software Version 2.9 (Cont'd)

4. Reassemble the Bag Scale

- 1 Replace the cover of the loadcell transmitter circuit board.
 - 2 Connect the communication cable.
 - 3 Connect the power cable.
 - 4 Replace the Bag Scale platter.
-

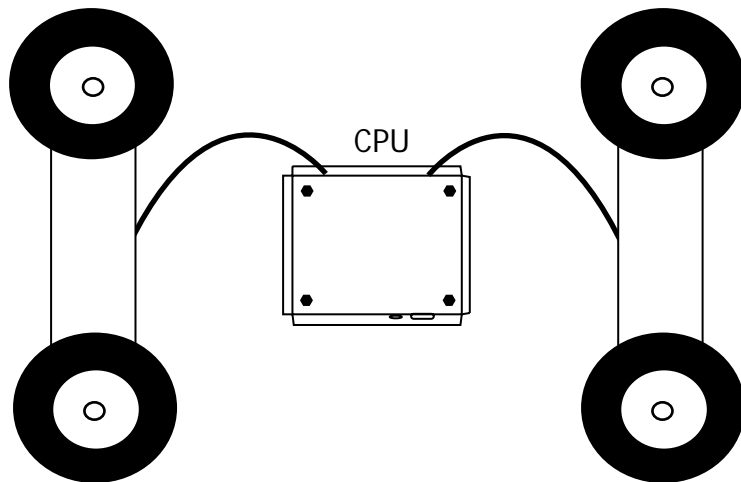
5. Test the Upgrade

- 1 Access the **Device Tester**.
 - 2 Click the **Bag Scale** tab.
 - 3 Click **Other**.
 - 4 In the **Command** drop-down list, select **V**.
 - 5 Ensure that the version is **2.9** for the Bag Scale(s).
 - 6 In the **Command** drop-down list, select **R**.
 - 7 Ensure that the range is correct for the Bag Scale(s).
-

6. Calibrate the Bag Scale(s)

Calibrate the Bag Scale(s). Refer to “[Calibrate the Bag Scale](#)” in “[Troubleshooting the Rotating SCALETRON](#)” or “[Troubleshooting the Stationary SCALETRON](#).”

SCALETRON 1900 Bag Scale for NextGen Customer Stations



The SCALETRON for NextGen Customer Stations has the following features:

- 150-lb. (68-kg) platform capacity
- 150-lb. (68-kg) scale capacity
- Maximum error limit of 0.05 lb. (0.02 kg) for 150 lbs. (68 kg)
- Maximum response time of 1.0 second

Technical Specifications

Environment

- Temperature: 50°F to 104°F (10° to 40°C)
- Relative Humidity: 0% to 90% non-condensing

Power Supply Requirements (Per Scale)

- Input: 100 to 240 V, 50 to 60 Hz
- Output: +12 V, 600 mA

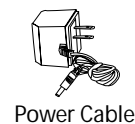
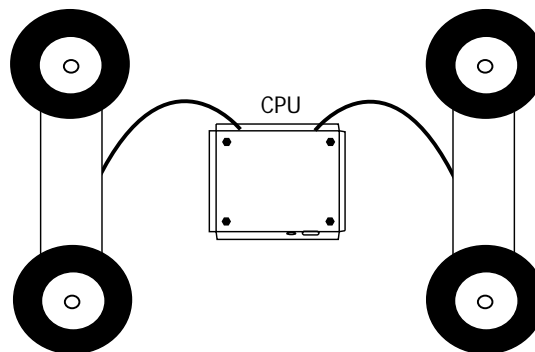
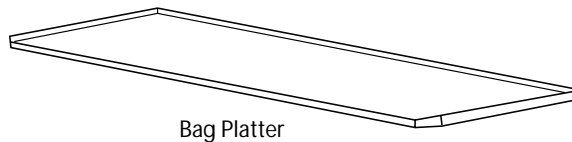
Communication

- RS-232 communication cable (9-pin D female connector)

Components of the SCALETRON Bag Scale for NextGen Customer Stations

The SCALETRON Bag Scale for NextGen Customer Stations includes the following components:

- SCALETRON 1900 Bag Scale for NextGen 2-bar
- Bag platter
- Communication cable
- Power cable



Troubleshooting the SCALETRON for NextGen Customer Stations

1. Follow the Testing Procedure

See “Testing the Bag Scale.”

2. Check the Power

- 1 Remove the bag platter.
 - 2 Ensure that the power cable is connected to the device.
 - 3 Ensure that the power adapter is connected to the power bar.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the Bag Scale.
 - 2 Ensure that the data cable is connected to COM 4.
 - 3 Replace the bag platter.
-

4. Check the Bag Scale Platter

- 1 Ensure that the bag platter is not touching the Customer Station casing.
 - 2 Ensure that the bag platter is aligned with the rubber shock absorbers on the Bag Scale.
-

5. Verify the LED Status

- 1 Remove the bag platter.
 - 2 Locate the LED inside the circuit board housing.
NOTE: There is a cut-out for the LED. Do not open the circuit board housing.
 - 3 Verify the LED status. The Active LED should be flashing at a constant rate. The Error LED cannot be lit continuously.
-

Troubleshooting the SCALETRON for NextGen Customer Stations (Cont'd)

6. Reset the Bag Scale

- 1 If there are bag racks on the Bag Scale, remove them.
OR
If there are no bag racks, remove the bag platter.
 - 2 Access the **Device Tester**.
 - 3 Click the **Bag Scale** tab.
 - 4 Click **Start**.
 - 5 Click **Other**.
 - 6 For U-Scan3 or U-Scan5 Stations only, select the upper Bag Scale (2) from the **Id** list.
OR
Select the lower Bag Scale (1) from the **Id** list.
 - 7 In the **Command** list, select **Z**.
 - 8 Click **ZERO** to reset the Bag Scale.
 - 9 If necessary, replace the bag racks or bag platter.
 - 10 If necessary, touch the **Rotating Siren** at the Attendant Station to clear the weight violation.
-

7. Calibrate the Bag Scale

- NOTE:** 1. Use 80 lbs. (37 kg) or more to calibrate the Bag Scale.
2. Never use water bottles or any container filled with liquid for calibration.

To determine the exact weight of the item:

- 1 At a Customer Station, weigh the item on the Scanner Scale.
- 2 For each item added, record the weight shown on the Scanner Scale until you have a minimum weight of 80 lbs. (37 kg).
- 3 Remove the bag racks.

To calibrate the stationary Bag Scale:

- 4 On the Customer Station **Launchpad**, click **Device Tester**.
- 5 Enter **1379** in the **Pinpad** box.
- 6 Click the **Bag Scale** tab.

Troubleshooting the SCALETRON for NextGen Customer Stations (Cont'd)

- 7 Under **Test Bag Scale**, click **Start**.
The **Messages** box indicates if the device is online and if there is a weight change.
 - 8 Click **Other**.
The **SCALETRON Unit Dialog** screen appears.
 - 9 For U-Scan3 or U-Scan5 Stations only, select the upper Bag Scale (2) from the **Id** list.
OR
Select the lower Bag Scale (1) from the **Id** list.
 - 10 From the **Command** list, select **C**.
 - 11 Click **Calibrate**.
 - 12 On the keyboard, press **ENTER**.
The **Messages** box displays **Place weight on scale**.
 - 13 Place the correct weight (minimum 80 lbs./37 kg) on the Bag Scale.
 - 14 Click **OK**.
 - 15 On the Pinpad, enter **0** and the exact weight of the item on the Bag Scale.
EXAMPLE: 080.00 for 80 lbs. (037.00 for 37 kg)
 - 16 Click **OK**.
The message **Calibration complete** displays. If the calibration was successful, the word **Done** also appears in the **Terminal Mode** window.
 - 17 Replace the bag racks or platter. **Do NOT zero the Bag Scale**.
 - 18 Go to the Attendant Station and touch the **Rotating Siren** to override the weight violation.
-

Bill Acceptor

Testing the Bill Acceptor in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Check the Settings

Refer to “Check the Settings” in “Using the Device Tester” at the beginning of this manual.

3. Test the Device

NOTE: *For an explanation of error messages see “Bill Acceptor Error Messages” on the next page. Error messages are also stored in the **Eventlog Viewer** and can be viewed upon exiting the **Device Tester**.*

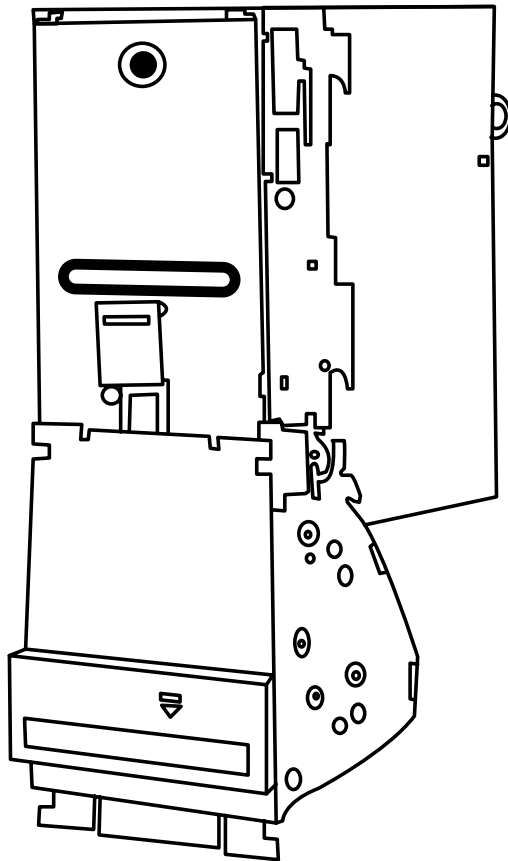
- 1 Click **Start**.
The Bill Acceptor is disabled. A red light appears at the “mouth” of the device.
 - 2 Click **Enable**.
The message **DEVICE::ONLINE{Bill Acceptor}**, should appear in the **Messages** box. A green light appears at the “mouth” of the Bill Acceptor.
 - 3 Enter a \$1 bill into the device.
If the test is successful, the bill remains in the acceptor and the **Messages** box displays **BILL_ACCEPTOR::RECEIVED_BILL{1}**.
 - 4 Click **Disable**.
 - 5 Click **Stop**.
 - 6 Click **OK**.
-

Bill Acceptor Error Messages

Refer to the table below for a description of Bill Acceptor error messages.

Error Message	Explanation
BILL_ACCEPTOR::BILL_REJECTED	Bills can be rejected if they are not in good condition.
BILL_ACCEPTOR(NEEDS_CLEANING)	The Bill Acceptor's sensors are dirty and cannot read the inserted bill. Clean the device and try again.
BILL_ACCEPTOR::FULL_OR_OPEN	The bill stacker is full or open. Empty the bill stacker and then close it. Test the Bill Acceptor.
MECHANICAL_ERROR	There could be a problem with serial communications, power connections, or the device needs to be replaced.

CASHCODE Bill Acceptor



Features:

- Optical sensors
- Four-way bill acceptance (face-up, face-down, etc.)
- 96% validation rate
- Removable vault (capacity of 400 bills)

NOTE: *There are currently two versions of the CASHCODE validator: the **ST** and the **SM**. Both versions use the same vault and cables. For firmware updates, the **ST** uses has an EPROM chip and the **SM** a memory stick.*

Technical Specifications

Environment

- Temperature: 32°F to 122°F (0°C to 50°C)

Power Supply Requirements

- Input: 85 to 265 V ac; 0.3 A; 50 to 60 Hz
- Output: 12 V dc; 0.9 A **OR** 2.5 A

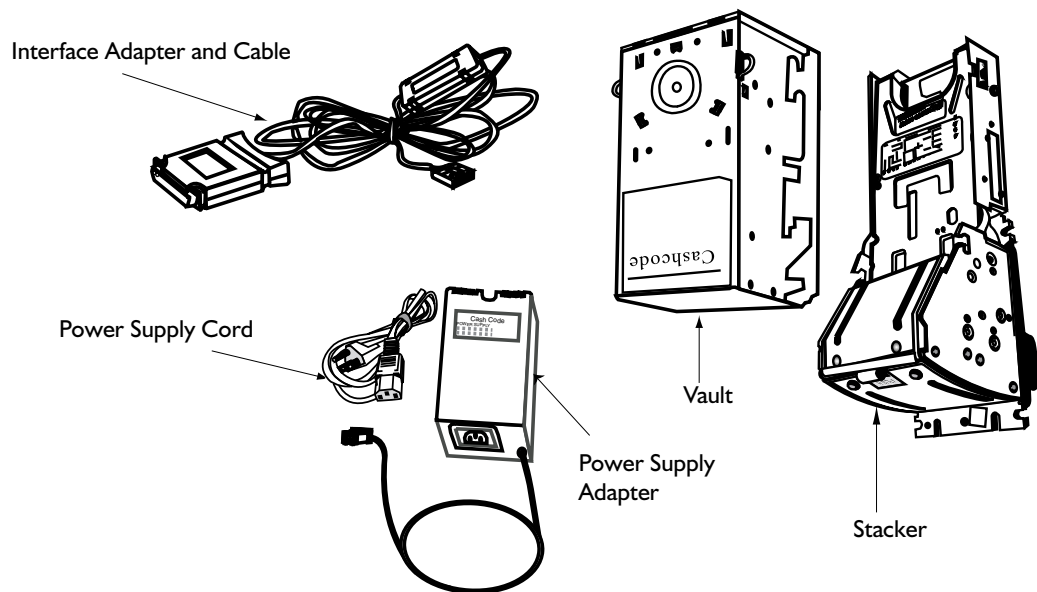
Communication

- 18-pin to 25-pin cable to DIGI Box or Edgeport

Components of the CASHCODE

The CASHCODE is made up of the following components:

- Vault
- Stacker (ST or SM)
- Power supply adapter (0.9 A or 2.5 A)
- Power cable
- Communication cable



Troubleshooting the CASHCODE Bill Acceptor

1. Follow the Testing Procedure

See “Testing the Bill Acceptor.”

2. Inspect the Power

- 1 Ensure that the power supply cable is connected to the power supply adapter. The green LED power indicator must be on when using a 0.9 A power supply.

NOTE: *There is no green LED on the 2.5 A power supply.*

- 2 Ensure that the power cable is connected to the device.
 - 3 Ensure that the red LED at the front of the device is on.
 - 4 Ensure that the power supply cable is connected to the power bar.
 - 5 Cycle the power by unplugging the power supply and then plugging it back in.
-

3. Inspect the Data Cable

NOTE: *The data cable for the Bill Acceptor has a larger connector than the other cables.*

- 1 Ensure that the data cable is connected to the device.
 - 2 Ensure that the data cable is connected to Port 8 on the DIGI Box or Edgeport.
-

4. Inspect for Bill Jams

- 1 Unplug the power supply to disconnect the power to the device.
- 2 Remove the vault by pressing on the clips on each side of the vault and pulling the vault forward.
- 3 Turn the black knob to open the vault.
- 4 Inspect the inside of the vault for bill jams.
- 5 Pull on the metal pusher plate to ensure that it is free from pieces of torn bills.

Troubleshooting the CASHCODE Bill Acceptor (*Cont'd*)

- 6 Open the sensor housing doors by pressing the black button on the housing.
 - 7 Inspect for bill jams inside the stacker.
-

5. Clean the Sensors and Rollers

NOTE: *Do not use alcohol to clean the sensors or rollers.*

- 1 Disconnect the power at the power supply.
 - 2 Open the sensor housing doors (clamshells) by pressing the black button on the housing.
 - 3 Clean the sensors inside the housing with a damp lint-free cloth.
 - 4 Clean the rollers (small wheels) thoroughly with a damp lint-free cloth.
-

6. Inspect the Metal Tab on the Circuit Board Cover

- 1 Disconnect the power at the power supply.
 - 2 Remove the vault.
 - 3 Pull the right side of the circuit board cover to remove it from the stacker.
 - 4 Ensure that the metal tab on the back plate is properly secured.
 - 5 Ensure that the metal tab is at a 90° angle with the plate.
-

7. Inspect the Ribbon Cables

- 1 Disconnect the power at the power supply.
 - 2 Remove the vault.
 - 3 Remove the circuit board cover.
 - 4 Check all the ribbon cables on the circuit board for any signs of damage.
-

Troubleshooting the CASHCODE Bill Acceptor (Cont'd)

8. Check the EPROM Version (ST Model Only)

NOTES: *The EPROM is the small chip on the circuit board.*

The SM model uses a memory stick instead of an EPROM chip.

- 1 Disconnect the power at the power supply.
 - 2 Remove the vault.
 - 3 Remove the back plate.
 - 4 Check the EPROM version number. For the latest EPROM version, contact the U-Scan Support Center.
 - 5 If necessary, see “Additional Information” to change the EPROM.
-

9. Check the DIP Switches

NOTE: *DIP Switches:*

ON = Right

OFF = Left

- 1 Disconnect the power to the device.
 - 2 Remove the vault.
 - 3 Remove the circuit board cover.
 - 4 Ensure that the DIP switch settings for the **CASHCODE ST** are:
Bank 1:
DIP switches 1,2,3, and 4, **ENABLED**.
DIP switches 5,6,7, and 8, **DISABLED**.
Bank 2:
3,4 are **ENABLED**.
DIP switches 1,2 are **DISABLED**.
OR
Ensure that all DIP switches for the **CASHCODE SM** are **ENABLED (ON)**.
-

Additional Information for the CASHCODE Bill Acceptor

This section contains the following information:

- [CASHCODE LED Status](#) (page 7): Table explaining the LED status.
- [CASHCODE DIP Switch Settings](#) (page 8): Information on the DIP switch location and settings.
- [Setting \\$50 Bill Acceptance](#) (page 10): Procedure for enabling the CASHCODE to accept \$50 bills.
- [Changing the EPROM Chip \(CASHCODE ST Only\)](#) (page 10): Procedure for changing the CASHCODE ST EPROM chip.
- [Changing the Memory Stick \(CASHCODE SM Only\)](#) (page 11): Procedure for changing the CASHCODE SM memory stick.

CASHCODE LED Status

1 If the Bill Acceptor is enabled in the **Device Tester** and the red LED on the front of the device is on, insert a bill.

2 Remove the bill when the red LED turns off.

NOTE: *If you insert the bill and the LED does not turn off, there is a communication problem.*

3 Count the number of times the LED flashes.

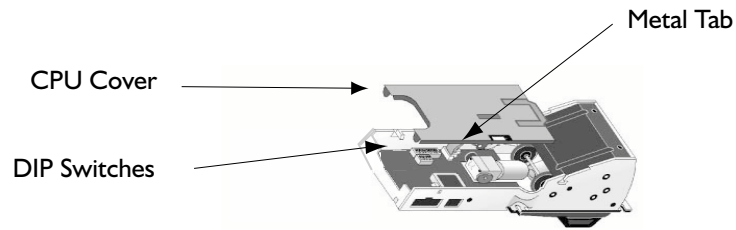
NOTE: *When the diagnostic process is complete, the LED becomes steady. Do **NOT** count this as a flash.*

4 Locate the problem in the table below.

Number of Flashes	Problem
1	Cassette is not present.
2	Stacking motor is not rotating.
3	Cassette is full.
4	Mechanical jam in cassette.
5	Stacking motor electrical overload.
6	Optical sensor failure.
7	Magnetic sensor failure.
8	Transport motor is not moving.
9	Speed of transport motor is too high.
10	Transport motor electrical overload.
11	Bill pathway security latch is open.
12	Bill is in the entry slot of the cassette and the credit is not issued.

CASHCODE DIP Switch Settings

The DIP switches on the CASHCODE Bill Acceptor are covered by the vault or stacker. There are two banks of DIP switches to set.



CASHCODE ST

The following are the factory default settings for the CASHCODE ST.

BANK 1

DIP	State
1	4 Pulse/ \$1 OFF
2	OFF
3	\$1 Enabled
4	\$5 Enabled
5	4-Way
6	Down Stacker
7	Fast Pulse
8	All Interfaces

BANK 2

DIP	State
1	\$50 Disabled
2	\$100 Disabled
3	High Security
4	BDP OFF

NOTE: *If a store accepts \$50 bills, DIP switch 1 on Bank 2 is ENABLED. See "Setting \$50 Bill Acceptance" on page 10 for more information.*

CASHCODE SM

For the CASHCODE SM, all DIP switches must be set to **ENABLED**. Refer to the table below for a list of DIP switch functions.

BANK 1

DIP	State
1	\$1 Enabled
2	\$2 Enabled
3	\$5 Enabled
4	\$10 Enabled
5	\$20 Enabled
6	\$50 Enabled
7	\$100 Enabled
8	Reserved

BANK 2

DIP	State
1	Four- Way Enabled
2	Stacker Up Enabled
3	9600 bps Enabled
4	CCNET ON Enabled

Setting \$50 Bill Acceptance

DIP switch 1 on Bank 2 should be set to 1 (**ON**). This allows the device to accept \$50 bills. The registry setting must also be changed.

To Change the Registry Setting

- 1 Go to **Start> Run**.
- 2 Enter **regedit**.
- 3 Click **OK**.
The **Registry Editor** appears.
- 4 Go to **HKEY_CURRENT_USER**
\Software\OptimalRobotics\Devices\BillAcceptor.
- 5 Click **AllowedDenominations**.
- 6 Modify the **Value data** text box to read exactly as follows: **1, 5, 10, 20, 50**. (By default, the first four numbers are displayed. Add **50** to the default values.)

Changing the EPROM Chip (CASHCODE ST Only)

Perform this procedure to change the EPROM chip and update the CASHCODE firmware.

CAUTION: To prevent damage to components, disconnect the DC power supply or the AC power cord.

Required Tools

- Surface-mount chip extractor (Diebold part number 19-038127-000A)

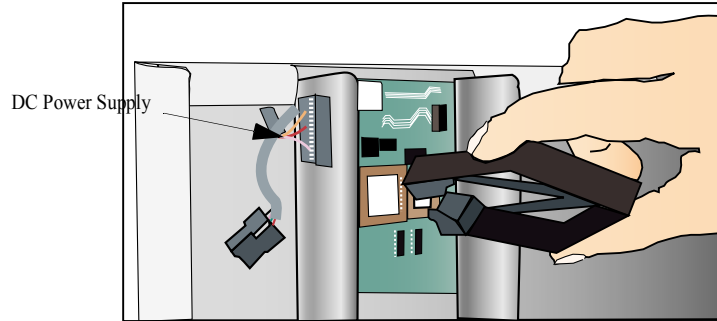


NOTE: *DO NOT* use any other tool to remove the EPROM.

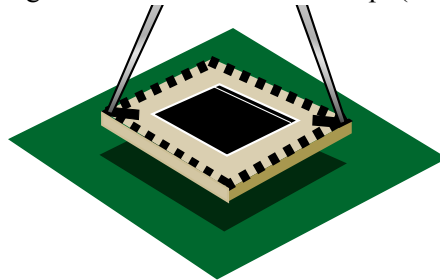
To Change the EPROM Chip:

- 1 Disconnect the DC power supply from the side of the Bill Acceptor.
- 2 Remove the CASHCODE vault.
- 3 Remove the back plate to uncover the circuit board.
- 4 Remove the *smaller* chip. (See the diagram below.)

- a Insert the chip extractor into the notches on the upper left and lower



right corners of the smaller chip. (See the diagram below.)



- b** Carefully remove the chip.
- 5** Insert the new EPROM chip, with the beveled side of the EPROM chip to your right. The chip should click into place.
- 6** Insert the back plate.
- 7** Insert the CASHCODE vault.
- 8** Connect the AC power supply to the CASHCODE.
- 9** Access the **Device Tester**.
- 10** Test the device with different denominations.

Changing the Memory Stick (CASHCODE SM Only)

Change the memory stick to upgrade the firmware for the CASHCODE SM Bill Acceptor.

- 1** Disconnect the power cable from the CASHCODE SM.
- 2** Remove the vault.
- 3** Remove the circuit board cover.
- 4** Locate the memory stick.
- 5** Slide the metal tab down toward the OPEN position to unlock the memory stick.
- 6** Lift and remove the memory stick.
- 7** Insert the new memory stick.
- 8** Press the new memory stick down against the circuit board.

- 9 Slide the metal tab up toward the CLOSED position to lock the memory stick in place.
- 10 Replace the circuit board cover.
- 11 Replace the vault.
- 12 Connect the power cable.
- 13 Test the CASHCODE SM.

Bill Dispenser

Testing the Bill Dispenser in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Verify the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: For an explanation of error messages, see “Bill Dispenser Error Messages” later in this section. Error messages are also stored in the **Eventlog Viewer** and can be viewed after you exit the Device Tester.

- 1 Click **Start**.
The message **ONLINE{Bill Dispenser}** appears in the **Messages** box.
- 2 Click **Dispense**.
- 3 Enter the dollar amount to be dispensed.
- 4 Click **OK**.
If the test was successful, the Bill Dispenser dispenses the indicated amount and the **Messages** box displays **BILL_DISPENSER::DISPENSED{amount}**.
- 5 Click **Stop**.
- 6 Click **OK**.

NOTE: When you test the Bill Dispenser, click **More** if further investigation is required. **Other** allows you to view the diagnostic output, view configurations, dispense bills, adjust the double detect, and reset the device.

- 7 As required, click the following buttons to perform additional tests or to check settings:

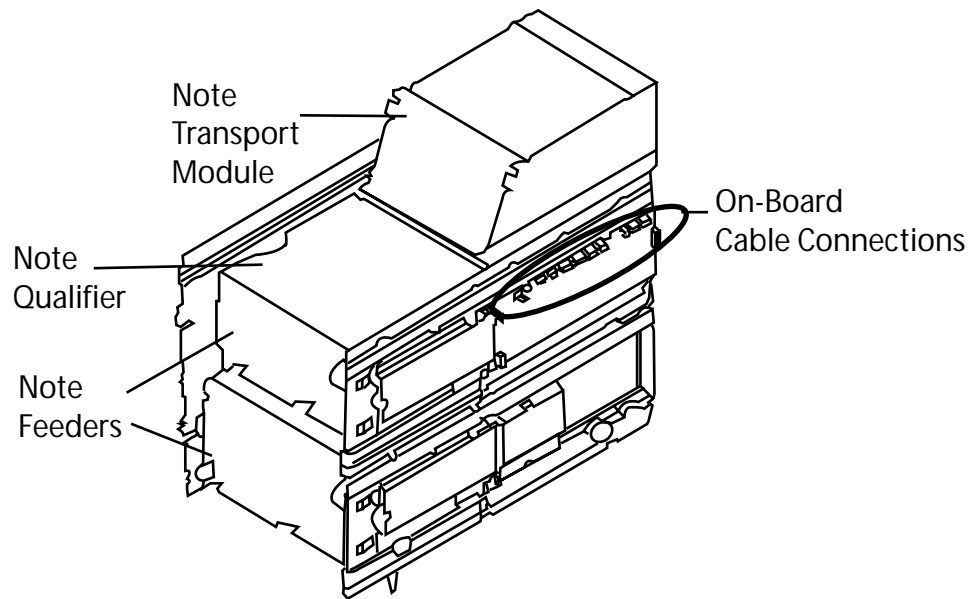
DE LA RUE	
Button	Function
Tray Configuration	Displays the current tray configuration (i.e. \$1, \$5, \$10).
Current Status	Displays the current functional status of the Bill Dispenser. Displays error messages if the Bill Dispenser is not working properly.
Dispense	N/A
Dispense to Reject	N/A
View Serial Trace	Displays logs for the DE LA RUE.
Reset Purge	Resets the Bill Dispenser and performs a purge sequence. Use this function to clear bill jams.
Lock/Unlock Trays	Locks or unlocks the trays.

Bill Dispenser Error Messages

Refer to table below for a description of the most common Bill Dispenser error messages. Refer to the Additional Information section for your Bill Dispenser model for model-specific error messages.

Error Message	Explanation
BILL_TRAY_EMPTY	Indicates that there are no bills in one of the trays or in the device altogether. Refill the Bill Dispenser and try again.
DISPENSE_LIMIT_EXCEEDED	Indicates that the amount of money to be dispensed exceeds the allowable limit. This limit is configurable. Try dispensing a smaller amount.
MECHANICAL_ERROR	The problem could be with the Serial Communications or the Power Cable, the dll file may be incorrect, or the device may need to be replaced.
BILL_TRAY_LOW	Indicates that the Bill Dispenser is low on bills.

DE LA RUE NMD 050 Bill Dispenser



Features:

- Two or three cassette Bill Dispenser models
- Cassette capacity of approximately 2000 bills (depending on thickness and quality)
- Upgradeable to four denominations
- Tower configuration
- Friction feed
- Front delivery of bills
- Cassettes that lock manually and electronically

Technical Specifications

Environment

- Temperature: 41°F to 122°F (5° to 50°C)
- Relative Humidity: 10% to 90% non-condensing

Electrical Interface

- RS-232C connection

Power Supply Requirements

DC-only power supply requires the following power levels:

- Input: 120 to 240 V ac, 50 to 60 Hz, 3 A
- Output: +12.0 V @ 3 A, +36.0 V @ 3.2 A

NOTE: *An optional power supply unit is available from DE LA RUE.*

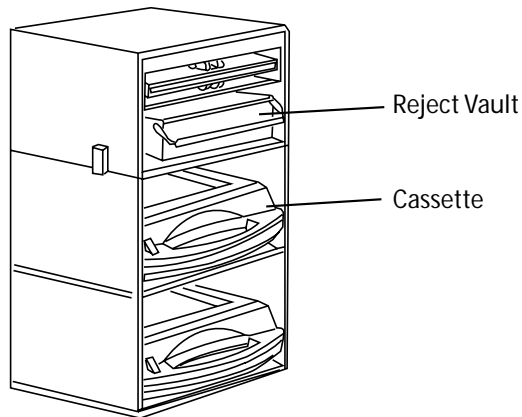
Communication

- Standard RS-232 communication cable
- Connects to COM 9 (Port 7)

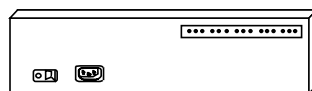
Components of the DE LA RUE NMD 050

The DE LA RUE NMD 050 Bill Dispenser includes the following components:

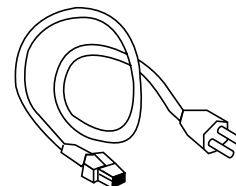
- DE LA RUE Bill Dispenser
- Cassettes (two or three)
- Reject vault
- DE LA RUE power supply
- DE LA RUE power cable
- RS-232 communication cable (handshaking for TS/NT; non-handshaking for OSA)



DE LA RUE Bill Dispenser



DE LA RUE
Power Supply



Power
Cable



Communication
Cable

Troubleshooting the DE LA RUE

1. Follow the Testing Procedure

See “Testing the Bill Dispenser.”

2. Inspect the Power

- 1 Ensure that the happy light is blinking on the circuit board.
 - 2 Locate the DE LA RUE power supply under the Bag Scale.
 - 3 Ensure that the power cable is connected to the rear of the DE LA RUE power supply.
 - 4 Ensure that the power cable is connected to the DE LA RUE main circuit board.
 - 5 Ensure that the power supply switch is ON.
-

3. Inspect the Data Cable

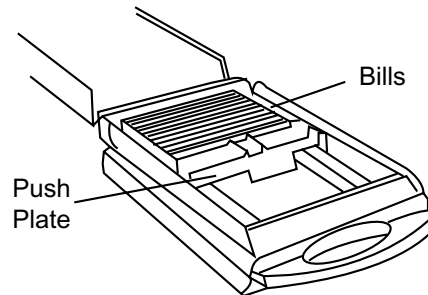
- 1 Locate the data cable.
 - 2 Ensure that the data cable is connected to the main circuit board in the 5-pin connection (at the front of the circuit board).
 - 3 Ensure that the data cable is connected to COM 9 (Port 7) on the Edgeport.
 - 4 Inspect the data cable for any visible signs of damage.
-

4. Inspect the Cassettes

- 1 Remove the cassettes from the DE LA RUE.
- 2 Locate the white locking mechanism on the side of the cassette.
- 3 Ensure that the locking mechanism is not damaged or broken.
- 4 Locate the copper contact on the cassette.
- 5 Ensure that there is no debris blocking the copper contact.
- 6 Open the cassettes.
- 7 Inspect the media condition. Ensure that the bills in the cassette are not damaged.

Troubleshooting the DE LA RUE (Cont'd)

- 8 Slide the push plate forward and backward to ensure that the internal components function.



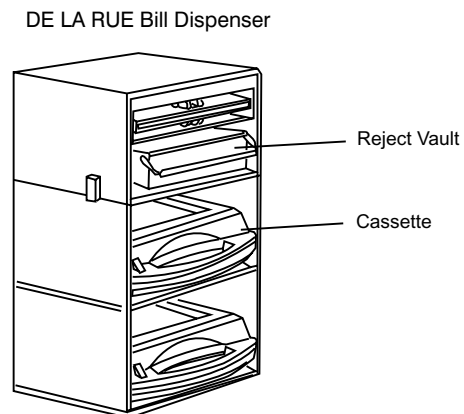
- 9 Verify the cassette settings.
- 10 Press on the motor clutch, then slide the push plate forward slowly to inspect the condition of the motor clutch.

5. Inspect the Status LEDs

- 1 Ensure that all the happy light flashes at a constant rate.
- 2 Inspect the LED beside the happy light.
- 3 If the LED is on, reset the device.
 - a Access the **Device Tester**.
 - b Click **Reset Purge**.

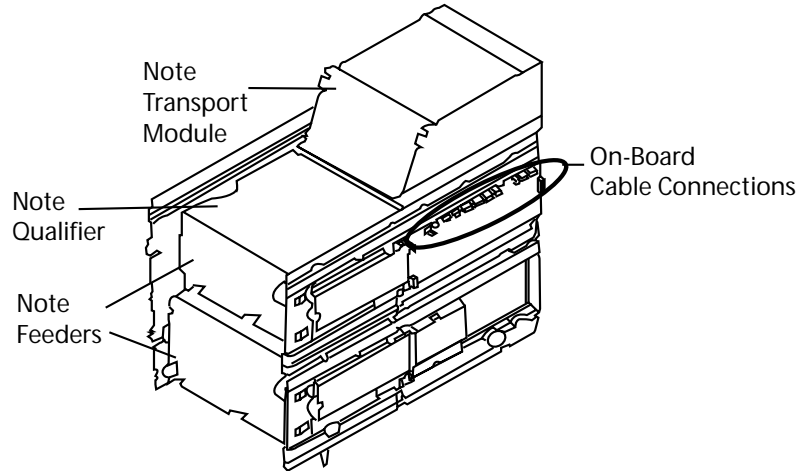
6. Check for Bill Jams or Debris

- 1 Remove the cassettes and the reject vault from the DE LA RUE.



Troubleshooting the DE LA RUE (*Cont'd*)

- 2 Slide the DE LA RUE out of the casing.
- 3 Open both note feeder covers located on the back of the device and check for any bill jams or debris in the DE LA RUE.

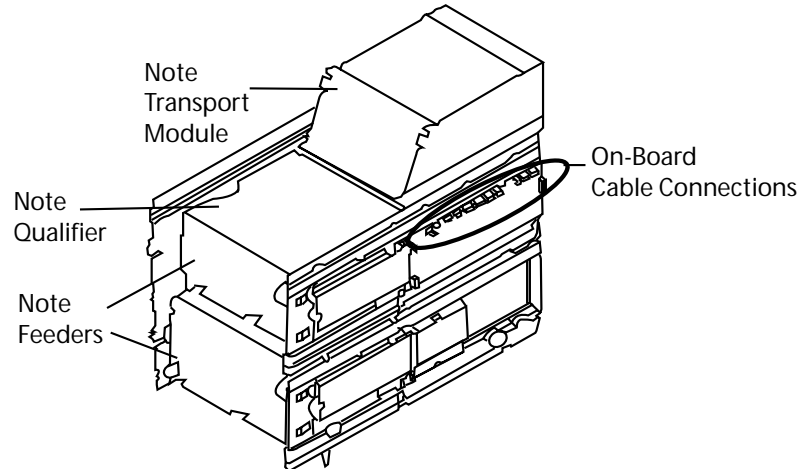


- 4 Close the note feeder covers securely.
- 5 Open both note transport covers.
- 6 Check for any debris or bill jams in the DE LA RUE.
- 7 Lift and drop the note transport cover (like the hood of a car) to close the note transport covers.
- 8 Ensure that the note transport covers are securely closed.
- 9 Look inside the note feeder modules and ensure that there are no bill jams or debris.
- 10 Locate the yellow handle inside the top note feeder/note qualifier module.
- 11 In one motion, push and then pull down on the handle. A door inside the module opens.

Troubleshooting the DE LA RUE (Cont'd)

7. Inspect the On-Board Cables

- 1 Locate the on-board cable connections on the side of the DE LA RUE.



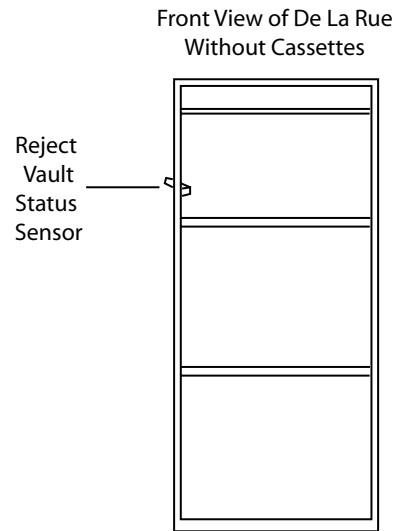
- 2 Press firmly on all of the cables to ensure that they are properly connected.
- 3 Ensure that all cables are pointing up toward the note transport module.
- 4 Locate the cable connections on the double-detect, throat, and exit sensors.
- 5 Press firmly on all of the cables to ensure that they are properly connected.

8. Inspect the Sensor Status

- 1 Open the top cover of the note transport module.
- 2 Use compressed air to clean the throat sensors.
- 3 Locate the empty, exit, and pressure sensors inside the note feeder module.
- 4 Use compressed air to clean the empty, exit, and pressure sensors.

Troubleshooting the DE LA RUE (*Cont'd*)

- 5 Locate the reject vault status sensor on the side of the reject vault.



- 6 Push on the reject vault status sensor to ensure that it moves back and forth freely.

Additional Information for the DE LA RUE

This section contains the following information:

- [Adjusting the Diverter Motor Mounting](#) (page 10): Procedure for adjusting the stand-outs on the diverter motor.
- [Adjusting the Note Guides](#) (page 13): Procedure for adjusting the note guides on the cassettes for US or Canadian currency.
- [Adjusting the Note Width](#) (page 14): Procedure for adjusting the cassettes.
- [Loading the Cassettes](#) (page 15): Procedure for loading bills in the cassettes.
- [Configuring the Cassettes through the Device Tester](#) (page 17): Procedures for setting the denomination and currency in the **Device Tester**.
- [Setting the Bill Quantities](#) (page 20): Procedures for setting bill quantities in **Maintenance Mode**.
- [Changing the Bill Dispenser Registry Settings](#) (page 23): Procedures for changing the number of cassettes and the denominations in the **Registry Editor**.

Additional Information for the DE LA RUE (Cont'd)

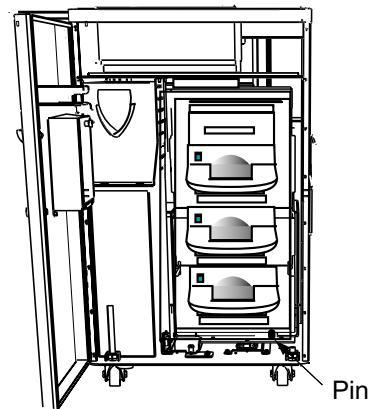
Adjusting the Diverter Motor Mounting

Perform this procedure if one of the following conditions occurs:

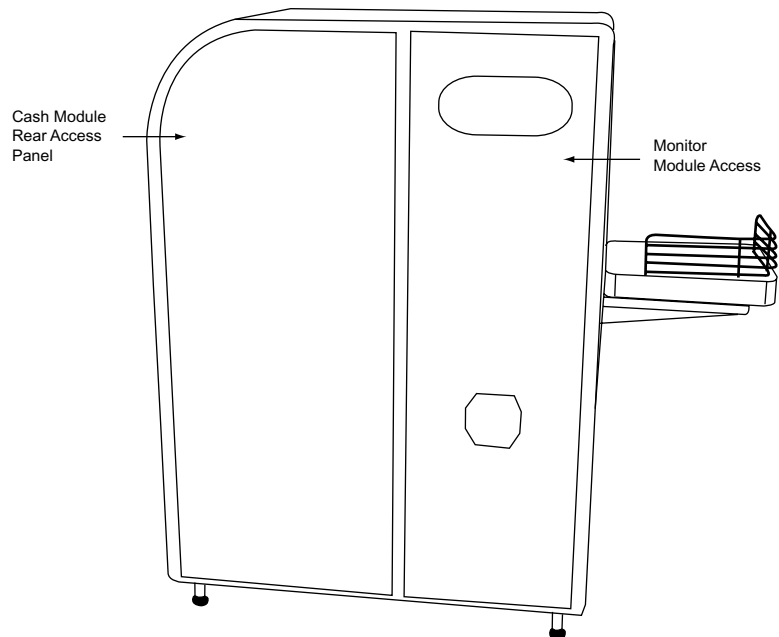
- The DE LA RUE does not read the cassettes properly in the **Device Tester**.
- You smell burnt electronics.

1. Access the DE LA RUE

- 1 Lift the pin that locks the Bill Dispenser tray into place.



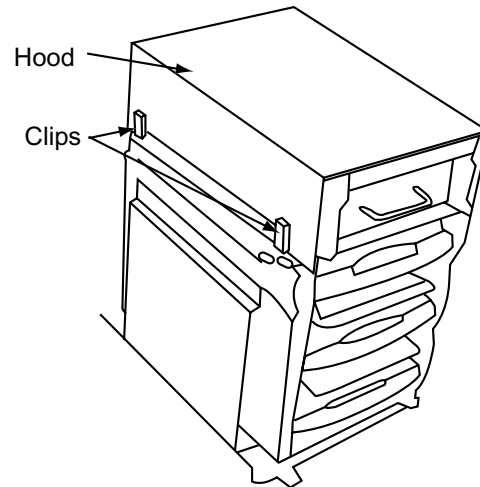
- 2 Slide the tray forward until it locks into place.
- 3 Remove the Monitor Module rear access panel.



- 4 Turn the locking pins to release the panel.

Additional Information for the DE LA RUE (Cont'd)

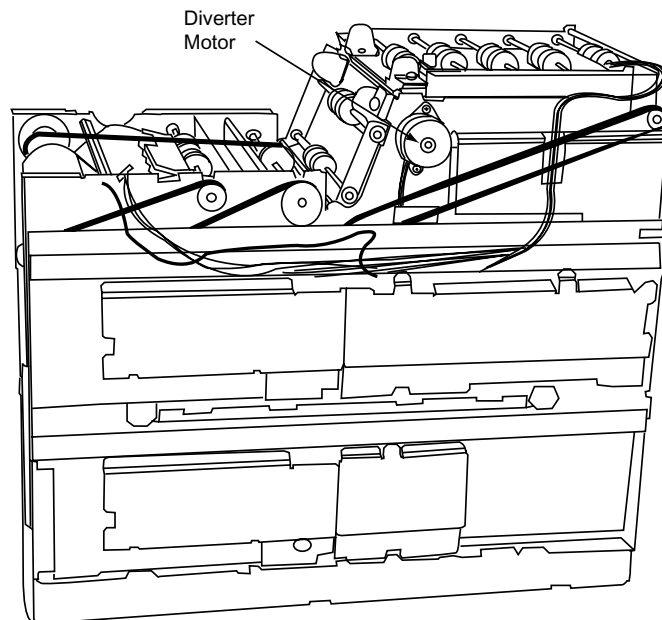
- 5 Remove the Cash Module rear access panel.
- 6 From the back of the casing, turn off the DE LA RUE power supply.
- 7 Undo the four clips (two on each side) that secure the DE LA RUE hood to the device.



- 8 Remove the hood from the device.

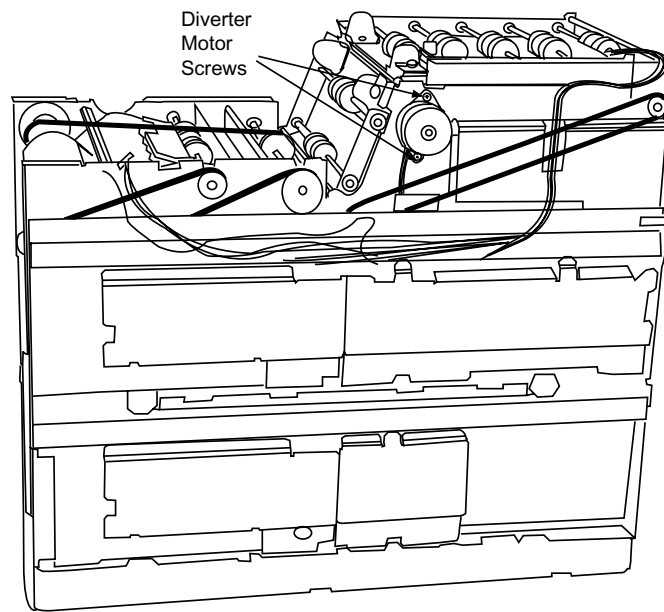
2. Adjust the Diverter Motor Mounting

- 1 On the side of the DE LA RUE, locate the diverter motor.



Additional Information for the DE LA RUE (Cont'd)

- 2 Loosen the two stand-offs behind the screws by 1/4 of a turn. Do **NOT** loosen the screws.



3. Replace the DE LA RUE

- 1 Replace the hood on the DE LA RUE.
- 2 Attach the clips that secure the hood to the device.
- 3 Slide the Bill Dispenser tray back into position.
- 4 Close the Customer Station door.
- 5 Turn on the DE LA RUE power supply.
- 6 Replace the Monitor Module rear access panel.

4. Test the DE LA RUE

- 1 If necessary, access the **Device Tester**.
 - 2 Click the **Bill Dispenser** tab.
 - 3 Perform a test dispense.
 - 4 Ensure that the DE LA RUE works properly and that you no longer smell burnt electronics.
-

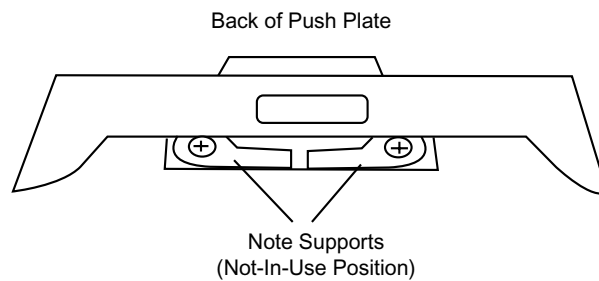
Additional Information for the DE LA RUE (Cont'd)

Adjusting and Loading the Cassettes

Adjusting the Note Guides

- 1 Open the cassette lid.
- 2 If necessary, clean the cassette.
- 3 Check the cassette for any signs of damage.
- 4 Locate the note supports on the back of the push plate.
- 5 Set the note supports to the “not in use” position.

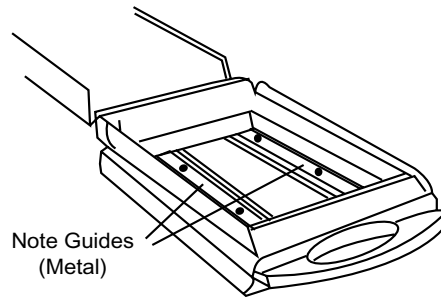
NOTE: *When you adjust the note supports, be careful not to damage the notch.*



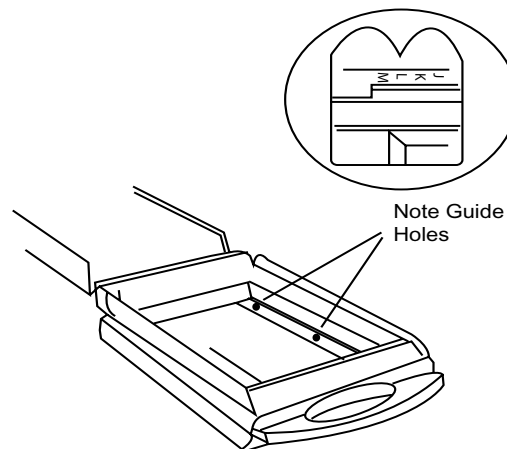
- 6 With the lid open, lock the cassette.

Additional Information for the DE LA RUE (Cont'd)

- 7 Lift the left note guide and move it toward the cassette handle as far as possible.



- 8 Ensure that you can see the letters in the note guide holes. (See below.)



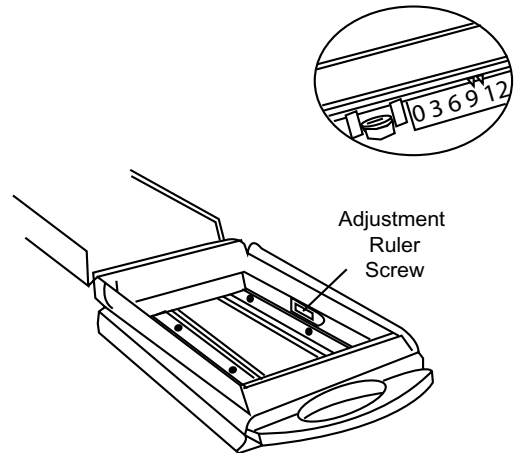
- 9 For **US currency**, set the **left** note guide to position **H**.
OR
For **Canadian currency**, set the **left** note guide to position **I**.
- 10 Repeat step 7 to step 9 to set the right note guide to position I for US and Canadian currency.

Adjusting the Note Width

- 1 Remove the cassette from the DE LA RUE.
 - a Access **Maintenance Mode**.
 - b Go the Customer Station.
 - c Touch **UNLOCK DISPENSERS**.
The cassettes unlock.

Additional Information for the DE LA RUE (Cont'd)

- d Grasp the handle and pull the cassette toward you to remove it.
- 2 Open the cassette.
- 3 If necessary, remove the bills from the cassette and clean the cassette.
- 4 Inspect the cassette for any signs of damage.
- 5 Locate the screws that hold the adjustment rulers on each side of the cassette.



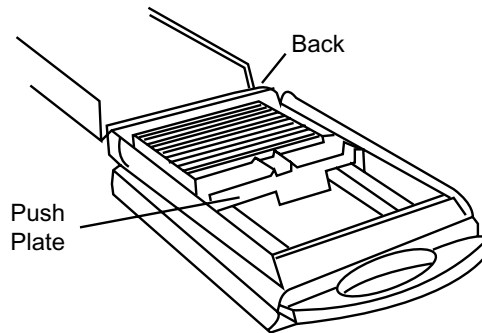
- 6 Loosen the screws that secure the adjustment rulers.
- 7 For **US currency**, set the note guides to **10**.
OR
For **Canadian currency**, set the note guides to **8**.
- 8 Tighten the screws.

Loading the Cassettes

- 1 Remove the cassette from the DE LA RUE.
 - a Access **Maintenance Mode**.
 - b Go the Customer Station.
 - c Touch **UNLOCK DISPENSERS**.
The cassettes unlock.

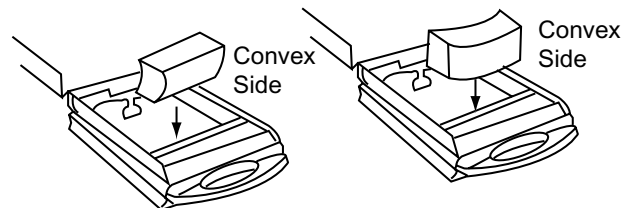
Additional Information for the DE LA RUE (Cont'd)

- d Grasp the handle and pull the cassette toward you to remove it.
- 2 Press the green button on the cassette.
- 3 Lift the top of the cassette to open it.
- 4 Fan the bills to ensure that they are not stuck together.
- 5 Move the push plate toward the handle of the cassette.

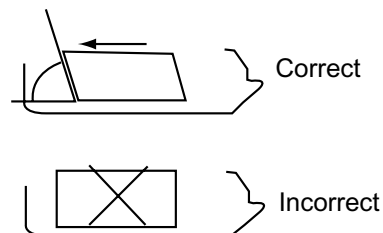


NOTES: *If you are loading a large quantity of bills, ensure that they are not all facing the same direction.*

If you are loading a "curved" bundle, place the convex side toward the handle. (See below.)



- 6 Insert the bills in the cassette.
- 7 Ensure that no bills are sticking out and that the bills lean evenly as shown below.



- 8 Move the push plate against the bills.
- 9 Close the cassette lid.
- 10 Replace the cassette in the DE LA RUE.
- 11 From **Maintenance Mode**, perform a test dispense. The specified amount is dispensed. The cassettes lock.
- 12 Touch **EXIT MAINTENANCE** to exit **Maintenance Mode**.

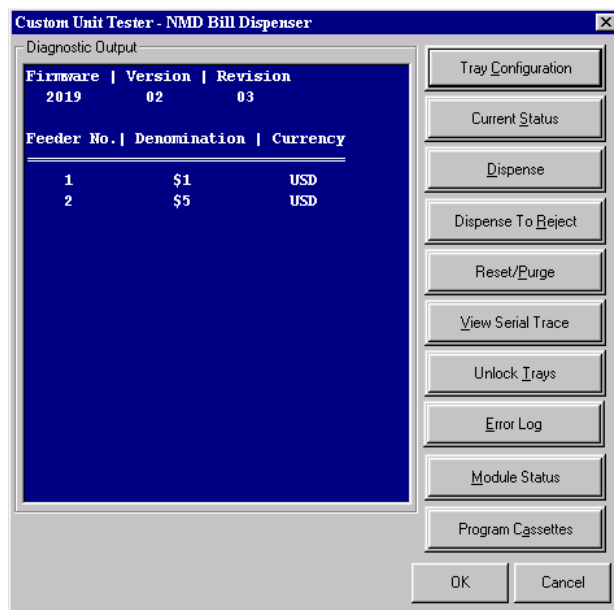
Additional Information for the DE LA RUE (Cont'd)

Configuring the Cassettes through the Device Tester

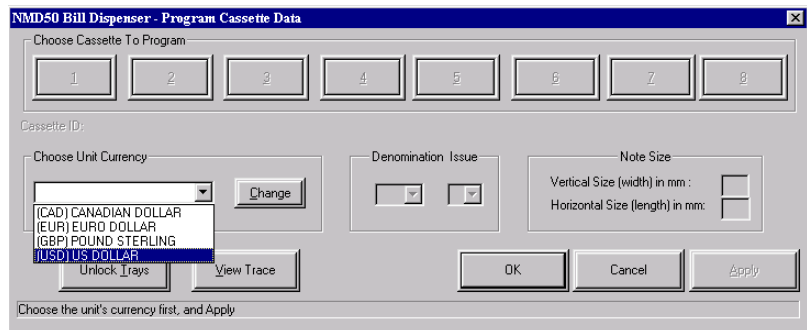
NOTE: You *MUST* perform the steps below in order.

For testing purposes, you can use a cassette from another Customer Station if the cassette has already been configured.

- 1 Access the **Device Tester**.
- 2 Click the **Bill Dispenser** tab.
- 3 Click **Other**.
The **Custom Unit Tester** dialog box appears.



- 4 Click **Program Cassettes**.
The **Program Cassettes** dialog box appears.
- 5 Click **Change**.
- 6 Select the currency from the **Choose Unit Currency** drop-down list.

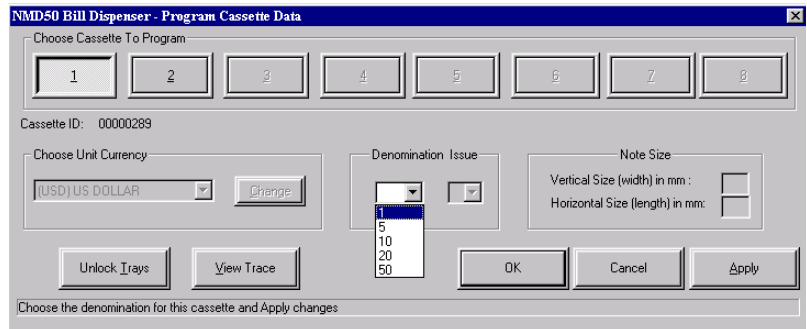


Configuring the Cassettes through the Device Tester (Cont'd)

- 7 Click **Apply**.
- 8 From the **Choose Cassette to Program** selections at the top of the screen, click the cassette that you wish to program.

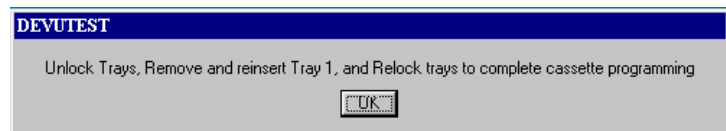
NOTE: *Cassette 1 is the top cassette, cassette 2 is the cassette below, etc. The reject vault is not considered a cassette.*

- 9 From the **Denomination Issue** drop-down list, select the appropriate denomination for the cassette.



NOTE: *The values for issue and note size are preset and cannot be set manually.*

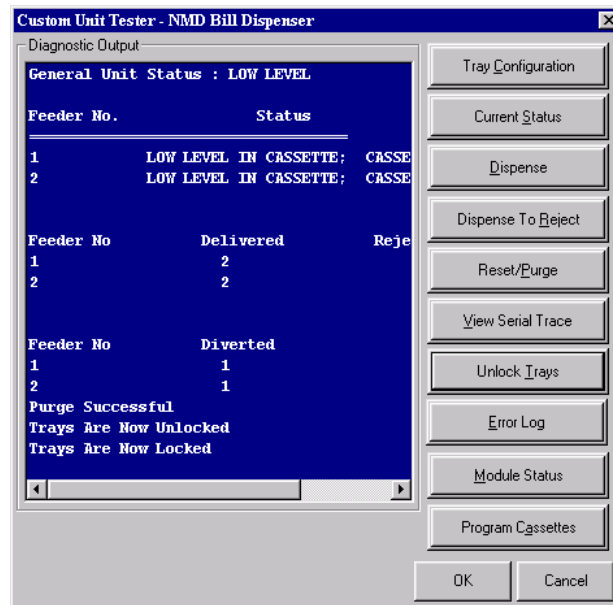
- 10 Click **Apply**.
The **Devutest** dialog box appears.



- 11 Click **OK**.
- 12 If necessary, repeat step 8 to step 11 to program the remaining cassettes.

Configuring the Cassettes through the Device Tester (Cont'd)

- 13 Click **Unlock Trays**.



- 14 Remove any cassettes that were programmed.
- 15 Replace the cassettes.
- 16 Click **Lock Trays**.
- 17 Click **OK**.
The Program Cassettes dialog box exits. The **Customer Unit Tester** dialog box displays.
- 18 Click **Dispense** or **Dispense to Reject**. This allows the cassettes to “relearn” the thickness of the currency.
- 19 Count the money dispensed to ensure that the cassettes are loaded with the appropriate denominations.
- 20 Click **OK**.
The Customer Unit Tester exits. The **Device Tester** displays.
- 21 Click **OK** to exit the **Device Tester**.
-

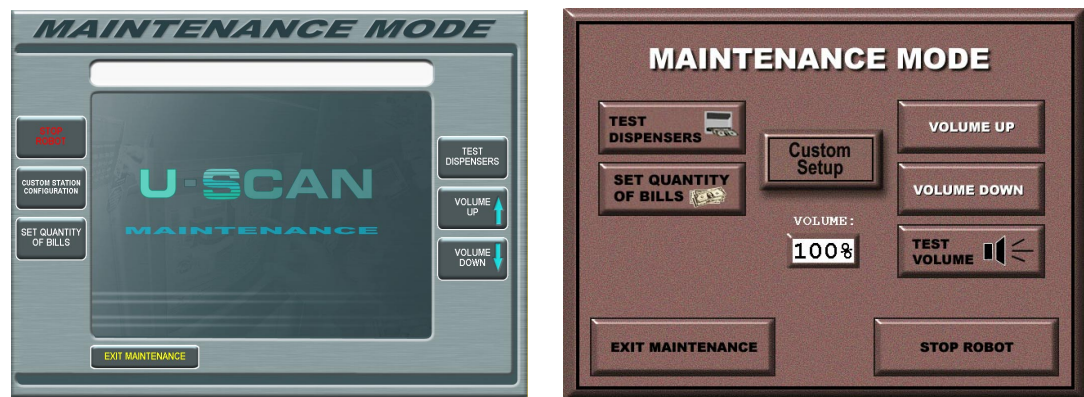
Tracking Bill Quantities in the DE LA RUE Bill Dispenser

SET QUANTITY OF BILLS is a feature in **Maintenance Mode** that is enabled in certain software versions. You will use this button to set the number of bills contained in the cassettes. The software then keeps track of how many bills are available to be dispensed.

When the level of bills reaches a predetermined ‘low’ amount that was configured in the registry setting, the Attendant Station shows a **Bill Tray Low** message for the corresponding Customer Station. If the Bill Dispenser is used when there are no bills left, the Attendant Station shows the message **Bill Tray Empty**.

NOTE: *You can damage the device if you try to dispense bills when the Bill Dispenser is empty.*

IEMM screen shown on left. Config media shown on right.



Setting the Bill Quantities

For each Bill Dispenser cassette you load at the Customer Station, you need to set the software to show the quantity of bills loaded into the cassettes. Doing this will help you account for the money in the Bill Dispenser cassettes.

The default value before the **SET** button is 0 for each cassette. When you set the bill quantities regularly, the default value before the **SET** button may not be 0. When the value for a cassette is not 0, touch **CLEAR** on the number pad. Then touch **SET** for the corresponding cassette. This resets the value to 0.

Set the bill quantities after loading empty Bill Dispenser cassettes:

- 1 Note the number of bills loaded into each Bill Dispenser cassette. For example, if loading \$1000 into the \$10 cassette, ensure that 100 bills were loaded.

Additional Information for the DE LA RUE (Cont'd)

- 2 Touch **SET QUANTITY OF BILLS** from **Maintenance Mode** at the Customer Station. The message at the top of the screen that appears says **Please enter the quantity of bills in each cassette**.
- 3 Touch **CLEAR** on the number pad.
- 4 Touch **SET** for the first cassette denomination to ensure the values are reset to 0.
- 5 Using the number pad on the Touch Screen, enter the quantity of bills loaded into the first cassette on the list.
- 6 After you have entered the number of bills for the first cassette, touch **SET** at the end of that row.
- 7 Touch **CLEAR** on the number pad before entering the next value.
- 8 Repeat steps 3-7 for the next cassette until you have set the bill quantities for all the cassettes in the Bill Dispenser at that Customer Station.
- 9 Touch **GO BACK** to return to **Maintenance Mode**.
- 10 Repeat this procedure for the other Customer Stations.

Reloading the Bill Dispenser Cassettes

Every time the Bill Dispenser cassettes are reloaded, you must set the bill quantities from **Maintenance Mode**. You will follow the same procedure as on the previous page, but now ensure that before you begin you touch **SET** for each cassette whose value is not 0.

If you reload the Bill Dispenser with money already in the cassettes:

- 1 Determine the total amount of bills loaded into the cassette, including the bills already there.
EXAMPLE: If you are loading \$100 into the \$1 Bill Dispenser cassette which already contains \$25, note that the new loading amount will be \$125. Therefore, enter a value of 125 for that cassette.

Additional Information for the DE LA RUE (Cont'd)

- 2 Touch **SET QUANTITY OF BILLS** from **Maintenance Mode** at the Customer Station. The message **Please enter the quantity of bills in each cassette** appears at the top of the screen.
 - 3 Touch **CLEAR** on the number pad.
 - 4 Touch **SET** for the first cassette denomination to ensure the values are reset to 0.
 - 5 Using the number pad on the Touch Screen, enter the quantity of bills loaded into the first cassette on the list.
 - 6 After you have entered the number of bills for the first cassette, touch **SET** at the end of that row.
 - 7 Touch **CLEAR** on the number pad before entering the next value.
 - 8 Repeat steps 3-7 for the next cassette until you have set the bill quantities for all the cassettes in the Bill Dispenser at that Customer Station.
 - 9 Touch **GO BACK** to return to **Maintenance Mode**.
 - 10 Repeat this procedure for the other Customer Stations.
-

Additional Information for the DE LA RUE (Cont'd)

Changing the Bill Dispenser Registry Settings

Changing the Number of Cassettes in the Registry

Perform this procedure if the Bill Dispenser is being upgraded from two cassettes to three cassettes.

- 1 Stop the Customer Station software.
- 2 Exit the **Launchpad**.
- 3 Go to **Start>Run...**
- 4 Enter **regedit**.
- 5 Click **OK**
The **Registry Editor** appears.
- 6 Go to **HKEY_CURRENT_USER**
\Software\OptimalRobotics\Devices\BillDispenser.
- 7 Click **NumTrays**.
- 8 Change the value in the **Value data** text box to **3**. (The default registry setting for NumTrays is **2**.)
- 9 Exit the **Registry Editor**.
- 10 Start the Customer Station software.
- 11 Test the Bill Dispenser in the **Device Tester**.

Changing the Denominations Settings in the Registry

Perform this procedure if you need to change that denominations in the cassettes.

EXAMPLE: The Bill Dispenser now dispenses \$1 and \$10 instead of \$1 and \$5.

- 1 Stop the Customer Station software.
- 2 Exit the **Launchpad**.
- 3 Go to **Start>Run**.
- 4 Enter **regedit**.
- 5 Click **OK**
The **Registry Editor** appears.
- 6 Go to **HKEY_CURRENT_USER**
\Software\OptimalRobotics\Devices\BillDispenser.
- 7 Click **BillDenominations**.

Additional Information for the DE LA RUE (Cont'd)

- 8 Add a **10** at the end of the string in the **Value data** text box. (The default registry setting for BillDenominations is **1, 5**.)
NOTE: *For Canadian Currency, click **BillDenominations** and add a **20** at the end of the string in the **Value data** text box. (The default registry setting for BillDenominations is **5, 10**).*
- 9 Close the **Registry Editor**.
- 10 Start the Customer Station software.
- 11 Access the **Device Tester**.
- 12 Configure the cassettes to reflect the new denomination(s). Refer to "Configuring the Cassettes through the Device Tester" on page 17.
- 13 Test the Bill Dispenser in the **Device Tester**.

Error Messages

This following table outlines error messages that appear in the **Unit Tests** window of the **Device Tester**.

Message	Explanation
LOW-LEVEL	Number of bills is low. No action is necessary yet.
EMPTY_CASSETTE	Provides the attendant with the number of the empty cassette.
MACHINE_NOT_OPENED	Attendant needs to send the Open Cassette command. The software sends this command.
NOTE_DIVERTER_FAILURE	A bill is stuck behind the diverter. If the state is cleared when the DE LA RUE is reset, it dispenses the bill. If necessary, close the Lane and clear the bill under the supervision of the manager or attendant.
FAILURE_TO_FEED	The DE LA RUE cannot pull bills from the cassette. The DE LA RUE attempts to dispense the bill(s) a second time.
TRANSMISSION_ERROR	The dispense command failed. The DE LA RUE attempts to dispense a second time.
JAM_IN_NOTE_QUALIFIER	A bill is jammed in the Note Qualifier. Close the lane and ask the attendant or manager to clear the jam.
FEED_CASSETTE_NOT_PRESENT_OR_PROPERLY_INSTALLED	The cassette is not inserted or not inserted properly. Close the lane and ask the attendant or manager to replace the cassette properly.
REJECT_VAULT_NOT_PRESENT_OR_PROPERLY_INSTALLED	The reject vault is not inserted or not inserted properly. Close the lane and ask the attendant or manager to replace the reject vault properly.
TOO_MANY_NOTES_REQUIRED	Preempted by the DISPENSE_LIMIT_EXCEEDED message.
REJECT_VAULT_ALMOST_FULL	The reject vault contains 37 bills. It will be full and stop functioning when it contains 50 bills.
CASSETTE_INTERNAL_FAILURE	The cassette failed to dispense. The DE LA RUE attempts to dispense a second time. If it fails again, replace the cassette.
MAIN_MOTOR_FAILURE	The main motor failed and needs to be serviced or replaced. Bills should NOT be dispensed if this message displays.

Message	Explanation
NOTE_FEEDER_EXIT_SENSOR_FAILURE	The sensor may be obstructed, or need to be cleaned or replaced. Trace output provided.
NOTES_IN_DELIVERY_THROAT	Bills are jammed inside the DE LA RUE. Close the lane and clear the jam.
COMMUNICATIONS_TIME_OUT	The DE LA RUE attempts to dispense a second time. Trace output provided.
CASSETTE_NOT_IDENTIFIED	This message should not display.
REJECT_VAULT_FULL	The reject vault contains 50 bills. Close the lane and empty the reject vault.
ERROR_IN_THROAT	Bills are jammed inside the DE LA RUE. Close the lane and clear the jam.
SENSOR_ERROR_OR_ERROR_COVERED	The sensor may be obstructed, or need to be cleaned or replaced. Trace output provided.
CASSETTE_LOCK_FAULTY	If this state occurs when the cassette is opening, the DE LA RUE attempts to close and then reopen it. If this state occurs when the cassette is closing, the DE LA RUE attempts to force it to close. If this fails, the cassette needs to be serviced.
MODULE_NEEDS_SERVICE	This message is for information purposes only. No action is required.
NO_MESSAGE_TO_RESEND	A command cannot be retried without an attempt to verify if it was fulfilled. If there is no response on the first attempt, the DE LA RUE attempts to dispense bills a second time.
ERROR_NOTE_IN_TRANS_PORT	Bills are jammed inside the DE LA RUE. Close the lane and clear the jam.

Coin Acceptor

Testing the Coin Acceptor in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Verify the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages see “Coin Acceptor Error Messages” on the next page. Error messages are also stored in the Eventlog Viewer and can be viewed when you exit the Device Tester.*

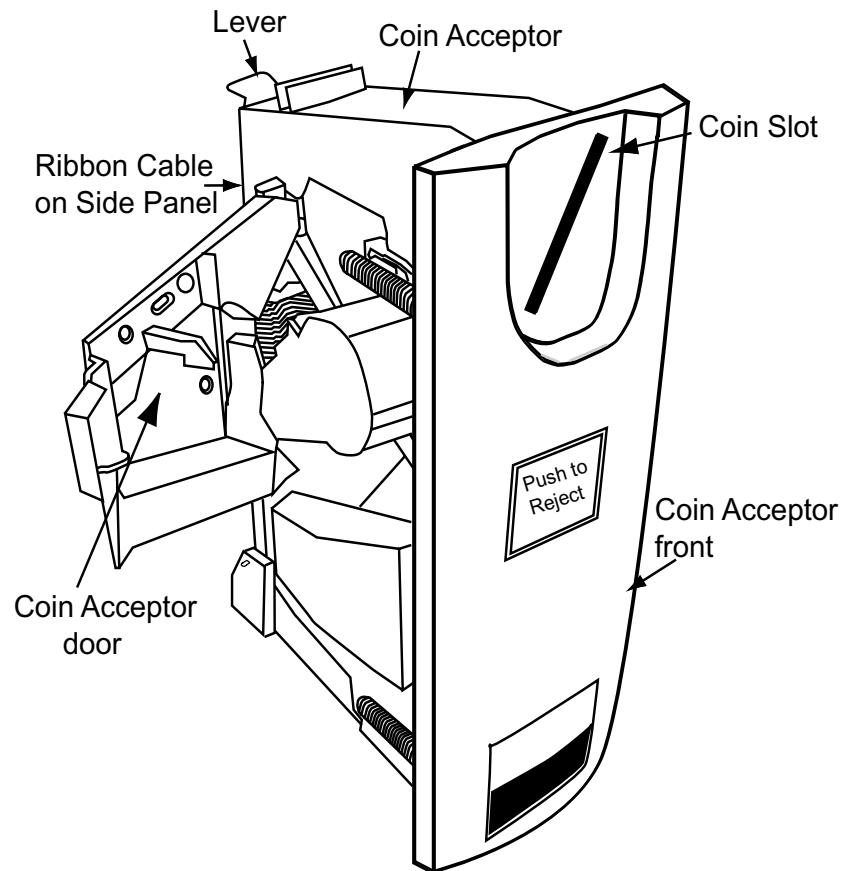
- 1 Click **Start**.
 - 2 Click **Enable**.
The message **DEVICE::ONLINE{Coin Acceptor}** appears in the **Messages** box.
 - 3 Insert a coin into the device.
If the coin was accepted, the **Messages** box displays **COIN_ACCEPTOR::RECEIVED_COIN{n}**, where **n** represents the coin inserted into the Coin Acceptor.
If the coin was not accepted, it falls through the coin return slot and no message is displayed.
 - 4 Click **Disable**.
 - 5 Click **Stop**.
-

Coin Acceptor Error Messages

Refer to table below for a description of error messages.

Error Message	Explanation
MECHANICAL ERROR	A general message that the device has failed and may need to be replaced.

MICROCOIN QL Coin Acceptor



Features:

- Capable of validating up to 12 coins
- On-board programming
- High security and discrimination
- On-board diagnostics

Technical Specifications

Environment

- Temperature: 32°F to 131°F (0° to 55°C)
- Relative humidity: 10% to 90% non-condensing

Electrical Interface

- RS-232C connection through Money Flex unit

Power Supply Requirements

- Input: 100 to 240 V, 50 to 60 Hz
- Output: 12 V, 1.0 A
- Output Power: 12 W Max.

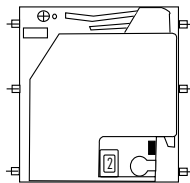
Communication

- Standard 10-way connector to Money Flex module

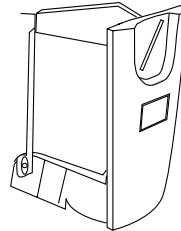
Components of the MICROCOIN QL

The MICROCOIN QL Coin Acceptor is made up of the following components:

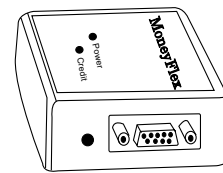
- MICROCOIN QL Coin Acceptor
- Coin Acceptor bracket
- Money Flex Unit (power supply)
- Communication cable
- 10-pin ribbon cable



MICROCOIN Coin Acceptor



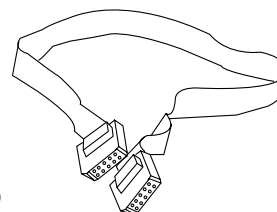
Coin Acceptor Bracket



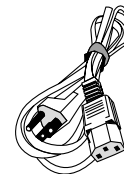
Money Flex Unit



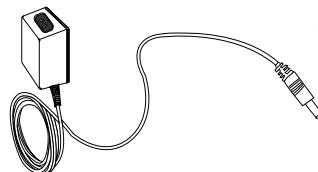
DB-9 Communication Cable
(Money Flex to DIGI Box or Edgeport)



10-Pin Ribbon Cable
(Money Flex Unit to MICROCOIN)



Power Cable
(Power Adapter to Power Bar)



Power Adapter
(Money Flex to Power Cable)

Troubleshooting the MICRO COIN Coin Acceptor

1. Follow the Testing Procedure

See “Testing the Coin Acceptor.”

2. Check the Power

- 1 Locate the LED on the Coin Acceptor and the Money Flex unit.
 - 2 Ensure that the indicator LEDs are on.
 - 3 Ensure that the power adapter cable is connected to the Money Flex unit.
 - 4 Ensure that the power cable is connected to the power adapter and to the power bar.
 - 5 Ensure that the ribbon cable is connected to the Coin Acceptor.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected and secured to the Money Flex unit.
 - 2 Ensure that the data cable is connected and secured to COM 7 (Port 5) of the DIGI Box or Edgeport.
 - 3 Ensure that the ribbon cable is connected to the Coin Acceptor.
-

4. Inspect the LED

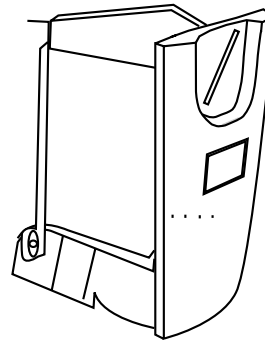
- 1 Locate the LED on the Coin Acceptor.
 - 2 Verify the indicator lamp status.
-

Replacing the MICROCOIN Coin Acceptor

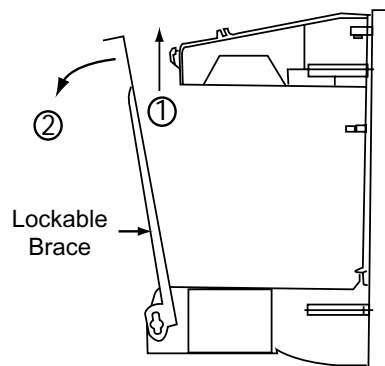
NOTE: *If you replace the MoneyFlex unit or any of the power or communication cables, route the cables as they were routed before. DO NOT CHANGE THE ORIGINAL CABLE ROUTING.*

1. Remove the MICROCOIN

- 1 Go to the U-Scan Customer Station where you want to replace the MICROCOIN.
- 2 Open the U-Scan casing door.
- 3 Locate the MICROCOIN bracket.



- 4 Pull up, then out and down on the lockable brace that holds the MICROCOIN in place.



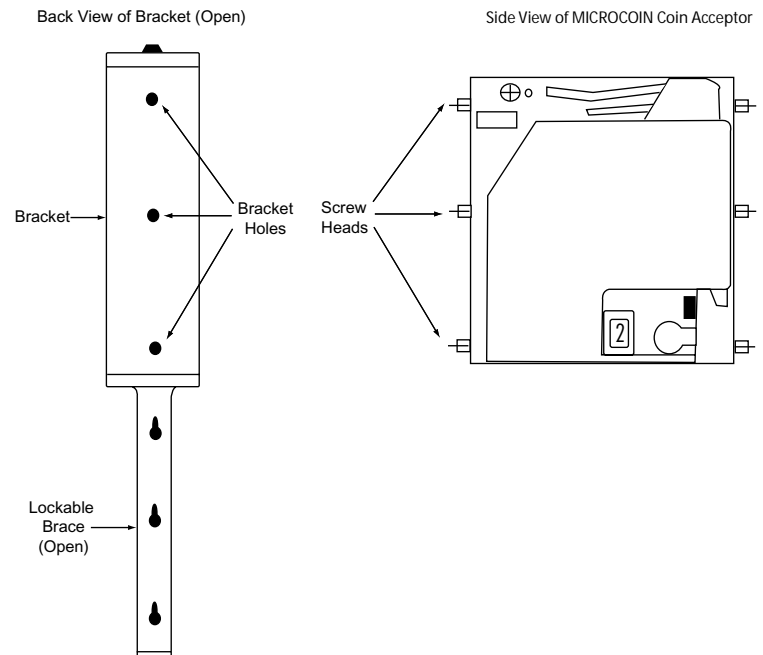
- 5 Grasp the MICROCOIN and pull outward to remove it from the bracket.
- 6 Disconnect the 10-pin ribbon cable from the MICROCOIN.

2. Replace the MICROCOIN

- 1 Connect the 10-pin ribbon cable to the MICROCOIN.

Replacing the MICROCOIN Coin Acceptor (Cont'd)

- 2 Slide the MICROCOIN back into the bracket.
- 3 Ensure that the screw heads on the MICROCOIN align with the holes in the bracket.



- 4 Lift the lockable brace and position it over the screw heads on the MICROCOIN.
 - 5 Lock the brace into place.
-

Additional Information for the MICROCOIN Coin Acceptor

LED Status

Use the table below to determine the indication of the LED.

LED Status	Indication
Green	Validator is operational
Red	Validator fault
Flashes green when coin is inserted	Coin is accepted
Amber	Validator disabled
Off	No power to Coin Acceptor

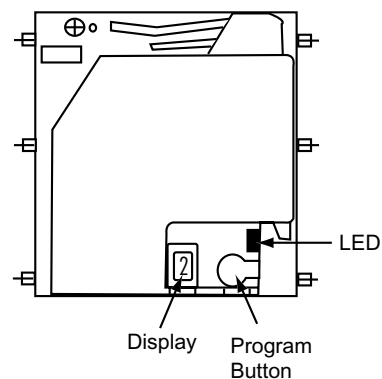
Programming the MICROCOIN

Use the **Program** button on the back of the device to program the MICROCOIN Coin Acceptor's coin signature.

1. Disable a Coin Denomination

Perform this procedure to disable a coin denomination temporarily or permanently.

- 1 Press the **Program** button twice quickly. The LED turns red and starts blinking.



- 2 Drop a coin into the Coin Acceptor. When the coin has gone through the Coin Acceptor, the LED turns green. The denomination will no longer be accepted.

Additional Information for the MICROCOIN Coin Acceptor (Cont'd)

- 3 If necessary, repeat this process to disable another coin denominations.

2. Enable a Coin Denomination

Perform this procedure to reactivate a coin denomination after it has been disabled.

- 1 Press the **Program** button once.
The LED turns green and starts flashing.
- 2 Insert a coin into the Coin Acceptor.
The LED turns solid green. The denomination is now enabled.
- 3 If necessary, repeat this procedure to enable other coin denominations.

Troubleshooting Table

Problem	Possible Cause	Solution
Coin Acceptor rejects all coin denominations	<ul style="list-style-type: none">• No power, no LED• Low voltage• Water in coin path	<ul style="list-style-type: none">• Check incoming voltage.• Monitor the voltage• Allow Coin Acceptor to dry
Coin Acceptor rejects one coin denomination	<ul style="list-style-type: none">• Coin denomination is disabled	<ul style="list-style-type: none">• Perform Task 2, "Enable a Coin Denomination."
Coin jam	<ul style="list-style-type: none">• Coin Acceptor is full.• Coin Acceptor is not sitting properly in the coin bracket• Coin path is blocked	<ul style="list-style-type: none">• Empty the Coin Acceptor.• Remove the Coin Acceptor from the bracket and reinsert it.• Remove the object that is blocking the coin path.

Testing the Coin Dispenser in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Verify the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages, see “Error Messages” in the Introduction to the U-Scan® Hardware manual. Error messages are also stored in the Eventlog Viewer and can be viewed upon exiting the **Device Tester**.*

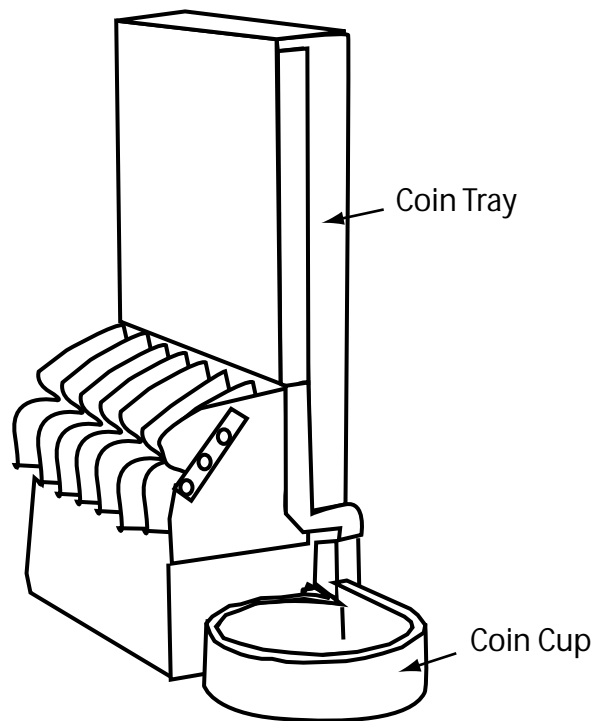
- 1 Click **Start**.
The message **DEVICE::ONLINE{Coin Dispenser}** appears in the **Messages** box.
 - 2 Click **Dispense**.
A numeric keypad appears.
 - 3 Enter an amount to dispense.
NOTE: *Only a two-digit amount may be entered.*
 - 4 Click **OK**.
If the test was successful, the Coin Dispenser dispenses the indicated amount and the **Messages** box displays **COIN_DISPENSER::DISPENSED{amount}**.
 - 5 Verify the amount dispensed.
 - 6 Click **Stop**.
 - 7 Click **OK** to exit.
-

Coin Dispenser Error Messages

Refer to table below for a description of Coin Dispenser error messages.

Error Message	Explanation
DEVICE::OFFLINE {COIN DISPENSER}	An error occurred during testing.
COIN_DISPENSER(LOW)	The Coin Dispenser is low on coins. Refill the device and try again.
MECHANICAL ERROR	A general message that the device has failed and may need to be replaced.

TELEQUIP Transact 2+ and 400-990



Features:

- Eight-row coin tray
- Maximum capacity of coin tray: \$110.80 (USD)
- Removable communication cable for easier installation
- Fault protection circuitry for increased assurance
- Simple mechanical design to decrease the failure rate
- Left or right-delivery coin cup

Technical Specifications

Power Supply Requirements

- Standard power cable

OR

- External power supply (auto-switching)

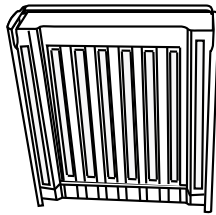
Communication

- RS-232 serial cable (RJ-45 to DB-25)

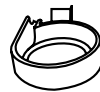
Components of the TELEQUIP Transact 2+ and 400-990

The TELEQUIP Transact 2+ is made up of the following components:

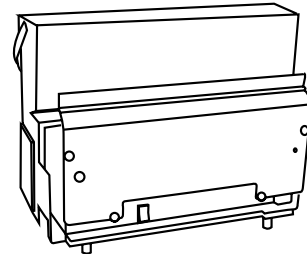
- TELEQUIP Transact 2+ **OR** 400-990 Coin Dispenser
- Left or right-delivery coin cup
- RS-232 communication cable (RJ-45 to DB-25)
- Coin tray
- Standard power cable **OR** external power supply



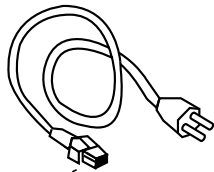
Coin Tray



Coin Cup

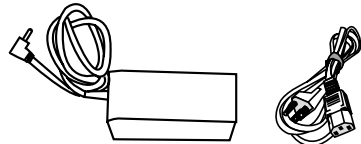


Coin Dispenser

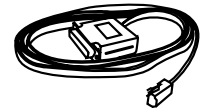


Power Cable
(Transact 2+ Only)

OR



External Power Supply and
Power Cable



Communication Cable
(RJ-45 to DB-25)

TELEQUIP Transact 2+ or 400-990 Common Problems and Solutions

This section provides basic steps for resolving common problems. Refer to “Troubleshooting the TELEQUIP Transact 2+ or 400-990 Coin Dispenser” for the full troubleshooting procedures.

Problem	Solution
<p>Coin Dispenser does not turn on.</p> <p>OR</p> <p>The Device:OFFLINE message appears.</p>	<ul style="list-style-type: none"> • Ensure that the power switch is in the ON position. • Check the power cable connections. • Check that power socket. Plug another device that you know is working into the power socket to ensure that it is a live power socket. • Check the communication cable connections. Ensure that the cable is not damaged. • Ensure that the device is on, then remove the coin tray. If the low coin alarm does not sound, replace the fuse.
<p>The amount in issued coins is not equal to the change amount due.</p>	<ul style="list-style-type: none"> • Ensure that the coin tray is properly inserted. • Remove any jammed or bent coins from the coin tray. • Check the coin tray for debris. Do NOT remove the rear cover. High voltages are present. • Check the coin tray for damage or loose or missing screws. Tighten any loose screws and replace any missing screws. • Use a flashlight to check the coin slide for debris. Remove any debris.
<p>Coins are not being returned.</p>	<ul style="list-style-type: none"> • Return change to customers at the Attendant Station. • Verify that no coins are stuck in the Coin Dispenser. • Ensure that the Coin Dispenser is on. • If the Coin Dispenser is empty, refill it or replace the coin tray. • Verify that the coins line up and do not stick out. • Perform a test dispense.

Problem	Solution
Coins are jamming and not ejecting properly.	<ul style="list-style-type: none"> • Ensure that the coin tray is properly inserted. • Remove any bent coins from the coin tray. • Check the coin tray for debris. Do NOT remove the rear cover. High voltages are present. • Check the coin tray for damage or loose or missing screws. Tighten any loose screws and replace any missing screws. • Use a flashlight to check the coin slide for debris. Remove any debris.
The Coin Dispenser is smoking or you smell burning	<ul style="list-style-type: none"> • Unplug the power cable. • Call the U-Scan Support Center. The Coin Dispenser will most likely be replaced.

Troubleshooting the TELEQUIP Transact 2+ or 400-990 Coin Dispenser

Troubleshooting Areas:

- Power Cable
- Communication Cable
- Fuse
- Slide
- Coin Tray
- Photo Sensors

1. Follow the Testing Procedure

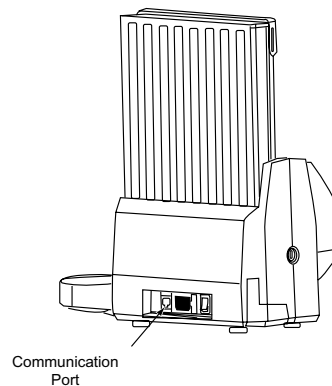
See “Testing the Coin Dispenser.”

2. Check the Power

- 1 Ensure that the power cable is connected to the power bar.
 - 2 If present, ensure that the power supply is connected to the Coin Dispenser.
 - 3 Remove the coin tray.
 - 4 Turn the device off, then back on.
If the alarm sounds, the Coin Dispenser is receiving power.
-

3. Inspect the Communication Cable

- 1 Ensure that the communication cable is connected to the communication port on the device.



NOTE: *The communication port is labeled **Main** on the 400-990 Coin Dispenser.*

Troubleshooting the TELEQUIP Transact 2+ or 400-990 Coin Dispenser (*Cont'd*)

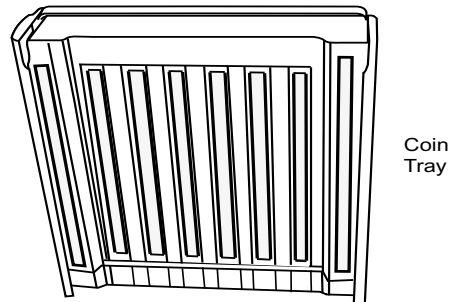
- 2 Ensure that the communication cable is connected to port 1 on the DIGI Box or Edgeport.
-

4. Inspect the Fuse

- 1 Unplug the device.
 - 2 Remove the screws on the bottom of the device.
 - 3 Turn the device to face forward.
 - 4 Use a screwdriver to remove the fuse.
 - 5 Inspect the fuse visually or with a multimeter.
 - 6 If necessary, replace the fuse with a 1.6-Amp, 250-V Fast Blow-type fuse.
-

5. Inspect the Slide (Transact 2+)

- 1 Disconnect the power to the device.
- 2 Remove the coin tray from the Coin Dispenser.

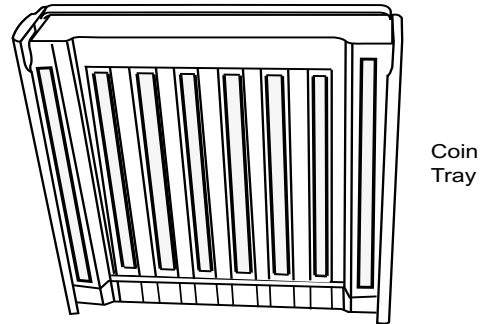


- 3 Remove the coin cup and the side cover.
 - 4 Locate the end of the coin slide on the side of the Coin Dispenser where you removed the coin cup.
 - 5 Lift the coin slide so that it tilts in the opposite direction.
 - 6 If necessary, clean any debris from the coin slide.
 - 7 Return the coin slide to its original position.
 - 8 Replace the coin tray.
 - 9 Replace the coin cup and the side cover.
-

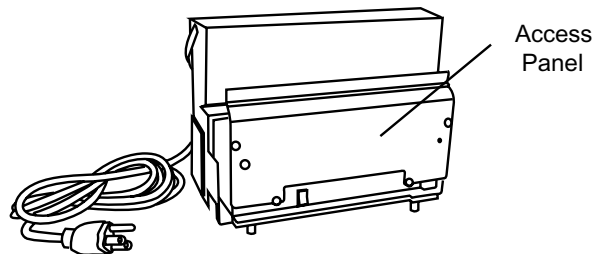
Troubleshooting the TELEQUIP Transact 2+ or 400-990 Coin Dispenser (Cont'd)

6. Inspect the Slide (400-990)

- 1 Disconnect the power to the device.
- 2 Remove the coin tray from the Coin Dispenser.



- 3 Locate the access panel for the slide (on the same side as the power switch).
- 4 Remove the screws.



- 5 Remove the access panel and inspect the coin slide for any obstructions.
- 6 Adjust or clean the slide if necessary.
- 7 Replace the access panel.
- 8 Replace the coin tray.

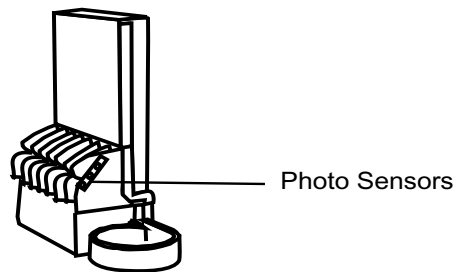
Troubleshooting the TELEQUIP Transact 2+ or 400-990 Coin Dispenser (*Cont'd*)

7. Inspect the Coin Tray

- 1 Turn off the device.
 - 2 Remove the coin tray.
 - 3 Slide back the cover of the coin tray.
 - 4 Inspect the lanes for any obstructions.
 - 5 Ensure that the coins line up and do not stick out.
 - 6 Ensure that the coin tray is only 3/4 full.
-

8. Inspect the Photo Sensors

- 1 Locate the two photo sensors.
- 2 Ensure that the sensors are not damaged.



Maintenance Procedures for the TELEQUIP Transact 2+

Adding Coins to the Coin Dispenser

NOTE: *The Coin Dispenser sounds a low coin alarm when the number of coins in a coin row is running low.*

- 1 Ensure that all the Customer Station lanes are closed.
- 2 Locate the Coin Dispenser platform (located behind the main panel door).
- 3 Extend this platform.
- 4 Set the power switch on the back of the device to the OFF position.
- 5 Pull the handle to remove the coin tray.
- 6 Position the handle under the coin tray.
- 7 Set the coin tray on a flat surface.
- 8 Push down on the two thumb points on the bottom of the coin tray while you slide the cover up.
- 9 Refill the coin tray according to the table below.

Denomination	Amount (US)	Amount (Canada)
\$2.00	N/A	\$250
\$1.00	N/A	\$100
\$0.25	\$60	\$60
\$0.10	\$30	\$15
\$0.05	\$6	\$6
\$0.01	\$4	\$1.50

- 10 Ensure that there is no debris in the coin rows.
- 11 Ensure that no coins are bent or protruding.
- 12 Replace the cover.
- 13 Replace the coin tray.
- 14 Turn the device on.

Maintenance Procedures for the TELEQUIP Transact 2+ (Cont'd)

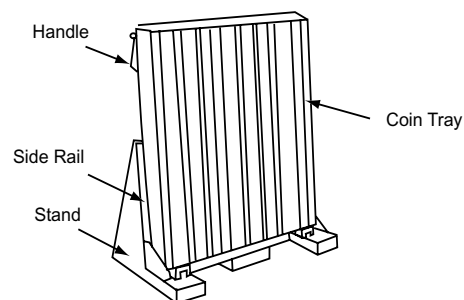
Loading the Coin Tray with the Loading Device

The TELEQUIP coin tray loading device is designed to make loading the coin tray easier and more efficient. Follow these steps to load the coin trays with the loading device.

- 1 Ensure that all the Customer Station lanes are closed.
- 2 Locate the Coin Dispenser platform (located behind the main panel door).
- 3 Extend this platform.
- 4 Set the power switch on the back of the device to the OFF position.
- 5 Pull the handle to remove the coin tray.
- 6 Refer to the table below to prepare the coin amounts for each denomination.

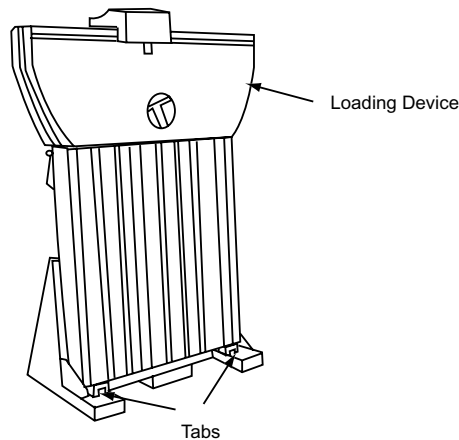
Denomination	Amount (US)	Amount (Canada)
\$2.00	N/A	\$250
\$1.00	N/A	\$100
\$0.25	\$60	\$60
\$0.10	\$30	\$15
\$0.05	\$6	\$6
\$0.01	\$4	\$1.50

- 7 Push down on the two thumb points on the bottom of the coin tray while you slide the cover up.
- 8 Position the handle so that it hangs toward the back of the coin tray.
- 9 Set the stand on a flat surface.
- 10 Slide the coin tray into the stand. Use the two side rails as guides.

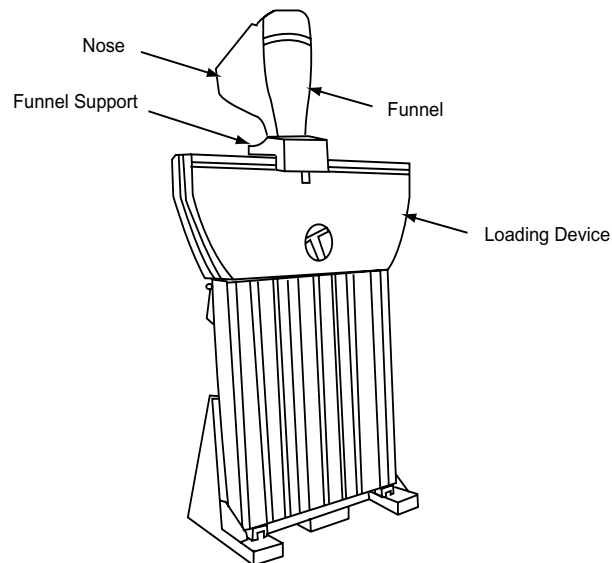


Maintenance Procedures for the TELEQUIP Transact 2+ (Cont'd)

- 11 Slide the loading device onto the coin tray. Place the back on first then move the front of the device against the coin tray.
- 12 Slide the loading device down until it locks into the tabs at the bottom of the stand.



- 13 If the funnel support is not already on the loading device, slide the funnel support onto the two rails on the top of the loading device.
NOTE: *When the funnel support is properly installed, it will not slide off the loading device.*
- 14 Insert the funnel in the funnel support:
 - a Align the slots on the funnel with the slots on the funnel support.
 - b Insert the funnel into the funnel support.
 - c Turn the funnel so that the nose points to the back.



Maintenance Procedures for the TELEQUIP Transact 2+ (Cont'd)

- 15 Load the coins:
 - a Lift the funnel slightly and slide it until it is positioned above the row you wish to fill.
 - b Make sure that the ridge on the funnel is touching the funnel support.
 - c Slowly pour the coins into the opening on the top of the funnel until you load the appropriate number of coins.
 - d Repeat this process to load the remaining coins.
 - 16 Remove the loading device:
 - a Turn the funnel counter clockwise and pull it up and out of the funnel support.
 - b Slide the loading device up and off of the coin tray.
 - 17 Replace the cover on the coin tray.
 - 18 Grasp the coin tray handle and pull the coin tray up and out of the stand.
-

Cleaning the Transact 2+

- 1 Dampen a clean, soft cloth.
- 2 Wring the cloth out thoroughly.
- 3 Wipe the coin tray and Coin Dispenser base with the cloth.

NOTES: *Do NOT use abrasive cleaners, solvents, or chemical cleaners on the device.*

Do NOT apply oil or lubricant to the any part of the device.

Computer Configuration

“Bare-Bones” Configuration

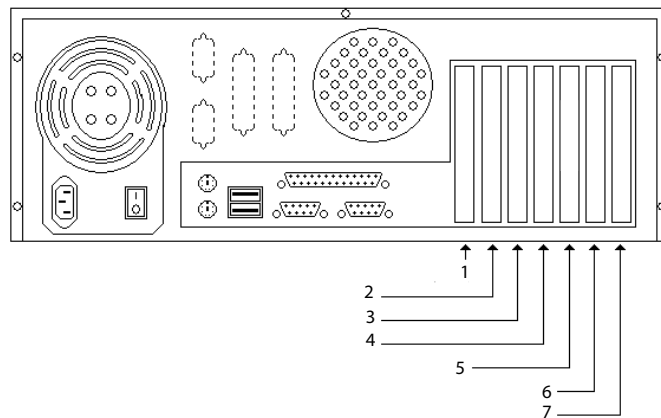
This section describes the standard Computer configurations. See below for the descriptions of the bare-bones systems. Refer to “Additional Information for the “Bare Bones” Computer Configuration” for a description of the cards shipped with each type of Computer.



WARNING: Always use proper electro-static discharge (ESD) protection when you open and work with cards inside the Computer.

Pentium II

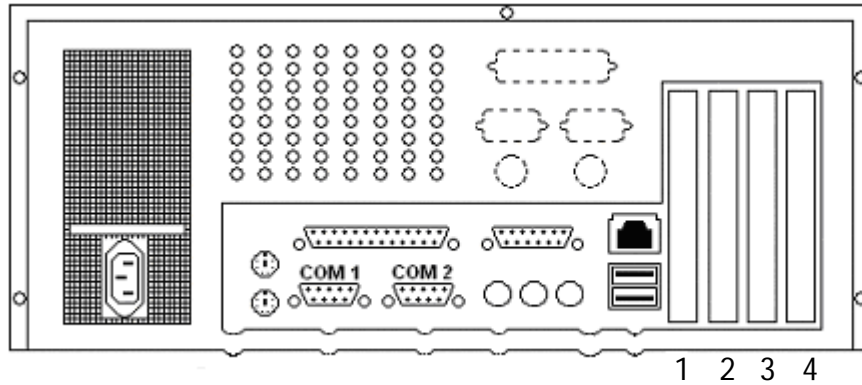
PII QDI (Part # COM-1024A) and PII DFI (Part # COM-1024B)



1	Video Card ATI RAGE (part # VGA-1002)	5	Not connected
2	Not connected	6	Not connected
3	Intel network card - Ethernet (part # NIC-1002)	7	Not connected
4	Not connected		

Pentium 4

Standard-Size Computer



P4 Customer Station (Part # COM-2001)

1	Video Card NVIDIA MX-400 (part # VGA-1004)	3	Not connected
2	Intel network card - Ethernet (part # NIC-1002)	4	Not connected

P4 Attendant Station (Part # COM-2003)

1	Video Card NVIDIA MX-400 (part # VGA-1004)	3	Not connected
2	Not connected	4	Not connected

Additional Information for the “Bare Bones” Computer Configuration

This section contains the following information:

- Description of the [Peripheral Cards](#)
- Procedures for [Replacing and Installing Cards](#)

Peripheral Cards

The tables below list peripheral cards that can be installed or replaced in the bare-bones systems. Not all cards can be used in all stores or on all types of Computer.

Video Cards

Card	Part Number
NVIDIA MX 400 (P4 only)	VGA-1004
ATI RAGE AGP (PII only)	VGA-1002

Sound Card

Card	Part Number
SB 128 PCI (PII only)	SND-1001

Network Cards

Card	Part Number
Intel NIC Ethernet PCI	NIC-1002
IBM 16/4 Token Ring PCI	NIC-1003

DIGI Card

Card	Part Number
PCI DIGI 8 port	CMM-1013

Special Function Cards

Card	Part Number
Video MUX ISA	VGA-1000
Yaupon ISA	CMM-1006

Replacing and Installing Cards

This section contains the following procedures:

- [Replacing Peripheral Cards](#)
- [Setting Up a New Computer](#)



WARNING

Always use proper electro-static discharge (ESD) protection when you open and work with cards inside the Computer.

Replacing Peripheral Cards

- 1 Completely shut down the Computer.
- 2 Turn off the Computer.
- 3 Disconnect all of the Computer cables.
- 4 Remove the Computer from the U-Scan casing.
- 5 Ensure that you are wearing proper ESD protection, such as an anti-static wrist strap.
- 6 Open the Computer casing.
- 7 Install or replace the card.

NOTE: *You may have to configure some of the DIP switches or jumpers on the card.*

- 8 Ensure that the cards are installed properly in the slots and that they are secured to the casing.
- 9 Replace the Computer cover.
- 10 Replace the Computer in the U-Scan casing.
- 11 Reconnect the Computer cables.
- 12 Test the function of the peripheral card that you replaced or installed.

Setting Up a New Computer

- 1 Ensure that you are wearing proper ESD protection, such as an anti-static wrist strap.
- 2 Open the Computer casing.
- 3 Install the necessary cards.

NOTE: *You may have to configure some of the DIP switches or jumpers on the card.*

Replacing and Installing Cards (*Cont'd*)

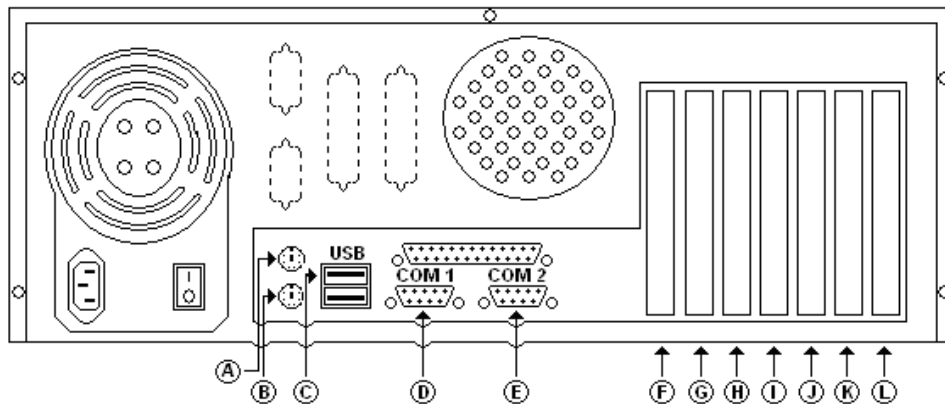
- 4 Ensure that the cards are installed properly in the slots and that they are secured to the casing.
- 5 Replace the Computer cover.
- 6 Replace the Computer in the U-Scan casing.
- 7 Connect the Computer cables.
- 8 Turn on the Computer.
- 9 Refer to the appropriate BIOS settings in the Software section to set up the BIOS.
- 10 Install the appropriate image.
- 11 Install the U-Scan software.
- 12 Test the Computer to ensure that all components work properly.

Standard Computer Configuration

Pentium II

NOTE: “Standard” refers to the Computer configuration issued before May 1, 2002.

The following diagram represents a generic Pentium II Computer for TS/NT systems. Refer to the Software manual for store-specific slot assignments. Refer to the appropriate BIOS settings section of the Software manual to assign the IRQs to the slots.



A	Mouse	G	PCI DIGI
B	Keyboard	H	Network
C	Edgeport	I	Sound
D	Touch Screen	J	Network
E	Empty (Customer Station) Modem (Attendant Station)	K	Yaupon (Customer Station) Video MUX (Attendant Station)
F	Video	L	ISA DIGI

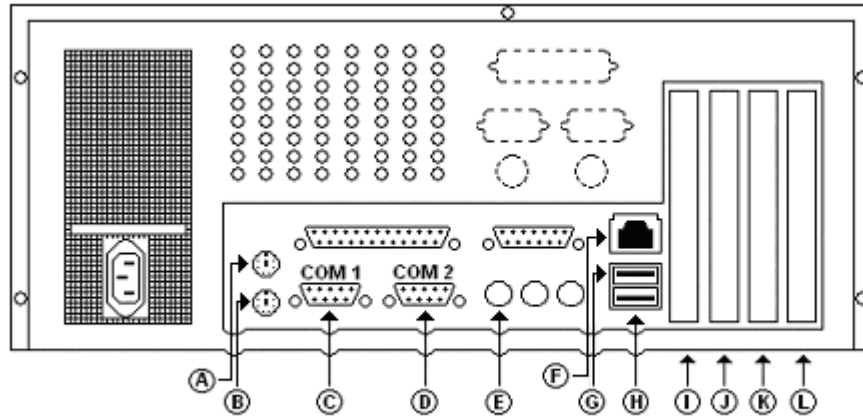
Description

Item	Description
A	PS/2 Mouse port
B	PS/2 Keyboard port
C	<p>USB ports</p> <ul style="list-style-type: none">• These ports must be enabled in the BIOS. Refer to the appropriate BIOS Settings section in the Software manual.• The top USB port is reserved for an Edgeport.• PC with Edgeport only• Remove the DIGI drivers before you install the Edgeport drivers.• All other cards must remain in the proper slots.• Install the correct Edgeport drivers. Refer to the “Edgeport Setup” guide for more information. <p><u>PC with DIGI and Edgeport</u></p> <ul style="list-style-type: none">• A PC has both DIGI and Edgeport 4 when the system requires extra ports.• Do not remove the DIGI drivers.• Install the correct Edgeport drivers. Refer to the section on installing the Edgeport drivers in the “Edgeport Setup” guide.
D	<p>9-pin male serial COM port 1.</p> <ul style="list-style-type: none">• Reserved for the Touch Screen.
E	<p>9-pin male serial COM port 2.</p> <ul style="list-style-type: none">• Reserved for the Modem on the Attendant Station.• This port is left empty on the Customer Station.
F	<p>AGP slot.</p> <ul style="list-style-type: none">• Reserved for the Video Card.• Ensure that Assign IRQ to VGA is disabled in the BIOS settings.
G	<p>PCI slot 1.</p> <ul style="list-style-type: none">• Reserved for a PCI DIGI card.• In the BIOS settings, assign IRQ 7 to this slot for the Attendant Station and the Customer Station.• If you convert a system from DIGI to Edgeport, remove the DIGI card (if instructed) and leave all other cards in the appropriate slots.

Item	Description
H	PCI slot 2 <ul style="list-style-type: none"> • Reserved for a PCI network card (Primary NIC card or U-Scan LAN NIC card). • Used to communicate within the U-Scan system between the Customer Station and the Attendant Station. Some systems use on network card in the Customer Station and Attendant Station. In this case, this communicates with the Store Controller and within the U-Scan system. Refer to appropriate Network Communication section in the Software chapter for more information.
I	PCI slot 3 <ul style="list-style-type: none"> • Reserved for a PCI Sound Card in the Customer Station. • This slot is left empty on the Attendant Station.
J	PCI slot 4 <ul style="list-style-type: none"> • Reserved for a PCI network card (Secondary NIC card or Controller LAN NIC card). • This card communicates with the Store Controller. Some stores do not have this card, and this slot is left empty. Refer to the appropriate Network Communication section in the Software manual.
K	ISA slot 2 <ul style="list-style-type: none"> • This slot is left empty on the Customer Station of <ul style="list-style-type: none"> — an OSA system — a non-TS/NT system — a TS/NT system that does not have a Yaupon • This slot holds the MUX card on the Attendant PC. • This slot holds the Yaupon card on the Customer Station of a TS/NT system with a Yaupon.
L	ISA slot 1 <ul style="list-style-type: none"> • This slot is left empty on a PC with a PCI DIGI card or an Edgeport. • This slot holds an ISA DIGI card if there is no PCI DIGI card or Edgeport.

Pentium 4

The following diagram represents a generic Pentium 4 Computer for TS/NT systems. Refer to the Pentium 4 BIOS settings section of the Software manual to assign the IRQs to the slots.



A	Mouse	G	Edgeport
B	Keyboard	H	Digital Camera
C	Touch Screen	I	Video Card
D	Modem - Attendant Station EAS - Customer Station	J	Secondary Network Card (Store LAN Card)
E	Sound Card	K	Extra COM Card
F	Primary Network (U-SCAN LAN Card)	L	Yaupon/MUX Card

Description

Item	Description
A	PS/2 Mouse port
B	PS/2 Keyboard port
C	<ul style="list-style-type: none">• 9-pin male serial COM port 1.• Reserved for the Touch Screen.
D	<p>9-pin male serial COM port 2.</p> <ul style="list-style-type: none">• Attendant Station: Reserved for a Modem at the Attendant Station. Leave this port empty if there is no Modem.• Customer Station: Reserved for a SENSORMATIC EAS device. Leave this port empty if there is no EAS.
E	<p>Integrated sound card.</p> <ul style="list-style-type: none">• The speaker cable connects to the Audio Out port (green port).
F	<p>Integrated network interface card RJ-45 jack.</p> <ul style="list-style-type: none">• Primary network interface card (U-Scan LAN NIC) that is used to communicate within the U-Scan system. <p>NOTE: <i>Some stores require only one network interface card in both the Attendant and the Customer Station Computers. This card communicates with the U-Scan system and the store controller. Contact the project manager for information about stores that do not conform to U-Scan standards for network interface cards.</i></p>
G	<p>USB port.</p> <ul style="list-style-type: none">• Reserved for the Edgeport.• In the BIOS settings, enable the USB port. Refer to “BIOS Setup for a Pentium 4 Computer” in the Software manual.
H	<p>USB port</p> <ul style="list-style-type: none">• Customer Station: Reserved for the USB Camera. Leave this port empty if there is no USB Camera. This port is always empty at the Attendant Station.• In the BIOS, enable the USB port. Refer to “BIOS Setup for a Pentium 4 Computer” in the Software manual.
I	<p>AGP slot</p> <ul style="list-style-type: none">• Reserved for the Video Card.• In the BIOS settings, disable Assign IRQ to VGA.

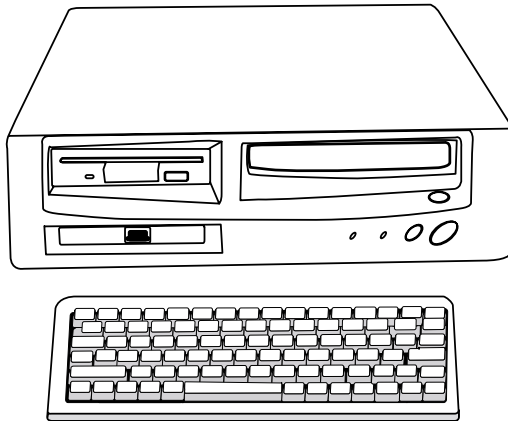
Item	Description
J	<p>PCI slot 1</p> <ul style="list-style-type: none"> Reserved for a PCI network interface card (Secondary NIC or Controller LAN NIC). This card communicates with the store controller. Some stores do not have this card, and this slot is left empty. Refer to the appropriate Network Communication section in the Software manual. In the BIOS, assign Auto to this slot.
K	<p>PCI slot 2</p> <ul style="list-style-type: none"> Reserved for a PCI DIGI Card. Leave this slot empty if there is no DIGI Card. In the BIOS, assign Auto to this slot.
L	<p>PCI/ISA slot 3</p> <ul style="list-style-type: none"> Customer Station: Reserved for a Yaupon card. Leave this slot empty if there is no Yaupon. Attendant Station: Reserved for a Video MUX card. Leave this slot empty if there is no Video MUX card. Leave this slot empty if there is no Yaupon or Video MUX card.

“Low-Profile” Pentium 4 Computer (Part # COM-2005)

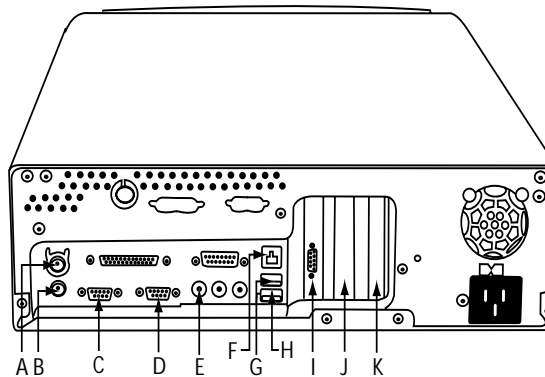
The “low-profile” Computer is a space-saving alternative to the standard-size Computer. It is used in combination with the Cherry keyboard at either the Attendant or Customer Station.

Features:

- Uses low profile cards only. DIGI, Video MUX, or Yaupon cards **cannot** be installed this Computer.
- Floppy disk and CD-ROM drive
- Dimensions: 14 3/4” x 13” x 3 3/4”



Connections:



A	Mouse	G	Edgeport
B	Keyboard	H	Digital Camera
C	Touch Screen	I	Video Card
D	Modem - Attendant Station EAS - Customer Station	J	Secondary Network Card (Store LAN Card)
E	Sound Card	K	Extra COM Card
F	Primary Network (U-SCAN LAN Card)		

Description

Item	Description
A	PS/2 Mouse port
B	PS/2 Keyboard port
C	<ul style="list-style-type: none">• 9-pin male serial COM port 1.• Reserved for the Touch Screen.
D	<p>9-pin male serial COM port 2.</p> <ul style="list-style-type: none">• Attendant Station: Reserved for a Modem at the Attendant Station. Leave this port empty if there is no Modem.• Customer Station: Reserved for a SENSORMATIC EAS device. Leave this port empty if there is no EAS.
E	<p>Integrated sound card.</p> <ul style="list-style-type: none">• The speaker cable connects to the Audio Out port (green port).
F	<p>Integrated network interface card RJ-45 jack.</p> <ul style="list-style-type: none">• Primary network interface card (U-Scan LAN NIC) that is used to communicate within the U-Scan system. <p>NOTE: <i>Some stores require only one network interface card in both the Attendant and the Customer Station Computers. This card communicates with the U-Scan system and the store controller. Contact the project manager for information about stores that do not conform to U-Scan standards for network interface cards.</i></p>
G	<p>USB port.</p> <ul style="list-style-type: none">• Reserved for the Edgeport.• In the BIOS settings, enable the USB port. Refer to “BIOS Setup for a Pentium 4 Computer” in the Software manual.
H	<p>USB port</p> <ul style="list-style-type: none">• Customer Station: Reserved for the USB Camera. Leave this port empty if there is no USB Camera. This port is always empty at the Attendant Station.• In the BIOS, enable the USB port. Refer to “BIOS Setup for a Pentium 4 Computer” in the Software manual.
I	<p>AGP slot</p> <ul style="list-style-type: none">• Reserved for the Video Card.• In the BIOS settings, disable Assign IRQ to VGA.

Item	Description
J	PCI slot 1 <ul style="list-style-type: none">• Reserved for a PCI network interface card (Secondary NIC or Controller LAN NIC).• This card communicates with the store controller. Some stores do not have this card, and this slot is left empty. Refer to the appropriate Network Communication section in the Software manual.• In the BIOS, assign Auto to this slot.
K	PCI slot 2 <ul style="list-style-type: none">• Reserved for a PCI DIGI Card. Leave this slot empty if there is no DIGI Card.• In the BIOS, assign Auto to this slot.

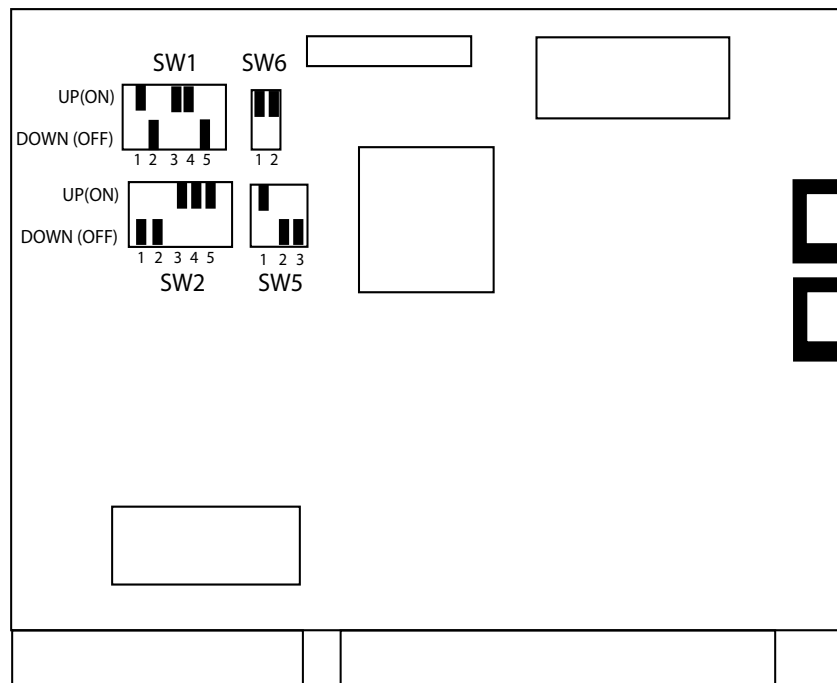
Additional Information for the Standard Computer Configuration

Card Configuration

Refer to the diagrams below for the configuration of the following cards:

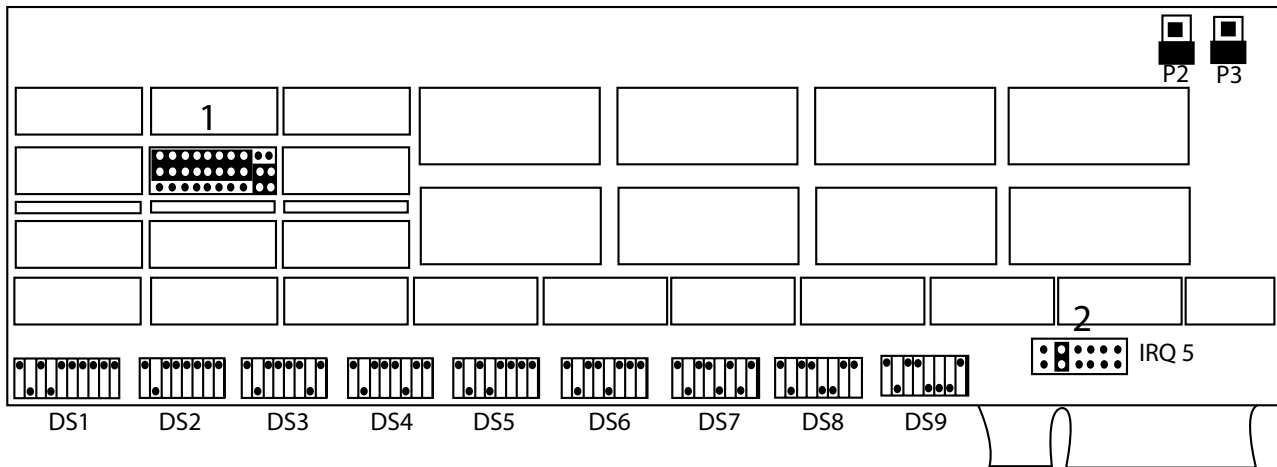
- [Yaupon Card for Customer Station Computers \(TS/NT Systems\)](#)
- [DIGI Board PC-8 for Attendant Station Computers](#)
- [DIGI Board PC-8 for Customer Station Computers](#)
- [Video Switch Board for Attendant Station Pentium II Computers](#)

Yaupon Card for Customer Station Computers (TS/NT Systems)



SW1	NVSRAM ADD
SW6	NVSRAM ENABLE
SW2	SRAM SELECT
SW5	I/O PORT IRQ7/11

DIGI Board PC-8 for Attendant Station Computers

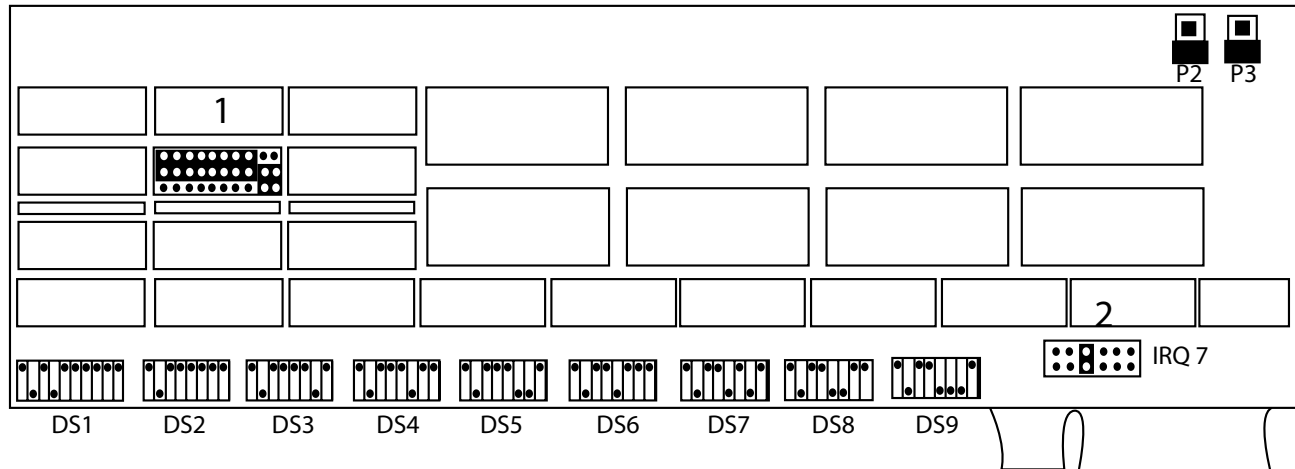


NOTE: Ensure that the jumper settings (banks 1 and 2 in the diagram) are exactly as shown. The DIGI Board is set to IRQ 5.

Switch Settings

Switch Set	Base I/O	Switch Set	Base I/O
DS2	100H	DS6	120H
DS3	108H	DS7	128H
DS4	110H	DS8	130H
DS5	118H	DS9	138H

DIGI Board PC-8 for Customer Station Computers

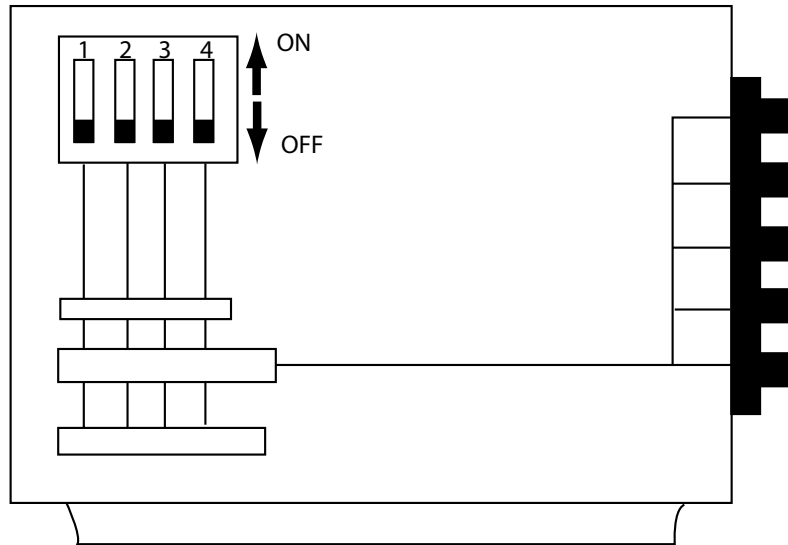


NOTE: Ensure that the jumper settings (banks 1 and 2 in the diagram) are exactly as shown. The DIGI Board is set to IRQ 7.

Switch Settings

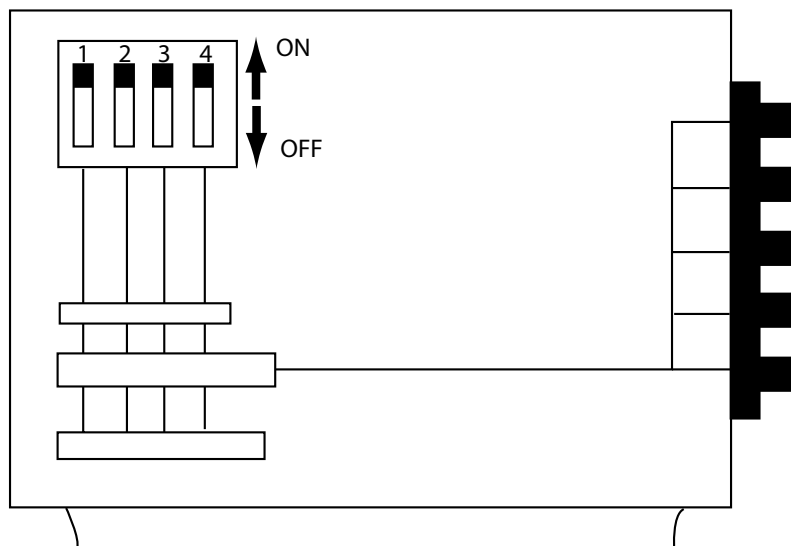
Switch Set	Base I/O	Switch Set	Base I/O
DS2	100H	DS6	120H
DS3	108H	DS7	128H
DS4	110H	DS8	130H
DS5	118H	DS9	138H

Video Switch Board for Attendant Station Pentium II Computers



NOTE: *All four switches must be set to ON.*

Video Switch Board for Attendant Station Pentium 4 Computers



NOTE: *All four switches must be set to OFF.*

EFT Interfacing

U-Scan currently supports several different EFT devices that interface with different systems. All of the EFT models perform the same type of functions but interface differently with the U-Scan. The following types of interfaces are used:

- RS-232
- Yaupon (RS-485)
- JM Cable (RS-485 to RS-232 conversion)

This section provides information about how to recognize these interfaces and how to set up the EFT for these interfaces.

Summary

EFT Setup	Notes
RS-232	<ul style="list-style-type: none">• Used by Verifone OMNI 490 and Verifone Everest.
RS-485	<ul style="list-style-type: none">• Used by Verifone OMNI 490.• The Yaupon cable plugs into port 9E of the Yaupon strip.• Go to My Computer>Control Panel>Services. Start AIPCTRL and set to Automatic.
JM Cable, (Yaupon Replacement Kit)	<ul style="list-style-type: none">• You MUST use version 2.04 drivers with DIGI PCI.• If you are using version 2.03 (or lower) drivers, connect the EFT to COM 2 of the Computer.• Go to My Computer>Control Panel>Services. Disable AIPCTRL.

RS-232 Interface

In most cases, the EFT connects to COM 6 (Port 4) of the DIGI Box or Edgeport. This can vary in certain store configurations. In these store configurations, the EFT often connects to COM 2 of the Computer. When the EFT is used in a TS/NT system, the AIPCTRL service must be disabled in Windows NT **Services**.

Interfacing a Serial EFT

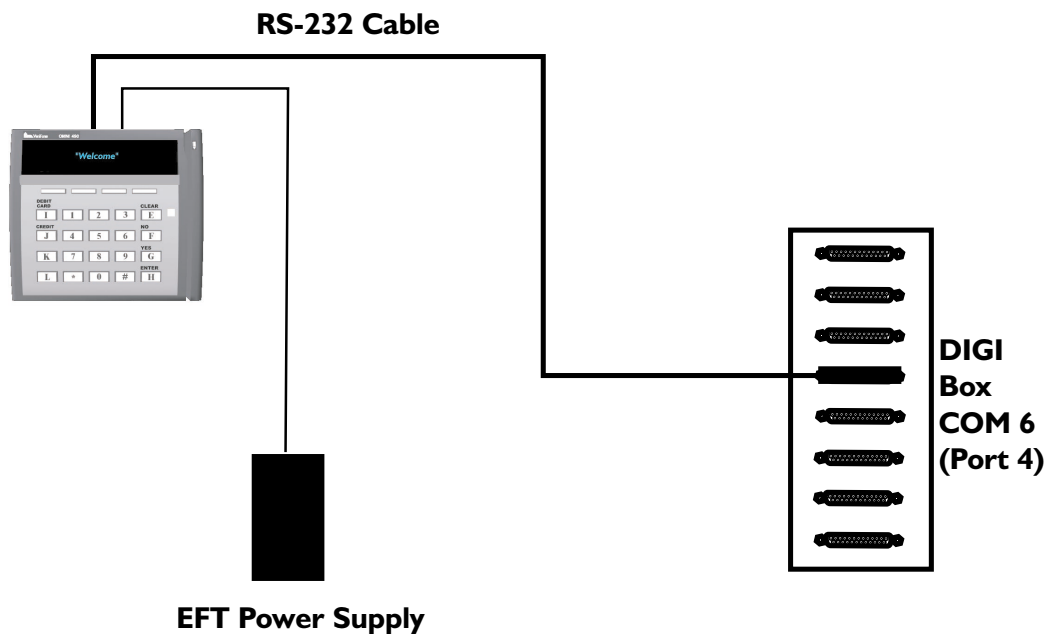
- 1 Connect the serial cable to the EFT.
- 2 Connect the power supply cable to the EFT or to the EFT cable.
- 3 Route the cable along the inside of the U-Scan Customer Station door and secure it to the door with wall mounts and tie wraps.
- 4 Connect the serial cable to the DIGI Box or Edgeport COM 6 (Port 4).

NOTE: Use another COM port if instructed to do so.

- 5 Connect the power supply to the power bar.
- 6 Refer to the appropriate EFT section for information about programming the EFT for RS-232 communication.
- 7 Refer to appropriate EFT section for information about downloading the EFT.

NOTE: Some of the EFT devices do not need to be downloaded or programmed. Refer to the appropriate EFT section for instructions.

RS-232 Connection Diagram



Yaupon Interface

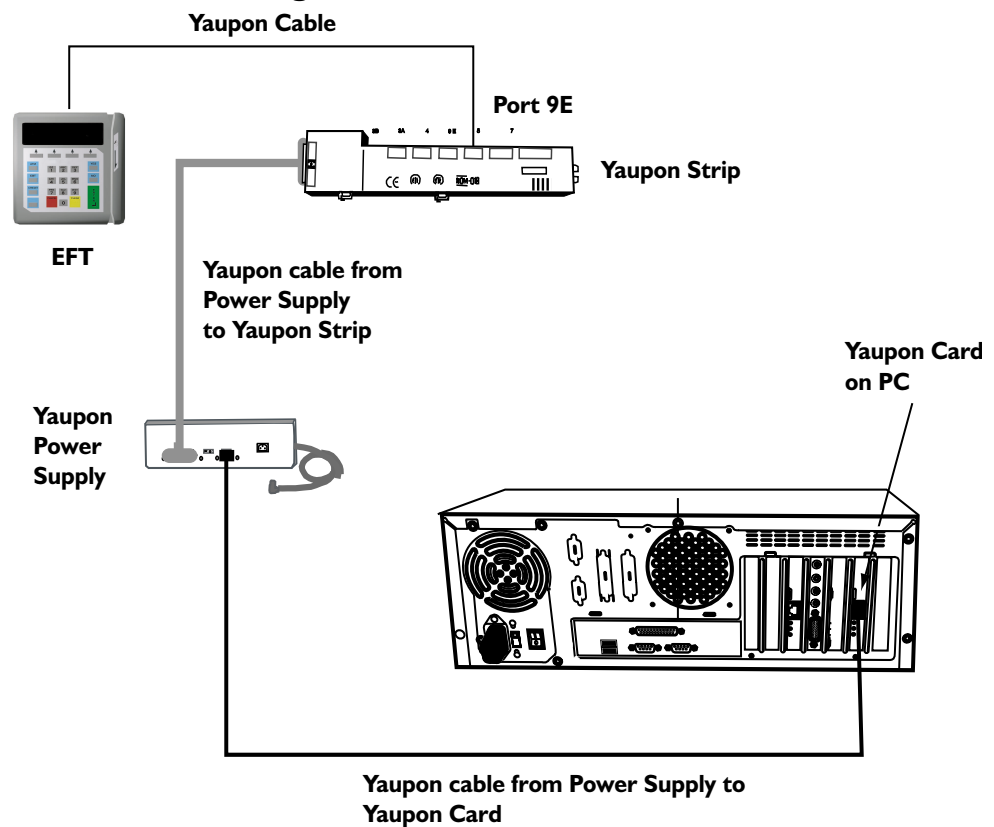
The Yaupon is mainly used in TS/NT systems. The Yaupon provides communication and power to the EFT. In some cases, a power supply is still used. When the EFT is used in a TS/NT system, the **AIPCTRL** service must be enabled in Windows NT Services.

Interfacing a Yaupon EFT

- 1 Connect the Yaupon cable to the EFT.
NOTE: In some cases the Yaupon cable is the EFT cable.
- 2 Route the cable along the inside of the U-Scan Customer Station door and secure it to the door with wall mounts and tie wraps.
- 3 Connect the Yaupon cable to **Port 9E** on the Yaupon strip.
- 4 Refer to the appropriate EFT section for information about programming the EFT for Yaupon communication.
- 5 Refer to appropriate EFT section for information about downloading the EFT.

NOTE: Some of the EFT devices do not require downloading or programming. Refer to the appropriate EFT section for instructions.

Yaupon Connection Diagram



JM Cable Interface

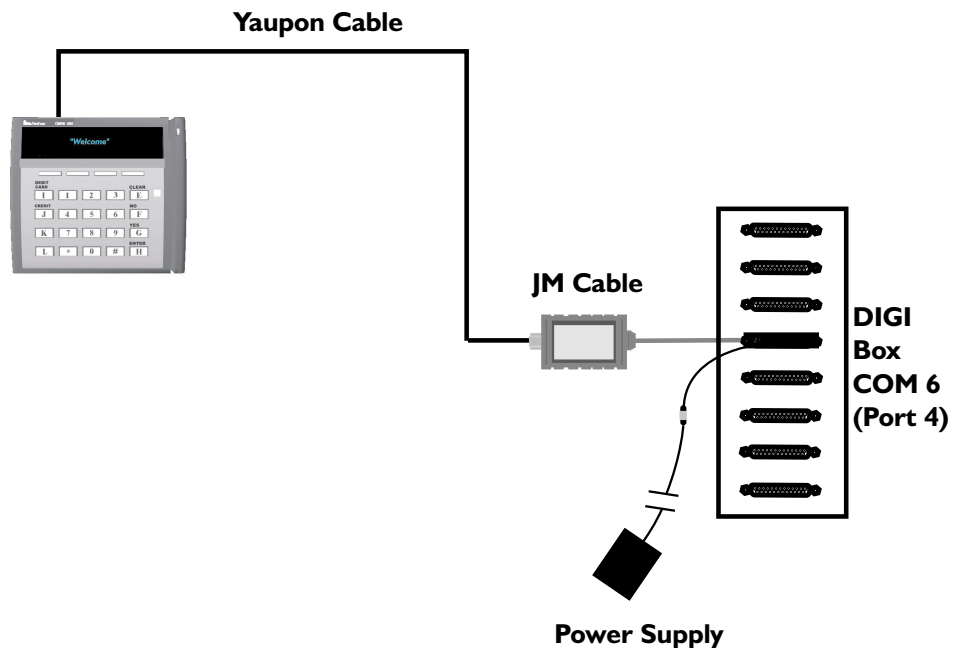
The JM cable replaces the Yaupon kit on newer systems. The Yaupon cable plugs into the JM cable rather than the Yaupon Strip, and the JM cable plugs into the DIGI Box or Edgeport. For TS/NT systems, the **AIPCTRL** service must be disabled in Windows NT Services.

Interfacing a Yaupon EFT Through the JM Cable

- 1 Determine if the systems requires the 4800 **or** the 9600-baud JM cable. In TS/NT systems, 4800 is used for SAV controllers, and 9600 for ACE controllers.
- 2 Connect the Yaupon cable to the EFT. In some cases the Yaupon cable is the EFT cable.
- 3 Route the cable along the inside of the U-Scan Customer Station door and secure it to the door with wall mounts and tie wraps.
- 4 Connect the JM cable to Port 4 (COM 6) the DIGI Box or Edgeport.
- 5 Connect the JM cable power supply to the power bar.
- 6 Connect the Yaupon cable to the JM cable.
- 7 Refer to the appropriate EFT section for information about programming the EFT for Yaupon communication.
- 8 Refer to appropriate EFT section for information about downloading the EFT.

NOTE: *Some of the EFT devices do not require downloading or programming. Refer to the appropriate EFT section for instructions.*

JM Cable Connection Diagram



NOTE: *The JM Cable can also connect to the Edgeport.*

Downloading and Programming the EFT

The customer provides the EFT device. During an *installation*, the technician must perform the following steps:

- 1 Connect the EFT to the DIGI Box or Yaupon strip at the Customer Station.
- 2 Identify which store controller the store has and perform the action in the table below

SAV	ACE
Sign on to the Lane at the Attendant Station OR Program the EFT, then sign on to the Lane at the Attendant Station.	No sign on is required.

- 3 Wait for the EFT application to download from the Store Controller.

Programming and Downloading the EVEREST (RS-232)

1. Enter Programming Mode on the EFT Pinpad

- 1 From the Attendant Station, close the Customer Station lane.
 - 2 On the EFT pinpad, press **7+ENTER** at the same time.
 - 3 Enter the password **166831**, then press **ENTER**.
-

2. A) Program the EFT

When the screen displays **VERIFONE EVEREST SYSTEM: LV0205US**, press **ENTER**.

OR

B) Reprogram the EFT

When the **Download Abort?** message appears, press **ENTER**.

3. The Function Menu

- 1 Use the **RIGHT ARROW** to scroll to **4683CN**.
 - 2 Press **ENTER**.
-

4. The Port Menu

- 1 Select **R232**.
 - 2 Press **ENTER**.
-

5. The Lane No. Menu

A) If the Lane No. is the Default

If the correct lane number is the default **LANE NO.**, press **ENTER**.

OR

B) To Change the Lane No.

- 1 Press **CLEAR**.

Programming and Downloading the EVEREST (RS-232) (Cont'd)

- 2 Enter the lane number.
 - 3 Press ENTER.
-

6. The L4683 Menu

- 1 Press CLEAR.
 - 2 Use the **RIGHT** or **LEFT ARROW** to scroll through the baud rates.
 - 3 If the controller is an ACE system, select **9600** baud.
OR
If the controller is a SAV system, select **4800** baud.
-

7. The Data Bits Menu

If the default Data Bits value is **7**, press ENTER.

OR

If the default Data Bits value is not **7**, use the **RIGHT** or **LEFT ARROW** to scroll to **7**, then press ENTER.

8. The Parity Menu

If the default Parity value is **Even**, press ENTER.

OR

If the default Parity value is **not Even**, use the **RIGHT** or **LEFT ARROW** to scroll to **Even**, then press ENTER.

9. The Stop Bits Menu

If the default Stop Bits value is **1**, press ENTER.

OR

If the default Stop Bits value is not **1**, use the **RIGHT** or **LEFT ARROW** to scroll to **1**, then press ENTER.

Programming and Downloading the EVEREST (RS-232) (Cont'd)

10. The Auto Enable Menu

If the default Auto Enable value is **No**, press **ENTER**.

OR

If the default Auto Enable value is **Yes**, use the **RIGHT** or **LEFT ARROW** to scroll to **No**, then press **ENTER**.

11. The Assert RTS Menu

If the default RTS Asserted value is **Yes**, press **ENTER**.

OR

If the default RTS Asserted value is **No**, use the **RIGHT** or **LEFT ARROW** to scroll to **Yes**, then press **ENTER**.

12. The Download Menu

If the default Download value is **Full**, press **ENTER**.

OR

If the default Download value is **not Full**, use the **RIGHT** or **LEFT ARROW** to scroll to **Yes**, then press **ENTER**.

13. The New Download Menu

In the **New Download** menu, use the **RIGHT** or **LEFT ARROW** to scroll to **Yes**.

14. The Download Process

A) For an ACE Controller

With ACE controllers, the EFT downloads as soon as the **Launchpad** appears at the Customer Station.

OR

Programming and Downloading the EVEREST (RS-232) (*Cont'd*)

B) For a SAV Controller

With SAV controllers, sign on the Lane and the EFT downloads automatically.

Hand Scanner

Testing the Hand Scanner in the Device Tester

1. Stop the Attendant Station Software

See “Stop the Attendant Station Software.”

2. Check the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages, see “Hand Scanner Error Messages” on the next page. Error messages are also stored in the **Eventlog Viewer** and can be viewed after you exit the **Device Tester**.*

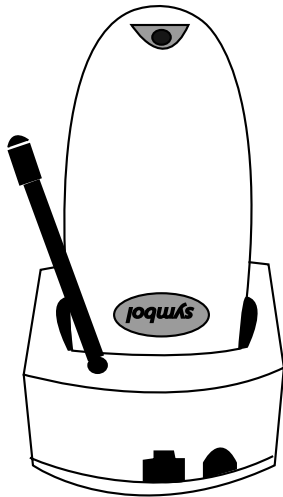
- 1 Click **Start**.
 - 2 Click **Enable**.
 - 3 Scan an item.
The bar code numbers display in the **Messages** box.
 - 4 Verify that the code in the **Messages** box matches the code on the item scanned.
 - 5 Click **Stop**.
-

Hand Scanner Error Messages

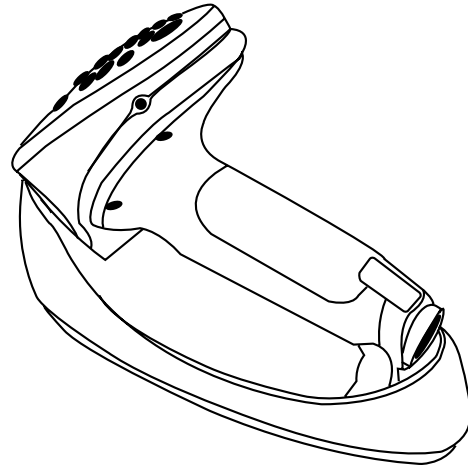
Refer to the table below for a description of Hand Scanner error messages.

Error Messages	Explanation
SCANNER (GOTUPC_ WHILE _DISABLED, UPC)	This does not indicate a malfunction. Indicates that a bar code was read before the Hand Scanner was enabled in the Device Unit Testing utility.
SCANNER(GOTABADUPC, ZS)	Indicates that someone tried to scan a bad bar code. Use another bar code to test the Hand Scanner.
SCANNER (CONTROL_ BARCODE, ZS,ZS)	Indicates that the bar code scanned was a test bar code entered in the Attendant Station registry. Call the Support Center.

SYMBOL P370 or P474/475 Hand Scanner



SYMBOL 474/475 Hand Scanner



SYMBOL P370 Hand Scanner

Features:

- Cordless RF scanning
- 17-key keypad and 20-character display (P370 only)
- Flash memory
- Rechargeable lithium-ion battery (1100 mAh) for up to 10 hours of scanning
- Battery charge time of 3.5 hours (100% charged)
- Scan rate of 35 (± 5) per second

Technical Specifications

Environment

- Temperature: -4°F to 122°F (-20°C to 50°C)
- Humidity: 5% to 95% non-condensing

Power Supply Requirements

- Input: 100 to 240 V, 50 to 60 Hz, 18 to 28 VA
- Output: +9 V, 1 A

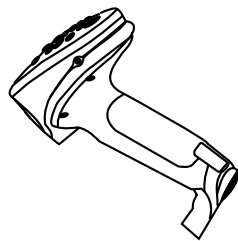
Communication

- RS-232 serial cable (RJ-45 to DB-25)

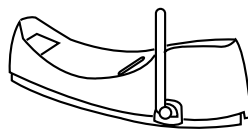
Components of the SYMBOL P370

The SYMBOL P370 or 474/475 Hand Scanner is made up of the following components:

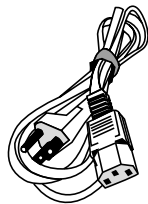
- SYMBOL Cordless Hand Scanner
- Charging base and two-way RF transceiver
- RS-232 communication cable (RJ-47 to DB-9 female)
- DB-9 male to DB-25 female adapter
- Power supply adapter



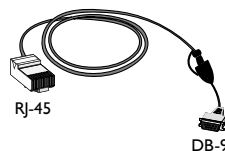
P370 Hand Scanner and Charging Base



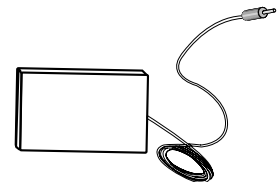
474/475 Hand Scanner and Charging Base



Power Cable



Communication Cable

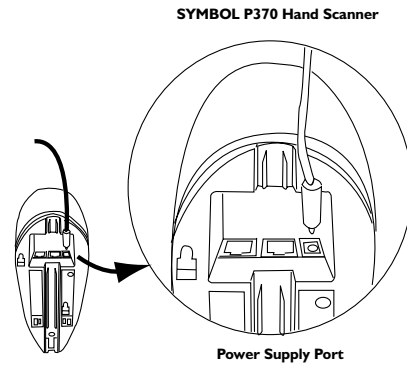


Power Supply

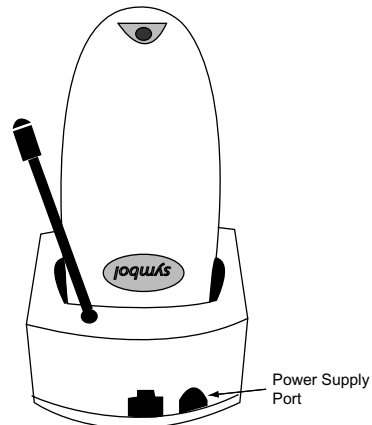
Troubleshooting the SYMBOL Hand Scanner

1. Check the Power

- 1 Ensure that the power cable is connected to the base of the Hand Scanner.



SYMBOL 474/475 Hand Scanner

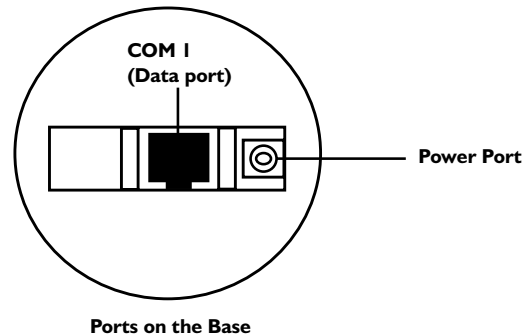


- 2 Ensure that the power cable is connected to the power bar.
- 3 Ensure that the laser works.
- 4 Ensure that the charge light comes on when the Hand Scanner is placed on the base.
- 5 Unplug the power cable from the data cable and then plug it back in to cycle the power.

Troubleshooting the SYMBOL Hand Scanner (Cont'd)

2. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the base.



- 2 Ensure that the data cable is connected to port 6 on the DIGI Box or Edgeport.

3. Pair the Hand Scanner to the Base

Scan the bar code on the base of the Hand Scanner.

4. Reprogram the Hand Scanner

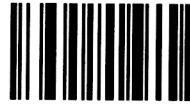
NOTE: *You can also use the bar codes in the manual for this procedure. You **must** use the bar codes in this manual for the P370.*

- 3 In the Attendant **Device Test** window, select the **Scanner** tab.
- 4 Press ALT+* (* is on the number pad).
Print becomes enabled.
- 5 Click **Print**.
The Printer prints the bar code settings.
- 6 Use the Hand Scanner to scan the bar codes in order.
- 7 Click **Start** to disable **Print**.

Additional Information for the SYMBOL 474/475 and P370 Cordless Hand Scanners

Programming the 474/475 Hand Scanner

Default Parameters: Set All Defaults



SET ALL DEFAULTS

Host Type: Standard RS-232C



STANDARD RS-232C

Transmit Check Digit: Do Not Transmit UPC-A Check Digit



DO NOT TRANSMIT UPC-A CHECK DIGIT

Transmit CheckDigit: Do Not Transmit UPC-E Check Digit



DO NOT TRANSMIT UPC-E CHECK DIGIT

Convert: Convert UPC-E to UPC-A (Enable)



**CONVERT UPC-E TO UPC-A
(ENABLE)**

RS-232C Parameters Hardware: None



NONE

RS-232C Parameters Software: None



NONE

RS-232C Parameters Baud Rate: 9600



BAUD RATE 9600

RS-232C Parameters Parity: None



NONE

RS-232C Parameters Stop Bits: 1 Stop Bit



1 STOP BIT

RS 232C Parameters ASCII Format: 7 Bit



7-BIT

Prefix/Suffix Values: Scan Suffix



SCAN SUFFIX

Numeric Barcodes: 1



1

Numeric Bar Codes: 0



0

Numeric Bar Codes: 1



1

Numeric Bar Codes: 3



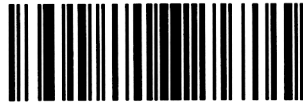
3

Scan Data Transmission: Scan Options



SCAN OPTIONS

Scan Data Transmission: <Data><Suffix>



<DATA> <SUFFIX>

Scan Data Transmission: Enter



ENTER

P370 Beep Sequences

The table below lists beep sequences for the SYMBOL P370 Hand Scanner and their meanings.

P370 Beeper Indications

Default application display Message	Beeper Sequence	Indication
Standard Use		
N/A	Short high tone	A bar code symbol was decoded (if decode beeper is enabled).
Error 00003 during transmit Error 00009 during transmit Error 00018 during transmit Error 00247 during transmit Error 00249 during transmit Error 00253 during transmit	Four long low beeps	A host transmission error occurred. Data was not successfully sent to the host device. This occurs when the unit is not properly configured. Check the option settings.
Error 00002 during transmit Error 00008 during transmit	Five beeps - low tone	Convert or format error
Error 00005 during transmit	Hi/Hi/Hi/Lo tone	RS-232 receive error.
Low battery	Four beeps - short Hi	Low battery.
Error 00015 during transmit Error 00016 during transmit Error 00017 during transmit Error 00024 during transmit	Four beeps - Lo/Hi/Lo/Hi	An RF transmission error has occurred. Move closer to the charging base and scan the bar code again.
Parameter Menu Scanning		
N/A	Short Hi tone.	Correct entry scanned or correct menu sequence performed.
N/A	Lo/Hi tone	Input error, incorrect barcode or "Cancel" has been scanned, wrong entry, incorrect bar code programming sequence. Remain in programming mode.
N/A	Hi/Lo tone	Keyboard parameter selected. Enter value using bar code keypad.

P370 Beeper Indications

Default application display Message	Beeper Sequence	Indication
N/A	Hi/Lo/Hi/Lo tone	Successful program exit with change in the parameter setting.
N/A	Four beeps - Lo/Hi/Lo/Hi followed by two beeps - Lo/Hi	Correct entry scanned or correct menu sequence performed in the Hand Scanner but communication error with charging base has occurred.

P370 LEDs

The table below describes the status of the LEDs on the P370 Hand Scanner charging base.

P370 Charging Base LED Indications

LED	Status
Off	The Hand Scanner is not on the charging base.
Blinking slowly	The Hand Scanner is properly resting on the charging base, but charging has not started.
Blinking rapidly	The battery is actively charging.
On	The battery has finished charging.

Configuring the SYMBOL P370 Hand Scanner

1. Configure the Hand Scanner

- 1 Press **FN**, ***** on the Hand Scanner keypad.
The display reads **Symbol Technologies Phaser RF**.
- 2 Press **FN**, **BK**.
The display reads **Phaser Setup, 0. System Setup**.
- 3 Press **2**.
The display reads **Phaser Setup, 2. Parameter Control**.
- 4 Press **ENTER**.
The display reads **Scan Parameters, [FUNC], [BK] to quit**.
- 5 Scan the following bar codes:

Set Synapse RS-232 Defaults



7 Data Bits



Do Not Transmit UPC-A Check Digit



Do Not Transmit UPC-E Check Digit

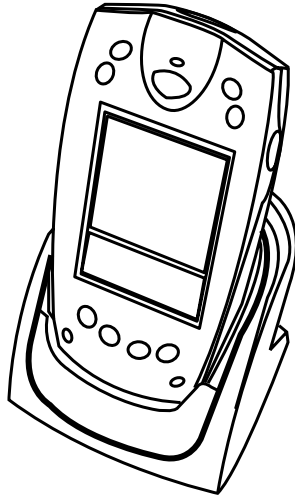


- 6 Press **FN**, **BK**.
The displays reads **Phaser Setup, 0. System Setup**.
- 7 Press **ENTER**.
The display reads **System Setup, 0. Set RF Channel**.
- 8 Press **4**.
The display reads **System Setup, 4. Set Scan Options**.
- 9 Press **ENTER**.
The display reads **Scan Options Menu, 1. Data as is**.

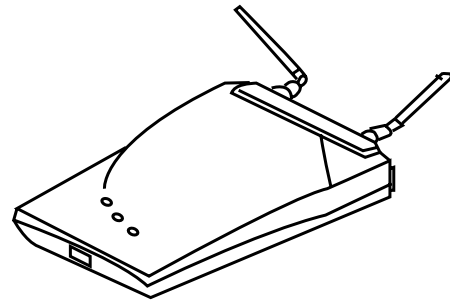
Configuring the SYMBOL P370 Hand Scanner (Cont'd)

- 10 Press 3.
The display reads **Scan Options Menu, 3. [DATA] [SUFFIX]**.
 - 11 Press ENTER.
The display reads **Scan Options Menu, 1. Data as is.**
 - 12 Press 6.
The display reads **Scan Options Menu, 1. Edit Suffix Code.**
 - 13 Press ENTER.
The display reads **ASCII suffix value: 7013^.**
 - 14 Press 1013, ENTER.
The display reads **Scan Options Menu, 1. Data as is.**
 - 15 Press 9.
The display reads **Scan Options Menu, 9. Exit.**
 - 16 Press ENTER.
The display reads **Phaser Setup, 0. System Setup.**
 - 17 Press 9.
The display reads **Phaser Setup, 9. Return to App.**
 - 18 Press ENTER.
The display reads **SKU: ^-----.**
-

U-Scan Mobile Attendant



SYMBOL Handheld
Device



3Com Access Point 8000

Features:

SYMBOL Handheld Device (SPT 1746/ 1846)

- Bar code reader
- A built-in radio frequency transceiver for wireless networking (802.11b radio protocol)
- High-contrast, anti-reflective, monochrome LCD Touch Screen (160x160 pixels)
- A stylus for written input (“Graffiti” writing)
- 8 MB of RAM (U-Scan Mobile Attendant software requires 200 KB)
- Specialized cradle for recharging the battery. Contains slot for charging an extra battery.
- Runs the Palm operating system

3COM Access Point

- Wireless Hub that allows the Mobile Attendant to communicate with the U-Scan
- Built-in antenna that can function inside the Attendant Station casing
- AC adapter
- Network connection to the Attendant Station Hub
- Indicator lights (power light, wired network traffic light, and radio network traffic light)

Technical Specifications

Environment

- Operating temperature: -4° to 122°F (-20° to 50° C)
- Storage temperature: -13° to 122°F (-25° to 50° C)
- Relative humidity: 5% to 90% non-condensing
- Environmental sealing: IP54 (windblown dust and rain)

Power (U-Scan Mobile Attendant)

- In: 100 to 240 V ac; 50 to 60 Hz; 0.5 to 2.5 A
- Out: 9 V; 2.0 A DC

Power (3COM Access Point)

- In: 100 to 240 V ac; 50 to 60 Hz
- Out: 48 V; 400 MA DC

Battery

- 3.7 V, 1550 mAh rechargeable Lithium-Ion
- Battery life: Approximately 20 hours if the scanner is not used. Approximately 9-10 hours if scanned is used once every 1-2 minutes.
- Recharge time: Depleted battery takes 2-3 hours to recharge. The battery does not need to be fully depleted to be recharged. **Turn off the device to recharge it.**

Electrostatic Discharge

- 8 kVdc air, 4 kVdc contact

Drop Specification

- 4 ft./1.2 m to concrete

Wireless LAN Specifications

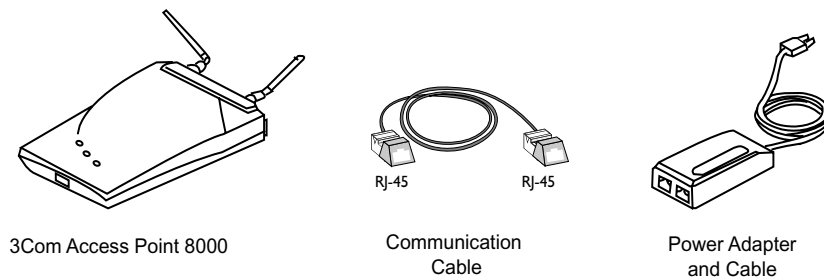
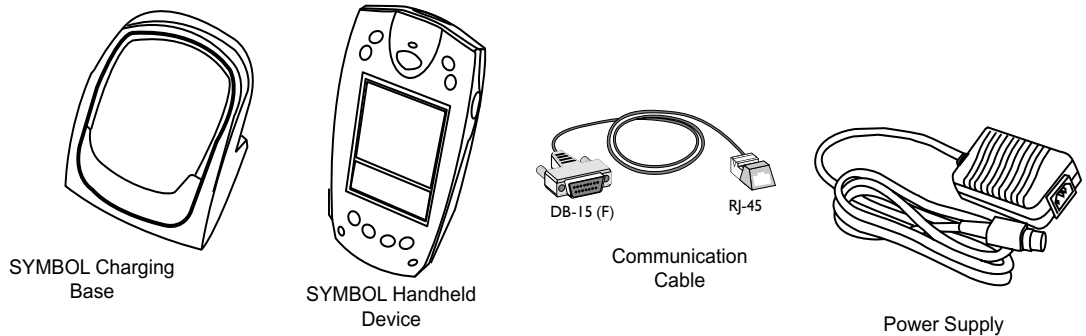
- Wireless LAN: SYMBOL Spectrum24 IEEE 802.11 airwaves standard compliant / IEEE 802.11b
- Radio transmission technique: Frequency hopping and direct sequence
- Data rate: 2 Mbps/11 Mbps
- Antenna: internal

- Range: Maximum 1000 ft. (303 m) in open space; 180 to 250 ft. (54 to 76 m) typical
- Output power: 500 mW US; 100 mW International
- Frequency range: country-dependent, typically 2.4 to 2.5 GHz

Components

The U-Scan Mobile Attendant is made up of the following components:

- SYMBOL handheld device
- SYMBOL charging base
- Charging base power adapter
- Charging base DB-9 to RJ-45 serial cable and DB-9 Male to DB-25 Female adapter (only connected when software is installed or upgraded)
- 3COM Access Point 96B (not shown) or 8000
- Power supply
- Serial cable (only connected when device is configured)



Testing the U-Scan Mobile Attendant



1. Stop the Customer Software

See “Stop the Customer Software.”

2. Test the Connection to the AccessPoint

- 1 Locate the Attendant Station Computer.
 - 2 Go to **Start>Run**.
 - 3 Enter **cmd**, then press **ENTER**.
A command prompt appears.
 - 4 Enter **ping xxx.xxx.xxx.xxx**, where “xxx” is the U-Scan Mobile Attendant’s IP address.
 - 5 Press **ENTER**.
 - 6 Ensure that there is a connection. If there is no response, refer to “[Troubleshooting the Access Point \(Model 96B\)](#)” or “[Troubleshooting the Access Point \(Model 8000\)](#).”
-

3. Test the Connection to the SYMBOL Handheld Device

- 1 On the U-Scan Mobile Attendant, touch the **Calculator** button. 
- 2 Touch the **Application** button. 
The U-Scan Mobile Attendant software exits.
- 3 Touch the **Prefs** button.
- 4 From the menu at the top of the screen, touch **Network**.
- 5 Ensure that the **Service** is **Spectrum24**.
- 6 Touch the **Connect** button.
- 7 Ensure that the U-Scan Mobile Attendant associates to **ESSID**.

IF	THEN
The Mobile Attendant connects,	go to step 8.
The Mobile Attendant does not connect,	verify the Access Point and Mobile Attendant settings.

Testing the U-Scan Mobile Attendant (*Cont'd*)

- 8 Start a DOS box.
- 9 At the C:> prompt, enter **ping 192.168.0.100**.
- 10 Ensure that the connection was established.

U-Scan Mobile Attendant Common Problems and Solutions

This section provides basic steps for resolving common problems. Refer to [“Troubleshooting the U-Scan Mobile Attendant”](#) for the full troubleshooting procedures.

Issue	Possible Cause(s)	Solution
<p>The MA does not power on or there is no image on the Touch Screen.</p>	<ul style="list-style-type: none"> • The battery is fully depleted. • The battery is defective or not in the device. • The power button is defective. • The contrast is not set up properly. • The device was exposed to prolonged cold weather. 	<ul style="list-style-type: none"> • Ensure that the charging base power cable is properly connected. • Ensure that the battery is present and charging. • Verify the contrast setting. • If it was exposed to cold temperatures, allow the device to return to room temperature. • If it still does not work, replace the unit.
<p>The MA battery is not charging or is depleting very quickly.</p>	<ul style="list-style-type: none"> • The attendant is not disconnecting the device at night. (User error.) • The charging base is not connected properly. • The MA is not sitting properly in the charging base. 	<ul style="list-style-type: none"> • Ensure that the attendants are following the appropriate procedures. • Ensure that the charging base is connected. • Ensure that the MA is sitting properly in the charging base. • Ensure that the MA is charging. (The charge light turns green.) • Replace the battery.

Issue	Possible Cause(s)	Solution
<p>Message: No Connection to U-Scan Open Net Lib Failed (0)</p>	<ul style="list-style-type: none"> • The AccessPoint is not connected or configured. • The Attendant Station MA software is not running. • The MA is not started in the Launchpad. • The MA is not configured properly. 	<ul style="list-style-type: none"> • Access the Attendant Station Launchpad. • Ensure that the MA is started. If necessary, touch Start MA. • Ensure that the Attendant Station software is running. • Verify the AccessPoint configuration. • Verify the MA configuration. • Verify the software registry settings.
<p>Message: No connection to U-Scan Socket connection failed (1)</p>	<ul style="list-style-type: none"> • There is a problem with the MA network software or configuration. • There is a problem with the AccessPoint. 	<ul style="list-style-type: none"> • From the Launchpad, stop and then restart the MA. • Verify the AccessPoint configuration. • Ensure that the Attendant Station software is running.
<p>Message: No connection to U-Scan Socket connection failed (2)</p>	<ul style="list-style-type: none"> • There is a configuration problem with the MA. • There is a configuration problem with the Attendant Station software. 	<ul style="list-style-type: none"> • From the Launchpad, stop and then restart the MA. • Perform a soft reset. • Configure the MA. • Verify the Attendant Station software registry settings. • Ensure that the Attendant Station software is running.
<p>Message: No connection to U-Scan Socket connection failed (18)</p>	<ul style="list-style-type: none"> • The connection was established and then broken. 	<ul style="list-style-type: none"> • From the Launchpad, stop and then restart the MA. • Turn the MA off and then on again. • Perform a soft reset. • Perform a hard reset. • Verify the MA settings.

Issue	Possible Cause(s)	Solution
Message: No connection to U-Scan Socket closed on recover or Write failed or similar message	<ul style="list-style-type: none"> The Attendant Station closed the communication socket. 	<ul style="list-style-type: none"> From the Launchpad, stop and then restart the MA. Ensure that the Attendant Station software is running. Verify the AccessPoint configuration. Perform a soft reset. Verify the MA configuration.
Message: Fatal Error OR The SYMBOL handheld device is frozen.	<ul style="list-style-type: none"> A fatal error in one of the MA applications is causing the MA to crash. 	<ul style="list-style-type: none"> Perform a hard reset. Configure the MA.
The wrong feature is activated when you touch the screen.	<ul style="list-style-type: none"> The screen is not calibrated properly. 	<ul style="list-style-type: none"> Calibrate the Digitizer.
The MA keeps turning off.	<ul style="list-style-type: none"> The automatic shutoff delay is set too low. 	<ul style="list-style-type: none"> Perform a soft reset. Set the MA shutoff time to a higher number.

Troubleshooting the U-Scan Mobile Attendant

NOTE: *The Access Point 8000 has enhanced security features and 128-bit encryption. If the U-Scan Mobile Attendant or Access Point 8000 fails, replace **both** devices so that the encryption keys will match.*

1. Restart the U-Scan Mobile Attendant

- 1 Locate the Computer keyboard inside the Attendant Station casing.
 - 2 Press **ALT+TAB** to select the **Launchpad**.
 - 3 Touch **Stop MA**.
 - 4 Touch **Start MA**.
 - 5 On the U-Scan Mobile Attendant, touch **Reconnect**.
-

2. Inspect the SYMBOL Power



- 1 Ensure that the power cable is connected to the SYMBOL cradle.
 - 2 Ensure that the power cable is connected to the SYMBOL power adapter.
 - 3 Ensure that the power adapter is connected to the power bar.
-

3. Inspect the Charging Base Communication Cable

NOTE: *This cable only needs to be connected when you flash the ROM.*

- 1 Ensure that the 9 to 25 pin adapter is connected to the DB-9 end of the SYMBOL communication cable.
 - 2 Ensure that the communication cable is connected to COM 3 (Port 1) of the DIGI Box or Edgeport.
-

4. Verify the U-Scan Mobile Attendant Settings

- 1 On the U-Scan Mobile Attendant, touch the **Application** button. 
- 2 Touch **Mattend**. 
The U-Scan Mobile Attendant software starts.
- 3 Touch **Mobile Attendant** at the top of the screen.
The **Mobile Attendant** menu appears.
- 4 Touch **Configure Connection**.

Troubleshooting the U-Scan Mobile Attendant (*Cont'd*)

5 Verify the following settings:

Host IP	192.168.0.5 (unless otherwise specified by the project manager)
Host Port	2500
Station Name	MOBILE
Demo mode	Disabled
Legacy Display (if it appears)	Enabled

6 Touch **More**.

7 Verify the following settings:

ESSID	OPMR
Use DHCP	Disabled
Local IP	192.168.0.100 (unless otherwise specified by the project manager)
Subnet Mask	255.255.255.0
Gateway	Leave blank

8 Touch **Done**.

5. Verify the Software Settings

- 1 At the Attendant Station, press **ALT+TAB** to access the **Launchpad**.
- 2 Ensure that the **Start/Stop MA** button appears.
- 3 At the Customer Station, press **ALT+TAB** to access the **Robot Control** window.
- 4 Ensure that the Mobile Attendant is listed on the right side of the window and the status light next to it is green.

NOTE: *If the U-Scan Mobile Attendant does not connect after you verify the software settings, perform Task 6, “[Verify the Registry Setting](#).”*

Troubleshooting the U-Scan Mobile Attendant (*Cont'd*)

6. Verify the Registry Setting

Only perform this procedure if the U-Scan Mobile Attendant does not connect after you have verified all the settings.

- 1 Go to a Customer Station.
- 2 Go to **Start>Run**.
The **Run** dialog box appears.
- 3 Enter **regedit**.
- 4 Click **OK**.
The **Registry Editor** is accessed.
- 5 Go to **HKEY_CURRENT_USER\software\optimal robotics\machine names\MCASHNT.IPADDRESS**.
- 6 Verify the IP address.

IF	THEN
The IP address is 255.255.255.255 ,	change it to the IP address for the Attendant Station.
The IP address is the correct IP address for the Attendant Station,	do not change the address.

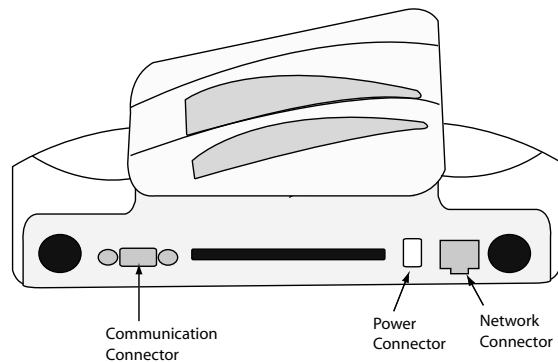
- 7 Repeat step **1** to step **6** for the remaining Customer Stations.
-

Troubleshooting the Access Point (Model 96B)

1. Inspect the 3Com Access Point Power

- 1 Ensure that the power adapter is connected to the 3Com Access Point.

Model 96B



- 2 Ensure that the power cable is connected to the power adapter and to the power bar.

2. Inspect the 3Com Access Point Communication Cables

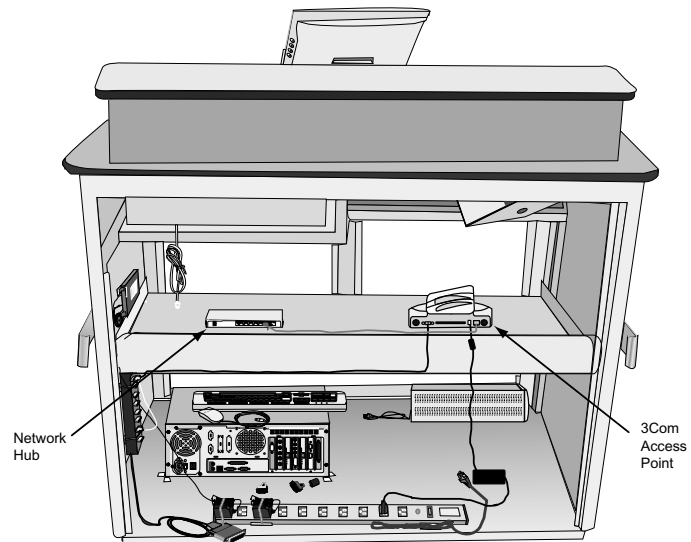
- 1 Ensure that the DB-9 communication cable is connected to the 3COM Access Point.
- 2 Ensure that the DB-9 communication cable is connected to COM 3 (Port 1) of the DIGI Box or Edgeport.

Troubleshooting the Access Point (Model 96B) (Cont'd)

- 3 If applicable, ensure that the network cable is connected to the 3COM Access Point and to the U-Scan Network Hub.

NOTES: *The communication cable only needs to be connected when you change or verify the settings.*

Not all stores have a Network Hub.



3. Verify the 3Com Access Point Settings

- 1 At the Attendant Station, go to **Start>Programs>Accessories>HyperTerminal**. The HyperTerminal application starts.
- 2 Enter **S24** in the **Connection Description** dialog box.
- 3 Click **OK**. The **Connect to** dialog box appears.
- 4 In the **Connect to** dialog box, use the drop-down menu to select **COM 3**.
- 5 Click **OK**. The **COM 3 Properties** dialog box appears.
- 6 Enter the following parameters:

BPS	19200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	Hardware

Troubleshooting the Access Point (Model 96B) (Cont'd)

- 7 Click **OK**.
A blank screen appears.
- 8 Press **ENTER**.
The **Access Point System Summary** screen appears.
- 9 Verify the following settings:

IP Address	192.168.0.101 (Unless otherwise specified by the project manager)
Channel	3
Net_ID (ESS)	OPMR (Unless otherwise specified by the project manager.)
DHCP	Disabled

4. Verify the Access Point Network Connections

- 1 On the U-Scan LAN Network Hub, ensure that the link light for the Access Point is on.
 - 2 Start a DOS box in Windows.
 - a Go to **Start>Run**.
 - b Enter **cmd**, then press **ENTER**.
 - 3 At the **C:\>** prompt, enter **ping 192.168.0.101**.
NOTE: *The IP address is store-assigned if the wireless hub is not a 3COM Access Point.*
 - 4 Ensure that a connection was established.
-

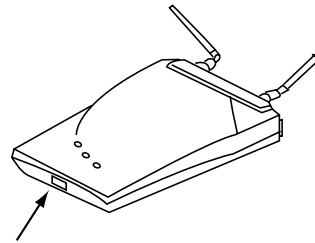
Troubleshooting the Access Point (Model 8000)

NOTE: *The Access Point 8000 has enhanced security features and 128-bit encryption. If the U-Scan Mobile Attendant or Access Point 8000 fails, replace **both** devices so that the encryption keys will match.*

1. Inspect the 3Com Access Point Power

- 1 Ensure that the power supply adapter cable is connected to the 3COM Access Point and to the power supply adapter.

Access Point 8000



Power Connector

- 2 Ensure that the power cable is connected to the power supply adapter and to the power bar.

2. Inspect the 3Com Access Point Communication Cables

Ensure that the data cable is connected to the Access Point power supply adapter and to the Network Hub.

NOTE: *Not all stores have a Network Hub.*

3. Verify the Access Point Network Connections

- 1 On the U-Scan LAN Network Hub, ensure that the link light for the Access Point is on.
- 2 Start a DOS box in Windows.
 - a Go to **Start>Run**.
 - b Enter **cmd**, then press **ENTER**.
- 3 At the **C:\>** prompt, enter **ping 192.168.0.101**.

NOTE: *The IP address is store-assigned if the wireless hub is not a 3COM Access Point.*
- 4 Ensure that a connection was established.

Additional Information for the U-Scan Mobile Attendant

The following information is contained in this section:

- [U-Scan Mobile Attendant Maintenance and Cleaning](#)
- [SYMBOL Handheld Device Buttons](#)
- [Setting Up the 3Com Access Point \(Model 96B\)](#)
- [Setting Up the 3COM Access Point 8000](#)
- [Installing the 3COM Omnidirectional Antenna for the AccessPoint 8000](#)
- [Setting Up the U-Scan Mobile Attendant](#)
- [Operating the U-Scan Mobile Attendant](#)
- [Troubleshooting U-Scan Mobile Attendant Connection Procedures](#)

U-Scan Mobile Attendant Maintenance and Cleaning

Spray a lint-free cleaning pad or cloth with the suggested cleaning solution (one part glass cleaner to one part water) and clean the Touch Screen.

SYMBOL Handheld Device Buttons



Buttons on the Main Screen

Diag: Performs diagnostic functions

Hot Sync: Synchronizes the U-Scan Mobile Attendant with the Computer.

MAttend: Launches the U-Scan Mobile Attendant application

Memo Pad: Allows the user to take notes.

Prefs: Configures the network and calibrates the device.

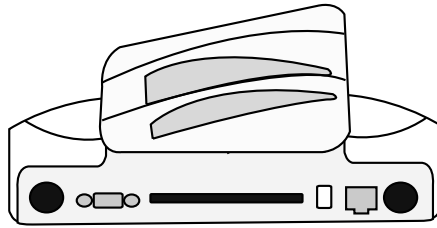
Symbol S24 Info: Provides information on hardware and drivers.

Symbol Scan Info: Provides information on the Scanner software.

Setup: Allows the user to calibrate the device and assign the IP address.

Setting Up the 3Com Access Point (Model 96B)

Perform the following tasks to set up the older 3COM Access Point model (96B).

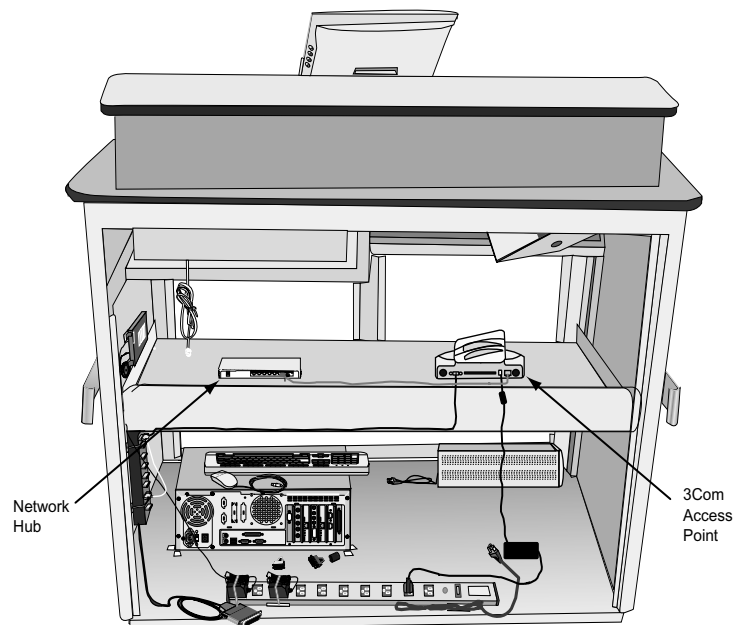


3Com Access Point: Model 96B

1. Install the 3Com Access Point

NOTE: *Contact the project manager to ensure that it is necessary to install the 3COM Access Point.*

- 1 Unpack the 3Com Access Point components.
- 2 Verify that you have the following components:
 - a Air Connect 11Mbps Wireless Hub (Access Point)
 - b DB-9 serial cable
 - c Power adapter and power cable
 - d RJ-45 patch cable
 - e DB-9 Male to DB-25 Female adapter
- 3 Place the 3COM Access Point in the Attendant Station as shown below.



Setting Up the 3Com Access Point (Model 96B) (Cont'd)

- 4 Connect the patch cable from the Access Point to the next available port on the U-Scan LAN Hub in the Attendant Station.
 - 5 Connect the 9 to 25 pin adapter to the DB-9 serial cable.
 - 6 Connect the DB-9 serial cable to the Access Point and to COM 3 (Port 1) of the DIGI Box.
 - 7 Connect the power cable to the power bar and to the Access Point power adapter.
 - 8 Connect the power cable to the Access Point.
-

2. Install HyperTerminal

- 1 Go to **Start>Settings>Control Panel**.
 - 2 Click **Add/Remove Programs**.
The **Add/Remove Programs Properties** dialog box appears.
 - 3 Select the **Windows NT Setup** tab.
 - 4 Highlight the **Communications** icon and click **Details**.
 - 5 Click **HyperTerminal**.
 - 6 Click **OK**.
 - 7 In the **Add/Remove Programs Properties** box, click **Apply**.
The system prompts you to enter a WIN NT disk.
 - 8 Click **OK**.
The **Files needed** dialog box appears.
 - 9 Click **Browse**.
 - 10 In the **Locate File** dialog box, browse to **My Computer>C>Storage>Win NT40>1386**.
 - 11 Click **Hypertrm.ex_**.
 - 12 Click **Open**.
 - 13 Click **OK**.
 - 14 Click **OK**.
HyperTerminal installs.
 - 15 Return to the Windows desktop.
-

3. Set Up a HyperTerminal Connection

- 1 Go to **Start>Programs>Accessories>HyperTerminal**.
- 2 Click **HyperTerminal**.
The HyperTerminal application starts.

Setting Up the 3Com Access Point (Model 96B) (Cont'd)

- 3 Enter **S24** in the **Connection Description** dialog box.
 - 4 Click **OK**.
The **Connect to** dialog box appears.
 - 5 In the **Connect to** dialog box, use the drop-down menu to select **COM 3**.
 - 6 Click **OK**.
The **COM 3 Properties** dialog box appears.
 - 7 Enter the following parameters:

BPS	19200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	Hardware
 - 8 Click **OK**.
A blank screen appears.
 - 9 Press **ENTER**.
The **Access Point System Summary** screen appears.
-

4. Install the Access Point

- 1 At the **Access Point System Summary** screen, touch **Escape**.
The main menu displays.
- 2 Use the up and down arrow keys to highlight **AP Installation**.
- 3 Press **ENTER**.
The system prompts you to enter the administrative password.
- 4 Enter **comcomcom**.
The **AP Installation** screen appears.
- 5 Use the arrow keys to scroll to the **IP address** field.
- 6 Enter the IP address **192.168.0.101** or the IP address provided by the project manager.
- 7 Use the arrow keys to scroll to the **Gateway IP address** field.
- 8 Enter the IP address **0.0.0.0**.
- 9 Use the arrow keys to move to the **Subnet Mask** field.
- 10 Enter **255.255.255.0**.
- 11 Use the arrow keys to scroll to the **Net_ID (ESS)** field.

Setting Up the 3Com Access Point (Model 96B) (Cont'd)

- 12 Enter **OPMR**.
*NOTE: If the store has multiple clusters, contact the project manager for the **Net_ID** information.*
 - 13 Use the arrow keys to scroll to the **DHCP** field.
 - 14 If the **DHCP** field is **Enabled**, use the left and right arrow keys to set it to **Disabled**.
 - 15 Press **F1** to save all information.
The system asks you to confirm.
 - 16 Use the arrow keys to select **Yes**.
 - 17 Press **ENTER**.
-

5. Configure the System and Radio Frequency

- 1 Use the up and down arrow keys to highlight **Set System Configuration**.
 - 2 Press **ENTER**.
 - 3 Use the arrow keys to scroll to the **Channel** field.
 - 4 Enter **3** in the **Channel** field.
 - 5 Press **F1** to save.
The system asks you to confirm.
 - 6 Use the arrow keys to select **Yes**.
 - 7 Press **ENTER**.
 - 8 Use the up and down arrow keys to highlight **Set RF Configuration**.
 - 9 Press **ENTER**.
 - 10 Use the arrow keys to scroll to the **Short Preamble** field.
 - 11 Use the arrow keys to set the **Short Preamble** field to **Disabled**.
 - 12 Press **F1** to save.
The system asks you to confirm.
 - 13 Use the arrow keys to select **Yes**.
 - 14 Press **ENTER**.
-

6. Change the Password

- 1 Use the up and down arrow keys to highlight **Set System Configuration**.
- 2 Press **ENTER**.

Setting Up the 3Com Access Point (Model 96B) (Cont'd)

- 3 Press **F4** to access **Password System Admin** option.
 - 4 Use the up and down arrow keys to highlight the **User Password**.
 - 5 Enter **Symbol**.
NOTE: *The password is case-sensitive.*
 - 6 Press **ENTER**.
The system prompts you to confirm the password.
 - 7 Enter **Symbol** again.
 - 8 Press **ENTER**.
 - 9 Use the up and down arrow keys to highlight the **Admin Password**.
 - 10 Enter **Symbol**.
 - 11 Press **ENTER**.
The system prompts you to confirm the password.
 - 12 Enter **Symbol** again.
 - 13 Press **ENTER**.
 - 14 Press **F1** to save.
The system asks you to confirm.
 - 15 Use the arrow keys to select **Yes**.
 - 16 Press **ENTER**.
The **Set System Configuration** window appears.
 - 17 Press **F1** again to save.
The system prompts you to confirm.
 - 18 Use the arrow keys to select **Yes**.
 - 19 Press **ENTER**.
-

7. Reset the Access Point

- 1 Use the up and down arrow keys to highlight **Special Functions**.
- 2 Press **ENTER**.
- 3 Use the up and down arrow keys to highlight **Reset AP**.
- 4 Press **ENTER**.
The system prompts you to confirm the reset.
- 5 Use the arrow keys to select **Yes**.
- 6 Press **ENTER**.
- 7 Wait until the Access Point resets.
The main menu appears.
- 8 Use the up and down arrow keys to highlight **Show System Summary**.

Setting Up the 3Com Access Point (Model 96B) (Cont'd)

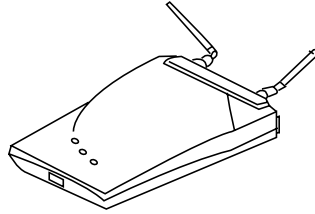
- 9 Press ENTER.
 - 10 Verify all system settings.
 - 11 Press ESC to return to the main menu.
 - 12 Touch the **X** in top right corner to exit HyperTerminal.
The message **Are you sure you want to disconnect?** appears.
 - 13 Click **Yes**.
The message **Do you want to save the session?** appears.
 - 14 Click **Yes**.
-

8. Set Up the U-Scan Mobile Attendant

Perform the tasks under "Setting Up the U-Scan Mobile Attendant" on page 29.

Setting Up the 3COM Access Point 8000

Perform this procedure to set up the 3COM Access Point 8000.

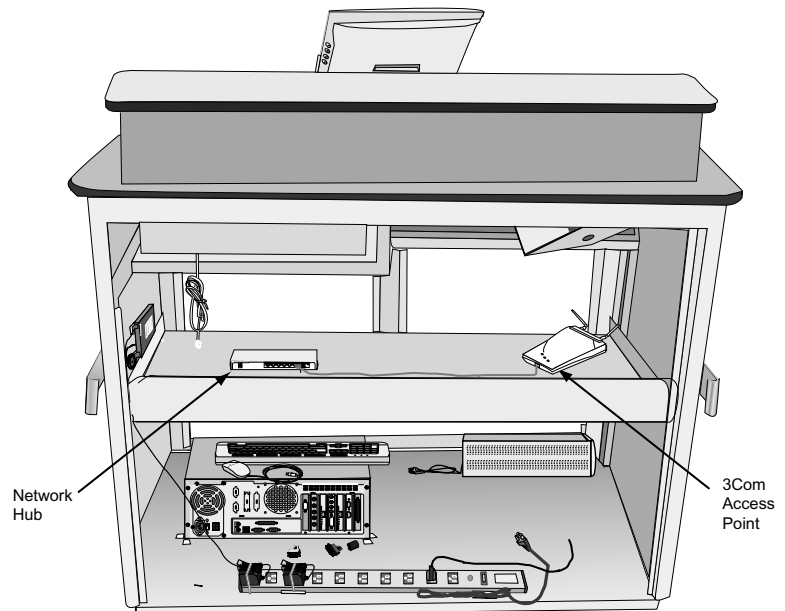


3Com Access Point 8000

NOTE: *The Access Point 8000 settings are pre-configured.*

Set Up the Access Point 8000 Hardware

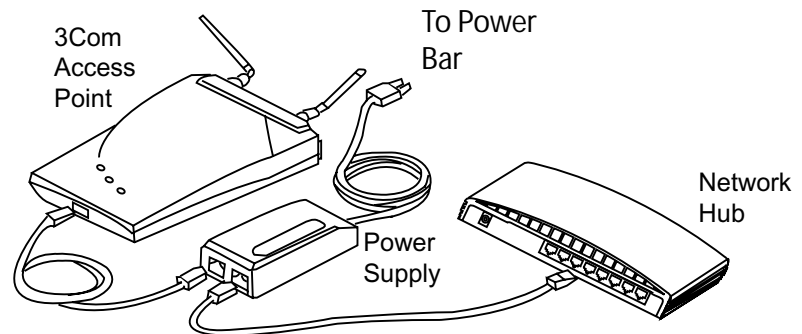
- 1 Unpack the Access Point 8000 components.
- 2 Attach both antennas to the Access Point.
- 3 Place the 3COM Access Point in the Attendant Station as shown below.



- 4 Connect one end of the Ethernet cable to the Ethernet port on the Access Point.

Setting Up the 3COM Access Point 8000 (Cont'd)

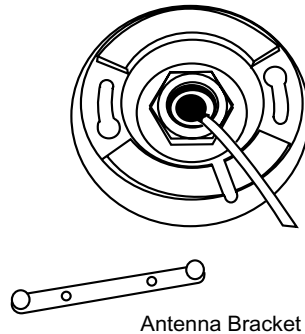
- 5 Connect the other end of the Ethernet cable to the port labeled “To Access Point” on the power supply.
- 6 Connect the power cable to the power supply.
- 7 Connect the power cable to the power bar.
- 8 Connect the second Ethernet cable to the port labeled “To Hub/Switch” on the power supply.
- 9 Connect the other end to the Network Hub.



Installing the 3COM Omnidirectional Antenna for the AccessPoint 8000

Perform this procedure to install the antenna extension at the Attendant Station.

Back of Omnidirectional Antenna



Requirements:

- 3COM Omnidirectional antenna
- Antenna extension cable (6')
- Antenna bracket
- Screwdriver
- Two screws

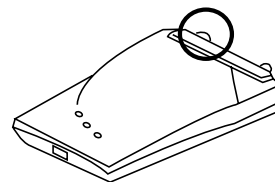
1. Set Up the Access Point 8000 Hardware (If Necessary)

Refer to "Setting Up the 3COM Access Point 8000" on page 24.

2. Install the New Antenna Extensions

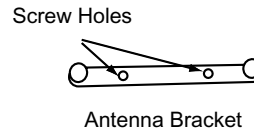
- 1 Remove the antennas from the back of the AccessPoint.
- 2 Connect the black antenna extension cable to the left antenna port.

Left Antenna Port

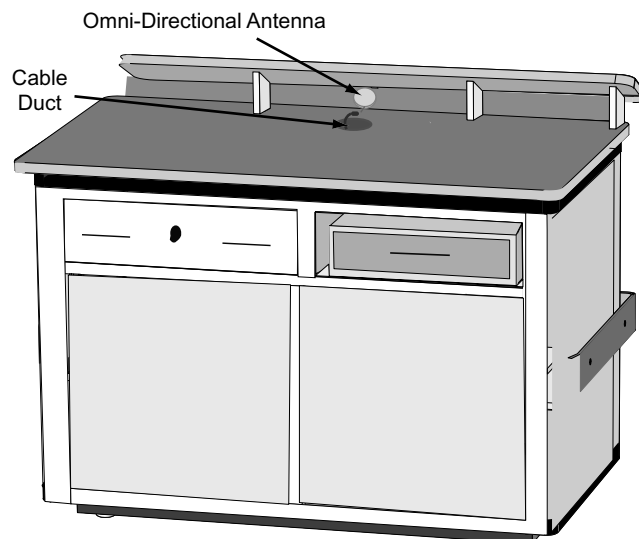


Installing the 3COM Omnidirectional Antenna for the AccessPoint 8000 (Cont'd)

- 3 Use two screws to install the antenna bracket on the Attendant Station panel behind the Monitor. Install it on the panel between the countertop.



- 4 Align the holes on the back of the antenna with the balls on the antenna bracket.
- 5 Slide the antenna onto the bracket and twist it so that it is secured to the bracket.



- 6 Route the antenna cable through the center cable duct.
- 7 Connect the extension cable to the antenna cable.

3. Set Up the AccessPoint Settings

- 1 Exit the U-Scan Attendant Station software.
- 2 Go to **Start>Run**.
- 3 Enter **http://192.168.0.101**, then press **ENTER**.
An **Access Point** web page opens.
- 4 Click **Data Transmission Properties**.
The system prompts you to enter a password.

Installing the 3COM Omnidirectional Antenna for the AccessPoint 8000 (Cont'd)

- 5 Enter the password **XXXXXXX**, then press **ENTER**.
NOTE: *The store may use another password for security purposes. If so, ask the store personnel to enter the password for you.*
 - 6 Scroll down to the **Radio Antenna** section.
 - 7 Click **Diversity Off (one antenna on)** to enable it.
 - 8 Click **Save**.
 - 9 Close the web browser.
-

4. Test the Antenna Extension

- 1 Start the U-Scan Attendant Station software.
- 2 Ensure that the U-Scan Mobile Attendant connects to the AccessPoint.

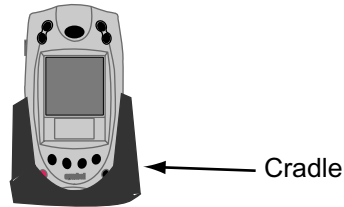
Setting Up the U-Scan Mobile Attendant

1. Install the U-Scan Mobile Attendant Hardware

- 1 Unpack the U-Scan Mobile Attendant components.
- 2 Verify that you have the following components:
 - a SYMBOL handheld device
 - b SYMBOL cradle
 - c Cradle power adapter and power cable
 - d Cradle communication cable (DB-9 to RJ-45)
 - e DB-9 Male to DB-25 Female adapter
- 3 Connect the 9 to 25 pin adapter to the DB-9 end of the SYMBOL communication cable.
- 4 Connect the communication cable to the SYMBOL cradle and to COM 4 (Port 2) of the Attendant Station DIGI Box or Edgeport.
- 5 Connect the power cable to the power bar and to the SYMBOL power adapter.
- 6 Connect the power cable to the SYMBOL cradle.

Setting Up the U-Scan Mobile Attendant (Cont'd)

- 7 Place the SYMBOL handheld device in the cradle.



2. Set Up the U-Scan Mobile Attendant Software at the Customer Station

- 1 Perform the software upgrade.
 - 2 Go to the Customer Station.
 - 3 Stop the Customer Station software.
 - a Press **ALT+TAB** to access the **Robot Control** window.
 - b Touch **Stop Robot**.
The **Launchpad** appears.
 - c Touch **Exit Launchpad**.
 - 4 Go to **C:\Robot\Data**.
 - 5 Click **MobileAttendant_ON.reg**.
The **Registry Editor** dialog box appears.
 - 6 Click **OK**.
 - 7 Start the Customer Station software.
 - 8 Repeat step 2 to step 7 for the other Customer Stations.
-

Setting Up the U-Scan Mobile Attendant (*Cont'd*)

3. Set Up the U-Scan Mobile Attendant Software at the Attendant Station

- 1 Perform the software upgrade.
 - 2 Go to the Attendant Station.
 - 3 Stop the Attendant Station software.
 - a If applicable, turn the manager key.
 - b Touch **Manager**.
 - c Touch **Exit C:\>**.
 - 4 Touch **Exit Launchpad**.
 - 5 Go to **Start>Run**.
 - 6 Enter **regedit**.
The Registry Editor appears.
 - 7 Go to **HKEY_CURRENT_USER>software>optimalrobotics>launchpad**.
 - 8 Double-click **MODE**.
 - 9 Change the setting to **cashier_ma**.
 - 10 Click **OK**.
 - 11 Exit the Registry Editor.
 - 12 Start the Attendant Station software.
-

4. Set Up the SYMBOL Handheld Device

- 1 Follow the on-screen instructions to calibrate the Touch Screen.
After you calibrate the Touch Screen, the **Preferences Network** screen displays.
- 2 Touch **Services**.
- 3 Select the **Spectrum24** service.
- 4 Touch **Details**.

Setting Up the U-Scan Mobile Attendant (Cont'd)

- 5 Set **ESSID** to **OPMR** or the store-specific ESSID.
NOTE: Contact the project manager for the store-specific ESSID.
 - a Touch the field **ESSID**.
 - b Touch **abc** on the graffiti area.
A keypad appears.
 - c Use the keypad to input **OPMR** or the store-specific ESSID.
 - d Touch **DONE**.
The **Spectrum24 Preferences** window appears.
 - 6 Disable the **Use DHCP** setting.
 - 7 Disable the **DNS Enabled** setting.
 - 8 In **IP Address Settings**, touch **Settings**.
The **IP Settings** screen appears.
 - 9 Set the IP to **192.168.0.100** or the IP address provided by the project manager.
 - a Touch the field **IP**.
 - b Touch **123** on the graffiti area.
A number pad appears.
 - c Use the number pad to input **192.168.0.100** (or the address provided by the project manager).
 - d Touch **DONE**.
The **Spectrum24 Preferences** window appears.
 - 10 Set the Subnet Mask to **255.255.255.0**.
 - 11 Leave the Gateway blank and touch **OK**.
 - 12 In the **Spectrum24 Preferences** window, touch **OK**.
-

5. Set Up the Host Settings

- 1 Touch **Home**.
The main application screen appears.
- 2 Touch **Mattend**.
The U-Scan Mobile Attendant application starts.
- 3 Verify that the connection to Access Point is established.
- 4 Touch the **Mobile Attendant** tab.
- 5 Touch **Configure Connection**.
- 6 Use the number pad to enter the Host IP **192.168.0.5**.
- 7 Use the number pad to enter the Host Port **2500**.

Setting Up the U-Scan Mobile Attendant (*Cont'd*)


- 8 Use the keypad to enter the Station Name **MOBILE**.
 - 9 Ensure that **Demo mode** is disabled.
 - 10 Ensure that **Legacy Display** is enabled (if the option exists).
 - 11 Touch **Done**.
 - 12 Touch **Reconnect**.
-

6. Test the U-Scan Mobile Attendant

- 1 Go to the Attendant Station.
 - 2 Press the red **Power** button to turn on the U-Scan Mobile Attendant.
 - 3 On the U-Scan Mobile Attendant, touch **MAttend**.
The message **Please wait** appears while the U-Scan Mobile Attendant connects to the network.
 - 4 Ensure that the U-Scan Mobile Attendant connects to the Access Point and to the Attendant Station.
 - 5 Ensure that the lane number displays on the U-Scan Mobile Attendant.
 - 6 Touch the lane on the U-Scan Mobile Attendant.
 - 7 Ensure that the message that displays in the Attendant Station message box also displays on the U-Scan Mobile Attendant.
 - 8 Touch **Done**.
The **Select Lane** screen appears.
-



Operating the U-Scan Mobile Attendant

Power On the U-Scan Mobile Attendant

- 1 Press the red **Power** button.
The main screen displays.
- 2 Touch the **MAttend** button. 
The Mobile Attendant software launches. The **Select Lane** screen displays.

Exit the U-Scan Mobile Attendant Software

Follow these steps to exit the U-Scan Mobile Attendant software before or after you disconnect from the network.

- 1 Touch the **Calculator** button. 
- 2 Touch the **Application** button. 

NOTES: *If you do not touch the Application button within nine seconds after touching the Calculator button, the software does not exit.*

*If you exit the software and you do not manually disconnect from the network, there is still a connection between the U-Scan Mobile Attendant and the U-Scan system. Touch the **Calculator** button, then the **Magnifying Glass** button to manually break the connection.*

Select a Customer Station

Perform this step when the U-Scan Mobile Attendant beeps, and the corresponding lane button on the **Select Lane** screen flashes to indicate that a customer requires assistance.

Touch the flashing lane button.
The **Operator Intervention Required** screen appears. (Refer to “[Respond to the Operator Intervention Required Screen.](#)”)

Operating the U-Scan Mobile Attendant (*Cont'd*)

Dismiss an Intervention Prompt

Follow these steps when a customer requires assistance and you cannot provide it at that time.

- 1 Touch the flashing lane button.
- 2 Touch **Later** to dismiss the intervention prompt.

OR

Touch **Done** on the **Tiny Direct Mode** screen.
The message is cleared and the lane button stops flashing.

Respond to the *Operator Intervention Required* Screen

Follow these steps to respond to the **Operator Intervention Required** screen.

- 1 Read the customer message on the **Operator Intervention Required** screen for details on the type of intervention required.

- 2 Touch **OK**.
Tiny Direct Mode is accessed.

OR

Touch **Later** to dismiss the intervention prompt.
The **Select Lane** screen appears. The lane continues to flash.

Process a Weight Violation

Follow these steps if a weight violation occurs and is not corrected.

- 1 Touch the flashing lane button to acknowledge the **Weight Violation** prompt.
The **Weight Violation** screen appears.
- 2 Touch **Override**.
The message is cleared at the Attendant Station and at the U-Scan Mobile Attendant.
The **Select Lane** screen displays on the U-Scan Mobile Attendant.

OR

Touch **Later** to indicate that the U-Scan Mobile Attendant will not service the Customer Station immediately.
The **Select Lane** screen displays on the U-Scan Mobile Attendant.
The lane button continues to flash.

Operating the U-Scan Mobile Attendant (*Cont'd*)

Process an Age Verification

- 1 Touch the flashing lane button.
 - 2 Enter the birthday as you would at a regular lane.
 - 3 Touch **Enter**.
Tiny Direct Mode exits and the **Age-verification required** prompt is cleared.
-

Process a Quantity or Price-Required Item

- 1 Touch the flashing lane button.
 - 2 Enter the quantity of items or price of the item.
 - 3 Touch **Enter**.
-

Process a Non Bar-Coded Item

- 1 Touch the flashing lane button.
 - 2 For produce items, enter the PLU code.
OR
Enter the UPC.
 - 3 Touch **Enter**.
-

Process a Large Item

- 1 Touch the flashing lane button.
 - 2 Scan the item.
OR
Enter the UPC.
-


Void an Item


- 1 Touch the lane button to access **Tiny Direct Mode**.
- 2 Enter the appropriate void key sequence.
- 3 Scan the item that the customer wants to void.
- 4 Take the item from the customer.

Troubleshooting U-Scan Mobile Attendant Connection Procedures

Perform the following procedures if the U-Scan Mobile Attendant stops responding. Begin with Task 1, “[Disconnect and Reconnect to the Network](#).” Only proceed to Task 2, “[Perform a Soft Reset](#)” if the Task 1 does not work.

1. Disconnect and Reconnect to the Network

1 On the **Select Lane** screen, touch the **Calculator** button. 

2 Touch the **Find** button. 
The **Reconnect** screen appears.

NOTE: *There is a nine-second “grace” period in which the calculator tap is “remembered.” If you do not touch the **Find** button within nine seconds, the network does not disconnect.*

3 Touch **Reconnect**.
The **Please Wait** screen appears while the U-Scan Mobile Attendant connects to the network.

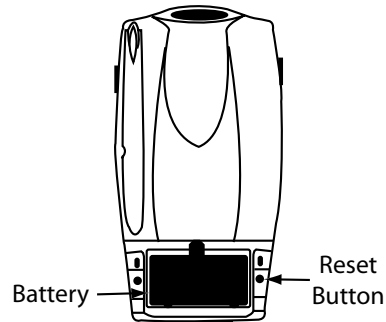
2. Perform a Soft Reset



If the U-Scan Mobile Attendant still does not respond after you disconnect and reconnect to the network, perform a soft reset.

1 Remove the battery cover from the U-Scan Mobile Attendant.

Troubleshooting U-Scan Mobile Attendant Connection Procedures (Cont'd)

- 2 Press the black **Reset** button that is located on the right side of the battery storage area.
The **Preferences** screen appears.

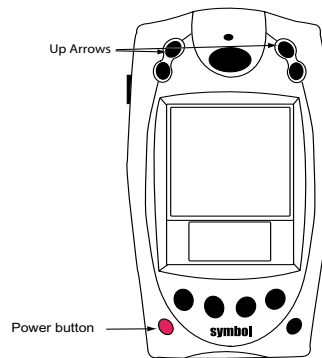


- 3 Touch the **Application** button. 
The **Main Screen** appears.
- 4 Touch the **MAttend** button. 
The U-Scan Mobile Attendant software launches.

3. Perform a Hard Reset

Only perform a hard reset if U-Scan Mobile Attendant does not respond to any key sequence.

- 1 Press and hold the red **Power** button.





- 2 Continue to hold the **Power** button, then press and hold the **Reset** button.
- 3 Release the **Reset** button.
- 4 Wait 1-2 seconds, then release the **Power** button.
The message **Erase all data?** appears.
- 5 Touch one of the Up arrows for **Yes**.

Troubleshooting U-Scan Mobile Attendant Connection Procedures (Cont'd)


- 6 Follow the on-screen instructions to calibrate the Touch Screen. When the calibration is complete, the **Network Preferences Settings** screen appears.
 - 7 Click **Details**.
 - 8 Ensure that the IP address is correct.
NOTE: *Obtain the IP address from the project manager.*
 - 9 Touch **OK**.
 - 10 Touch **Done**.
 - 11 Touch **Reconnect**.
The U-Scan Mobile Attendant reconnects to the Attendant Station. If necessary, the latest software is loaded.
-

4. Reset the U-Scan Mobile Attendant Connection

Perform this procedure if the Customer Station software was not properly exited when the Customer Station was restarted and the message **Connection to mcashnts refused because this Robot machine name not part of allowed name list**.

- 1 Go to the first Customer Station.
- 2 Press ALT+TAB to access the **Robot Control** window.
- 3 Touch **Stop Robot**.
The **Launchpad** appears.
- 4 Touch **Exit Launchpad**.
- 5 Repeat step 1 to step 4 for the remaining Customer Stations.
- 6 Locate the U-Scan Mobile Attendant.
- 7 Exit the U-Scan Mobile Attendant application.
 - a Touch the **Calculator** button. 
 - b Touch the **Application** button. 
- 8 Go to the Attendant Station.
- 9 Exit the Attendant Station software.
- 10 Restart the Computer.
- 11 Wait until the Computer restarts and the Attendant Station software starts.

Troubleshooting U-Scan Mobile Attendant Connection Procedures (Cont'd)

- 12 Restart all of the Customer Stations.
- 13 Touch the **MAttend** button  to restart the U-Scan Mobile Attendant.

5. Calibrate the Digitizer

- 1 Exit the U-Scan Mobile Attendant software.
- 2 Touch **Prefs.**
- 3 From the drop-down list, select **Digitizer.**
- 4 Follow the on-screen instructions to calibrate the Touch Screen.

6. Set the “Auto-off after” Option

- 1 Exit the U-Scan Mobile Attendant software.
- 2 Touch **Prefs.**
- 3 Set the **Auto-off after** option to 2 minutes.

Modem

Troubleshooting the Modem

1. Inspect the Power Connections

- 1 Locate the Modem at the Attendant Station or at one of the Customer Stations.

NOTE: *The Modem is most often located at the Attendant Station.*

- 2 Make sure that the LEDs on the Modem are on.
 - 3 Make sure that the power cable is connected and secured to the Modem.
 - 4 Make sure that the power cable is connected and secured to the power bar.
 - 5 Turn the power switch on the front of the Modem off, then on to cycle the power.
-

2. Inspect the Data Cable

- 1 Make sure that the DB-25 end of the data cable is properly secured to the back of the Modem.
 - 2 Make sure that the DB-9 end of the data cable is connected and secured to COM 2 of the Computer.
-

3. Inspect the Phone Cable

- 1 Make sure that the RJ-11 cable for the phone line is connected to the phone jack.
 - 2 Make sure that the RJ-11 cable for the phone line is connected to the **LINE** jack of the Modem.
-

4. Inspect the Modem DIP Switch Settings

- 1 Locate the DIP switches on the back of the Modem.
- 2 Make sure that switches **3**, **5**, and **8** are pushed up.

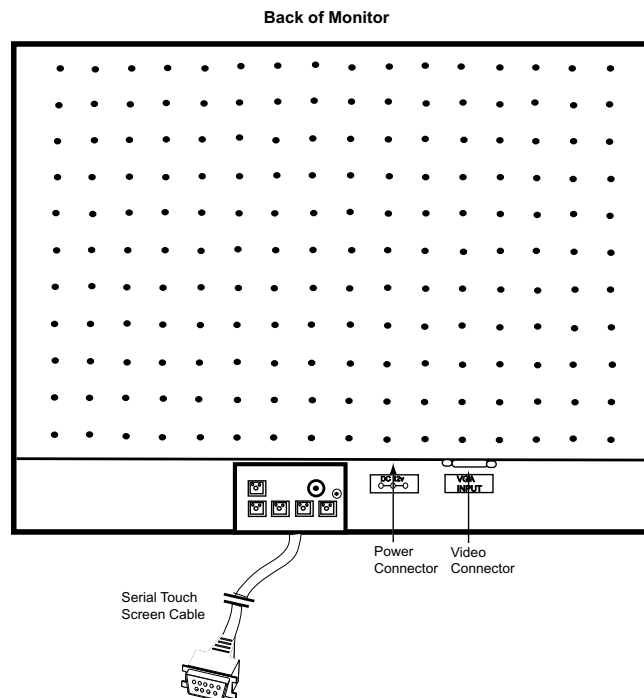
Troubleshooting the Modem (*Cont'd*)

5. Test the Modem

- 1 Ensure that the CS and TR lights on the Modem are on.
 - 2 If both lights are on, contact the U-Scan Support Center.
 - 3 Ensure that the Modem works when the Call Taker dials in to the store.
-

Touch Screen Monitor

KRISTEL LCD Monitor



Features:

- 1024 x 768 pixel TFT color display
- 304.1(H) x 228.1(W) (15") Active Area
- High contrast ratio
- High-speed response
- Single supply voltage
- Ultra low power consumption
- No electromagnetic radiation

NOTE: *There is a capacitive and a resistive KRISTEL LCD Monitor. The capacitive Monitor responds to body heat only. It does not respond to a pen or other instrument.*

Technical Specifications

Environment

- Temperature: 14°F to 122°F (-10°C to 50°C)
- Relative Humidity: 95%

Power Supply Requirements

- Input: AC 100 V - 240 V, 1.0 A Max, 50/60 Hz
- Output: 12 V, 3.0 A

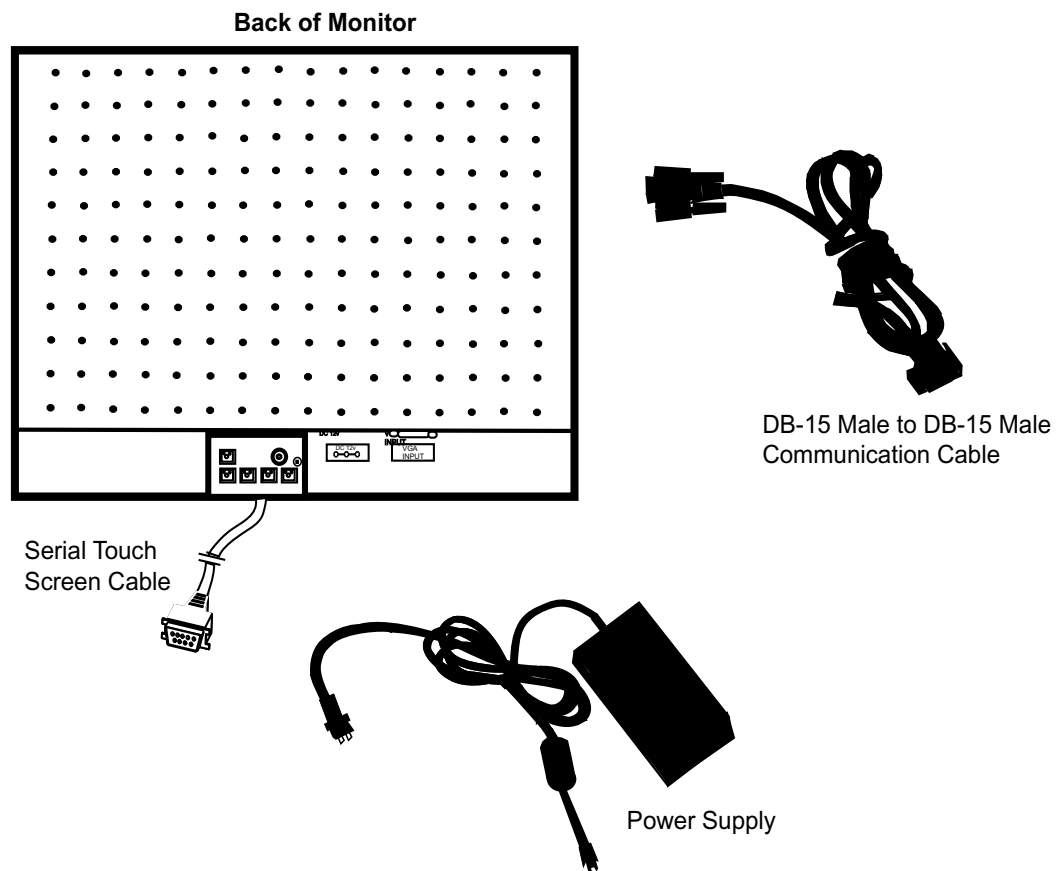
Communication

- Serial Touch Screen cable (DB-9 female) connects to COM 1 of the Computer
- Video cable (DB-15 male to DB-15 male) connects to the video card on the Computer

Components of the KRISTEL LCD15-011

The KRISTEL LCD15-011 Monitor has the following components:

- 12" Monitor Display
- Serial Touch Screen cable (DB-9 female)
- Video cable (DB-15 male to DB-15 male)
- Power supply



Troubleshooting the Customer Station LCD Monitor

1. Inspect the Power

- 1 Locate the power button at the rear of the Monitor.
 - 2 Press the power button to cycle the power.
 - 3 Ensure that the green LED at the rear of Monitor is on.
 - 4 Locate the power cable at the base of the Monitor.
 - 5 Ensure that the power cable is connected and secured to the Monitor and to the power bar.
-

2. Inspect the Data Cable

- 1 Verify that the video and serial data cables at the base of the Monitor are connected and secured.
 - 2 Verify that the video cable is connected and secured to the video card of the Computer.
 - 3 Verify that the serial Touch Screen cable is plugged in and secured to COM 1 of the Computer.
-

3. Check the Display Properties

- 1 Press **CTRL+ESC** to access the **Start** menu.
 - 2 Use the arrow keys to go to **Settings>Control Panel**.
 - 3 Press **ENTER**.
 - 4 Use **TAB** and the arrow keys to select the **Settings** tab.
 - 5 Ensure that the settings are:
Desktop Area = 640x480 pixels
Color Palette = 65536 colors
Refresh Frequency = 60 Hz for Pentium 4 Computers; 72 Hz for Pentium II Computers
Click **Test**.
 - 6 At the prompt, accept the changes.
 - 7 Click **OK** to exit.
-

Troubleshooting the Customer Station LCD Monitor (Cont'd)

4. Adjust the Monitor

- 1 Locate the picture adjustment on the back of the Monitor.
 - 2 Use the adjustment menu button to access the **Setup** menu.
 - 3 Adjust each setting as needed.
-

5. Adjust the Clock Phase

- 1 Go to **Start>Shut down**.
The **Shut down** menu appears.
 - 2 Do not shut down.
 - 3 Inspect the gray background for vertical lines.
 - 4 If necessary, use the buttons on the back of the Monitor in the **Monitor Setup** to eliminate the vertical lines.
-

6. Check the Calibration (Capacitive Monitor - NT4 Environment)

NOTE: *Capacitive OPMR Touch Monitors in a Windows 2000 environment do not require calibration or configuration.*

- 1 Press **CTRL+ESC** to access the **Start** menu.
 - 2 Use the arrow keys to go to **Settings>Control Panel**.
 - 3 Press **ENTER**.
 - 4 Use the arrow keys to select **MicroTouch**.
 - 5 Press **ENTER**.
 - 6 Click **Calibrate**.
 - 7 Follow the instructions on the screen to calibrate the Touch Screen.
-

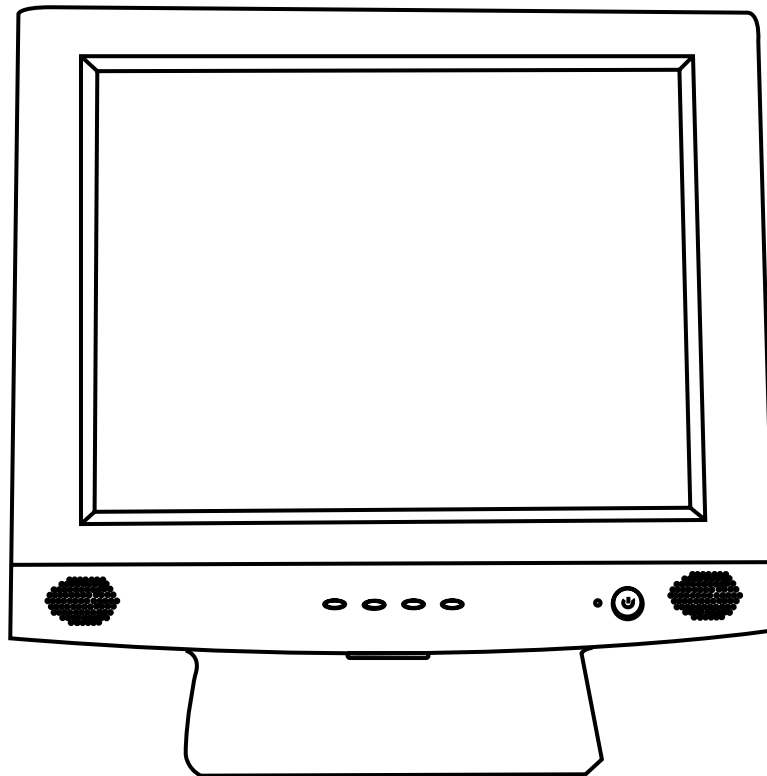
Check the Calibration (Resistive ELO Touch Monitor - All Environments)

- 1 Press **CTRL+ESC** to access the **Start** menu.
- 2 Use the arrow keys to go to **Settings>Control Panel**.
- 3 Press **ENTER**.

Troubleshooting the Customer Station LCD Monitor (*Cont'd*)

- 4 Use the arrow keys to select **Elo Touchscreen**.
 - 5 Press **ENTER**.
 - 6 Click **Calibrate** or **Align**.
 - 7 Follow the instructions on the screen to calibrate the Touch Screen.
-

VITA Monitor



Features:

- 15.1" LCD TFT active display area
- XGA 1024 x 768 maximum resolution support
- Built-in speakers and control system
- Power-saving feature
- 30ms typical response time
- MicroTouch drivers


Technical Specifications

Environment

- Temperature: 5°C to -35°C (41°F to -31°F)
- Relative humidity: 20% to 80%

Power Supply Requirements

- Input: 100 to 240 V, 50 to 60 Hz
- Output: 12 V ac, 2.5 A

- Polarity: 

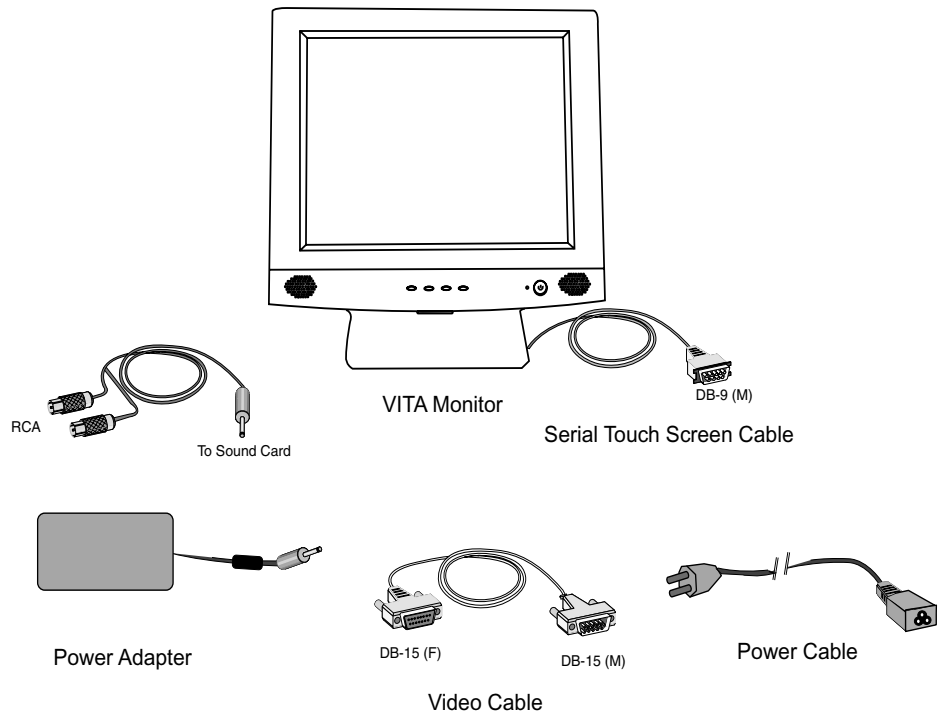
Communication

- Serial touch screen cable (DB-9) connects to COM 1 of the Computer
- Video cable (DB-15 connects to video card on Computer

Components of the VITA Monitor

The VITA Monitor is made up of the following components:

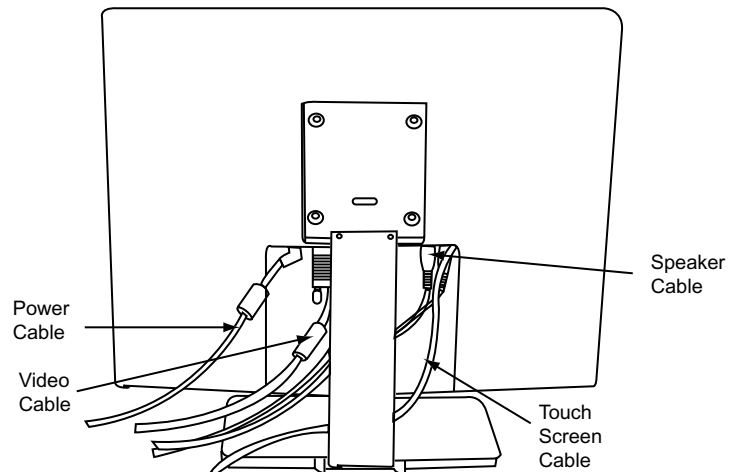
- VITA Monitor
- DB-9 male serial Touch Screen cable
- DB-15 female to DB-15 male video cable
- Power cable
- AC power adapter



Troubleshooting the Attendant Station VITA Monitor

1. Inspect the Power

- 1 Locate the power cable on the back of the base of the Monitor.
- 2 Ensure that the power cable is connected and secured to the Monitor and to the power bar.



2. Inspect the Data Cable

- 1 Verify that the 15-pin male video cable is connected and secured to the video card of the Computer.
- 2 Verify that the 9-pin female serial data cable is plugged into and secured to COM 1 of the Computer.

3. Inspect the Speaker Cable and Volume

- 1 Locate the speaker cable.
 - 2 Ensure that the speaker cable is connected to the back of the Monitor.
 - 3 Ensure that the speaker cable is connected to the sound card on the Computer.
 - 4 Use the volume buttons to adjust the volume to mid-level. Refer to the graphic on the next page for the location of the buttons.
 - 5 Play a sound to test the speaker functionality.
-

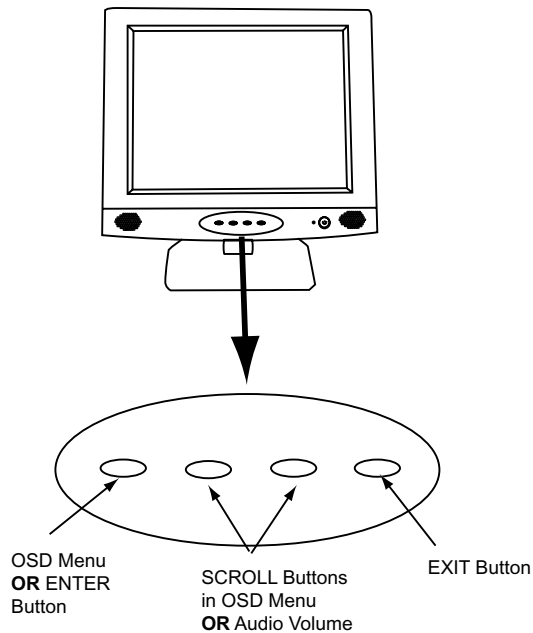
Troubleshooting the Attendant Station VITA Monitor (Cont'd)

4. Check the Display Configuration

- 1 Press **CTRL+ESC** to access the **Start** menu.
- 2 Use the arrow keys to go to **Settings>Control Panel**.
- 3 Press **ENTER**.
- 4 Click **Display**.
- 5 Press **ENTER**.
- 6 Use **TAB** and the arrow keys to select the **Settings** tab.
- 7 Ensure that the settings are:
Resolution = 800×600 pixels
Colors= 65536 colors
Hz = 60 Hertz
- 8 Click **OK** to exit.

5. Adjust the Picture

- 1 Locate and press the **MENU** button on the front of the Monitor.



- 2 Press the **SCROLL** buttons to select the **Picture Menu** feature, then press the **ENTER** button.
- 3 Press the **SCROLL** buttons to activate the **Auto Adjust** feature.
- 4 If the picture is not adjusted, use the other options in the **OSD (On Screen Display)** menu to correct the settings.

Troubleshooting the Attendant Station VITA Monitor (Cont'd)

6. Verify the Clock Phase and Coarse Settings

- 1 Go to **Start>Shut down**.
The **Shut down** menu appears.
- 2 Do not shut down.
- 3 Inspect the grayed out background for any vertical or horizontal lines on the screen.

IF	THEN
There are horizontal lines on the screen	go to Task 7, " Correct the Horizontal Lines. "
There are no lines	the task is complete. Go to Task 8, " Verify the TouchWare Version. "

7. Correct the Horizontal Lines

- 1 Press the **MENU** button.
- 2 Use the **SCROLL** buttons to select the **Picture Menu**, then press **ENTER**.
- 3 Use the **SCROLL** buttons to select the **H-Position** setting, then press **ENTER**.
- 4 Use the **SCROLL** buttons to adjust the setting until the horizontal lines disappear.
- 5 Press the **EXIT** button.

8. Verify the TouchWare Version

- 1 Go to **Start>Settings>Control Panel**.
- 2 Double-click **MicroTouch Touchscreen**.
The **Properties** window appears.
- 3 Select the **Hardware** tab.
- 4 Click **About TouchWare**.
- 5 Ensure that the Microtouch TouchWare Version is 5.4.
- 6 Click **OK**.
- 7 Click **Close**.

Troubleshooting the Attendant Station VITA Monitor (*Cont'd*)

9. Check the Calibration

NOTE: *You do not need to calibrate the Touch Screen Monitor for OSA systems.*

- 1 Press CTRL+ESC to access the **Start** menu.
- 2 Use the arrow keys to go to **Settings>Control Panel**.
- 3 Press ENTER.
- 4 Use the arrow keys to select the **MicroTouch** icon.
- 5 Press ENTER.
- 6 Touch **Calibrate**.
- 7 Follow the instructions on the screen to calibrate the Touch Screen.

Additional Information for the Touch Screen

The following information and procedures are contained in this chapter:

- [Touch Screen Monitor: Common Problems](#) (page 2): Table detailing common problems and troubleshooting information.
- [Adjusting Touch Screen Monitor Settings](#) (page 3): Procedures detailing how to adjust the settings for the Touch Screen Monitor.
- [Uninstalling and Installing Drivers for Windows 2000 Images](#) (page 5): Procedures for uninstalling and installing the Touch Screen drivers needed for Windows 2000 images. The procedures in this section are listed below.
 - [Uninstall the OPMR TOUCH Driver](#) (page 5)
 - [Install the Microtouch v5.63 SR3 Driver](#) (page 5)

NOTE: *If you are viewing this document in PDF format, click on the procedure to go directly to that section.*

Touch Screen Monitor: Common Problems

Check to ensure that all cables and plugs are properly connected. Use the table below if the problem persists after you have checked all cables and plugs.

Problem	Possible Cause	Solutions
At startup, only a white screen is visible.	There is a disconnected or loose connection inside the Monitor.	Replace the Monitor.
The Touch Screen LED blinks but there is no image.	The VGA cable is not properly connected.	Check the VGA connection.
The Touch Screen displays a very displaced image.	The screen resolution is not set up correctly.	Check the screen configuration setup. See “Adjusting Touch Screen Monitor Settings.”
The Touch Screen displays only part of the image.	The screen resolution is not set up correctly.	Check the screen configuration setup. See “Adjusting Touch Screen Monitor Settings.”
There are streaks in the LCD image.	The Clock Phase or Horizontal Size is not set up correctly.	Adjust the OSM Setup menu. See “Adjusting Touch Screen Monitor Settings.”
The Touch Screen cannot be calibrated (the CALIBRATE button is not active).	Improper cable connection.	Check the serial connection. Restart the Computer.

Adjusting Touch Screen Monitor Settings

1. Check the Options Menu Settings

- 1 Click the Windows **Start** button.
- 2 Choose **Shut Down** and wait.
If there are vertical lines on the screen, the settings need to be verified.
- 3 Click **Cancel**.
- 4 Press the **MENU** button (the first button under the LED, on the right side of the Touch Screen).
The **Main Menu** of the On Screen Manager (OSM) appears.
- 5 Use the + and - buttons (the second and third buttons, respectively, on the right side of the Touch Screen) to select the **Options** menu.
Press **ENTER** (the fourth button).
- 6 Ensure that the settings are:
NOTE: *To change a setting, press ENTER, then (+) or (-). Press ENTER again.*
Prompt = Off
Language = English
LCD backlight = This setting changes the amount of the Touch Screen's background illumination. Adjust it according to the location of the Attendant Station. For example, if the Attendant Station is well lit, adjust the LCD backlight to the night setting.
- 7 Press the **MENU** button (the first button) on the right side of the Touch Screen to exit the menu item.
NOTE: *The menu item is automatically deactivated after a 0.5 second delay.*
- 8 Press the **MENU** button (the first button) to save the settings and exit the OSM.

Adjusting Touch Screen Monitor Settings (Cont'd)

2. Adjust the Touch Screen Video Signals

NOTE: *The Touch Screen Monitor must be adjusted to the video signals from the graphic adapter. Use the OnScreen Manager (OSM) on the Desktop to perform the adjustment. For more information on using the OSM, see Task 1, “[Check the Options Menu Settings.](#)”*

- 1 Go to **Start>Shut Down**.
 - 2 Do **NOT** shut down the Computer.
If there are vertical lines on the screen, the settings need to be verified.
 - 3 Click **Cancel**.
 - 4 Select **SETUP** from the Menu.
 - 5 Press **ENTER**.
 - 6 Press the + or - button until **H-SIZE** is selected.
 - 7 Press **ENTER**. This adjusts the left edge of the picture against the left edge of the monitor and removes the vertical black bars from the screen.
 - 8 Use the + and - buttons to adjust the settings.
 - 9 Press **ENTER** to exit.
 - 10 Press the + or - button until **CLOCK-PHASE** is selected.
 - 11 Press **ENTER**. This adjusts the clarity of the image and removes horizontal stripes (the value is usually set to 1).
 - 12 Use the + and - buttons to adjust the settings.
 - 13 Press **ENTER** to exit.
 - 14 Press the **MENU** button (the first button) on the right side of the Touch Screen to exit the menu item.
NOTE: *The menu item is automatically deactivated after a 0.5 second delay.*
 - 15 Press the **MENU** button (the first button) to save the settings and exit the OSM.
-

Uninstalling and Installing Drivers for Windows 2000 Images

Perform the procedures below as necessary:

- [Uninstall the OPMR TOUCH Driver](#)
- [Install the Microtouch v5.63 SR3 Driver](#)

Uninstall the OPMR TOUCH Driver

Perform this procedure if you need to remove the OPMRTOUCH driver (Image 213 and below).

- 1 Press **CTRL+ALT+DEL**.
The **Task Manager** appears.
- 2 Select the **Processes** tab.
- 3 Click **UTCMUDRV.EXE**.
- 4 Click **End Process**.
The **Task Manager Warning** screen appears.
- 5 Click **Yes**.
- 6 Exit the Windows Task Manager.
- 7 Go to **Start>Settings>Control Panel>Add/Remove Programs**.
The **Add/Remove Programs** window appears.
- 8 Click **OPMR Touch Driver V 1.00** to highlight it.
- 9 Click **Change/Remove**.
The **Capacitive Touch Screen Driver Uninstall** dialog box appears.
- 10 Click **Yes**.
The message **OPMR TOUCH** was successfully removed appears.
- 11 Click **OK**.
- 12 Close the **Add/Remove Programs** dialog box.

Install the Microtouch v5.63 SR3 Driver

Perform this procedure to install the Microtouch v5.63 SR3 Driver.

For Images 213 and Below ONLY:

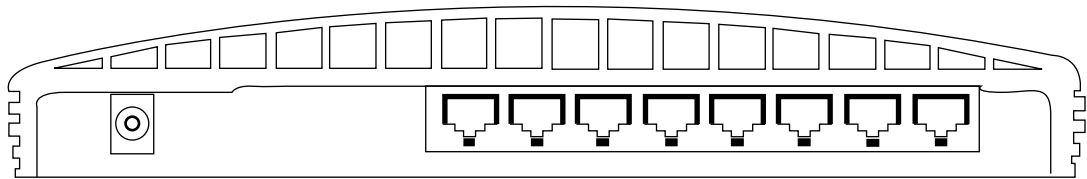
- 1 On the **C** drive, create a folder called **Microtouch 5.63**.
- 2 Insert the Microtouch 5.63 SR3 CD into the CD-ROM drive.
- 3 Extract **TW563SR3.zip** to **C:\Microtouch 5.63**.
- 4 Go to **C:\Microtouch 5.63\Disk1**.

Uninstalling and Installing Drivers for Windows 2000 Images (Cont'd)

- 5 Go to step 4 under “**For Images 214 and Above.**”
For Images 214 and Above:
 - 1 Locate the **Microtouch 5.63 Installation** folder.
 - 2 Double-click the zip file.
 - 3 Extract the files.
 - 4 In the Disk 1 folder, double-click **Setup.exe**.
The **Welcome** screen appears.
 - 5 Click **Next**.
The **3M Software License Agreement** screen appears.
 - 6 Click **I accept**, then click **Next**.
The **Please choose the controller that matches your hardware** screen appears.
 - 7 Click **Serial (Default)**, then click **Next**.
The **Default Calibration Type** screen appears.
 - 8 Select **2-point calibration**, then click **Next**.
The **Select Installation Type** screen appears.
 - 9 Click **Express Install (Default Setting)**, then click **Next**.
The drivers install. The **Setup Complete** screen appears.
 - 10 Disable **Yes, I want to view the readme file**.
 - 11 Click **Finish** to restart the Computer.
The Computer restarts. The **Touch Screen Calibration Needed** screen appears.
 - 12 Click **OK**.
 - 13 Press the targets. Keep your finger on the target until the message **Touch Enable** appears. This can take up to four seconds.
 - 14 When the **Calibration Complete** screen appears, click **Done**.
-

Network Hub

3COM Network Hub



Features:

- Eight RJ-45 ports
- Diagnostic and alert LEDs
- MDI-MDIX port to connect to a server, end station, switch, or hub
- Front-panel display
- Dual-speed support 10 Mbps and 100 Mbps

Technical Specifications

Environmental

- Temperature: 32°F - 105°F (0°C to 40°C)
- Relative humidity: 0 to 90% non-condensing

Power

- 11 VA
- 11 W power adapter

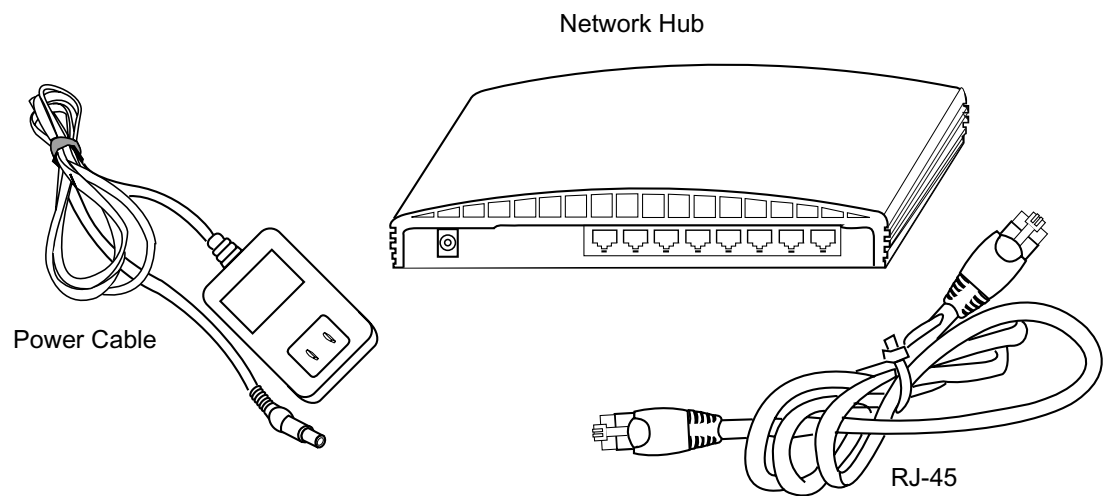
Communication

- 10Base-T (CAT 5) cable with RJ-45 connectors

Components of the 3COM Network Hub

The 3COM Network Hub includes the following components:

- 3COM OfficeConnect Ethernet Hub 8
- International power supply
- RJ-45 cables
- Power cable



Testing the Network Hub

- 1 Make sure that all network devices are turned on.
- 2 Disconnect all network devices from the Network Hub.
- 3 Disconnect the Network Hub power cable.
- 4 Reconnect the Network Hub power cable.
- 5 Make sure that the power LED is on.
- 6 Reconnect the network devices one at a time, making sure that a link light comes on for each device.

Network Hub Common Problems and Solutions

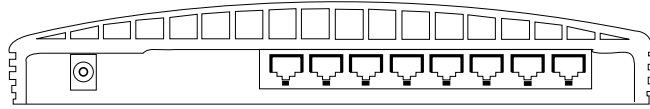
This section provides basic steps for resolving common problems. Refer to “Troubleshooting the Network Hub” for the full troubleshooting procedures.

Issue	Possible Cause(s)	Solution
Power LED is not on.	<ul style="list-style-type: none">• Power adapter is faulty or disconnected.	<ul style="list-style-type: none">• Verify the power connections.• Replace the power adapter with an identical power adapter.
10 Mbps port status LED is on for a port to which a 100 Mbps device is connected.	<ul style="list-style-type: none">• Poor quality network cable.• Problem with network card.	<ul style="list-style-type: none">• Replace the patch cable.• Verify the network cable crimping.• Remove and then reinstall the network card drivers.• Replace the network card.
Link between the Network Hub and another Hub is not working.	<ul style="list-style-type: none">• The Hub is not connected to the uplink port.• The uplink switch is not in the right position.	<ul style="list-style-type: none">• Connect the network cable from the other Hub to Port 8 of the Network Hub.• Make sure that the uplink switch is in the right position.
Port status LED is not on for a port that has a connection	<ul style="list-style-type: none">• The cable is defective or damaged.• The equipment connected to the port is not turned on.• The network card drivers are not loaded properly.• The network card is defective or disconnected.	<ul style="list-style-type: none">• Verify the cable condition.• Replace or retrim the cable.• Make sure that the equipment that is connected is turned on.• Remove and then reinstall the network card drivers.• Replace the network card.

Troubleshooting the Network Hub

1. Inspect the Power Connections

- 1 Locate the 3Com Network Hub inside the casing of the Attendant Station.



- 2 Make sure that the power LED on the Network Hub is on.
- 3 Make sure that the power cable is connected and secured to the Network Hub.
- 4 Make sure that the power cable is connected and secured to the power bar.

2. Inspect the Network Cables

- 1 Make sure that the RJ-45 cables are properly connected to the Network Hub.
- 2 On the Network Hub, make sure that one link light is on for each network cable that is connected to the Network Hub.
- 3 On the Computer network cards, make sure that a link light is on for each network card that is connected to the Network Hub.
- 4 Make sure that nothing is plugged into Port 8 of the Network Hub (unless otherwise specified).

Paging System

Testing the Paging System in the Device Tester

1. Stop the Attendant Station Software

See “Stop the Attendant Station Software.”

2. Check the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

- 1 Click **Start**.
The message **DEVICE::ONLINE{Pager}** appears in the **Messages** box.
 - 2 Verify any messages in the **Messages** box.
NOTE: *Error messages are also entered in the **Event Log Viewer**. You can view messages in the **Event Log Viewer** when you exit the **Device Tester**.*
 - 3 Click **Stop**.
-

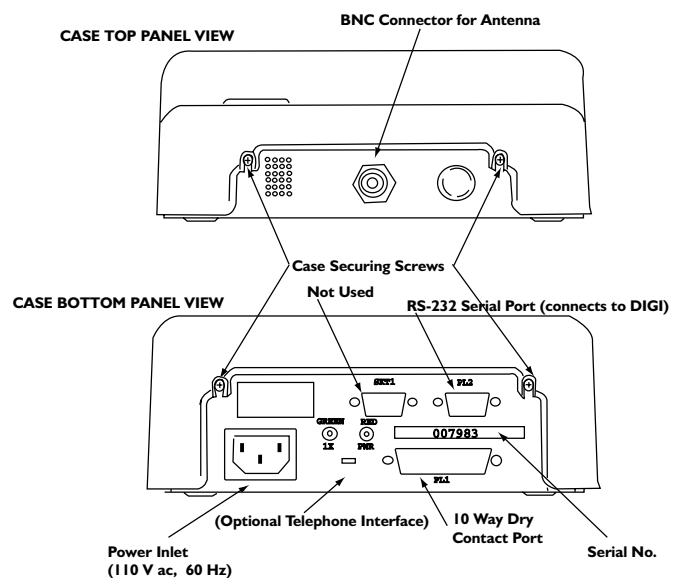
Troubleshooting the Paging System (Compact Cashier)

1. Follow the Testing Procedure

See “Testing the Paging System.”

2. Inspect the Power

- 1 Verify that the red power LED is on.
- 2 Locate the power cable on the back of the scope unit. Refer to the diagram below if necessary.



- 3 Verify that the power cable is connected and secured to the scope unit and to the power bar.
-

3. Inspect the Data Cable

- 1 Verify that the data cable at the back of the scope unit is connected and secured. Refer to the diagram above if necessary.
 - 2 Verify that the serial cable is plugged into and secured to COM 1 of the Compact Cashier.
 - 3 Verify that the serial cable is plugged into Port 4 of the DIGI Box at the Attendant Station.
-

4. Verify the Transmit Status

- 1 At the Attendant Station, access the **Device Tester**.

Troubleshooting the Paging System (Compact Cashier) (Cont'd)

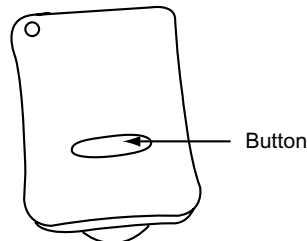
- a At the Attendant Station, touch **Manager**.
The **Manager** menu appears.
 - b Touch **Exit C:**.
The message **Are you sure?** appears.
 - c Touch **Yes**.
The Attendant Station software exits.
The **Launchpad** appears.
 - d Press **ALT+TAB** to access the **Launchpad**.
The **Launchpad** appears.
 - e Touch **Device Tester**.
 - f Enter the password (**1379**).
The **Device Tester** appears.
- 2 Select the **Paging** tab.
 - 3 Test the Paging system.
 - 4 Verify that the green Transmit (Tx) LED on the scope unit turns on every time you send a message.
-

5. Verify the Pager Settings

- 1 Exit the Attendant Station software.
 - 2 Go to **C:\Cashier\Data**.
 - 3 Double-click the **Device.ini** file to open it.
 - 4 Verify that the **[pagerIDs]** setting is **1010600**.
-

6. Verify the Receive Status

- 1 Access the **Device Tester**.
- 2 Test the Paging System.
- 3 Verify that the Pager vibrates or sounds a tone every time you test it.
- 4 Press the button to stop the Pager.



Customer Station Printer

Testing the Customer Station Printer

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Check the Settings

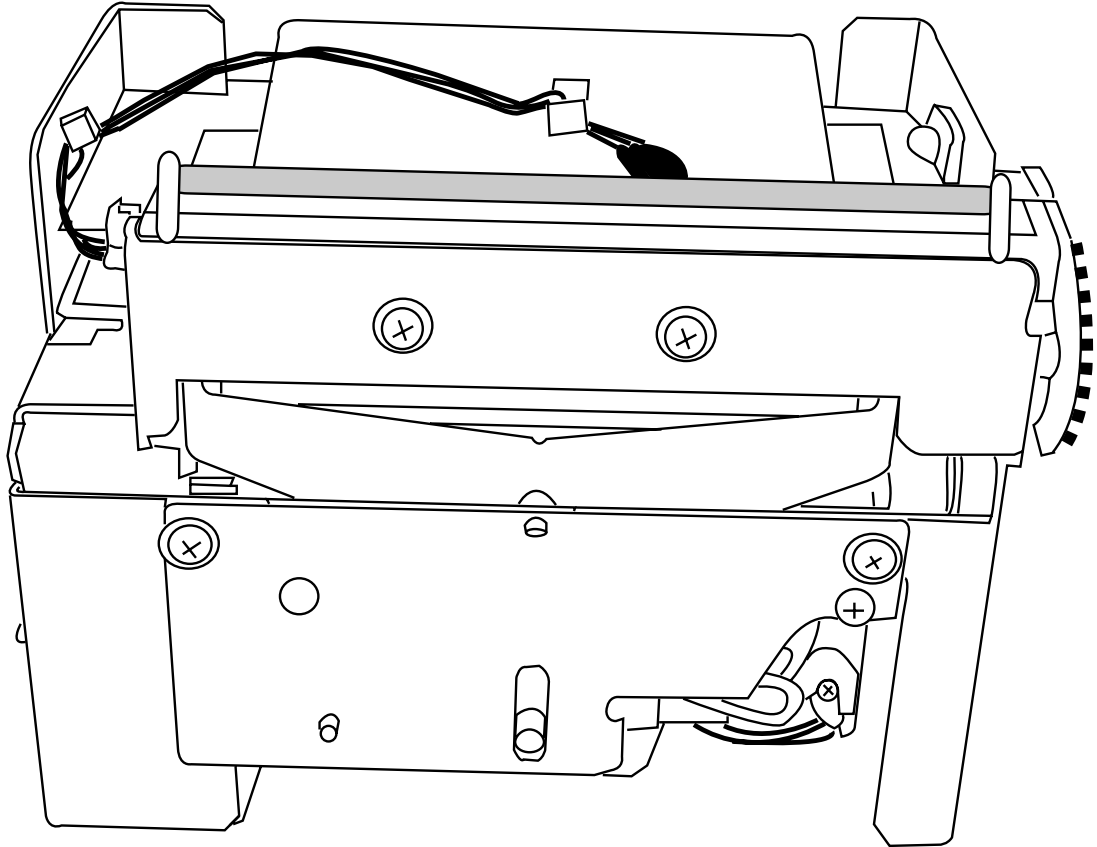
Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages see “Error Messages” at the beginning of this section. Error messages are also stored in the **Eventlog Viewer** and can be viewed when you exit the **Device Tester**.*

- 1 Click **Start**.
The message **DEVICE::ONLINE{Printer}** appears in the **Messages** box.
- 2 Click **Print Text**.
- 3 Click **Cut**.
Check the Printer for a cut printout.
- 4 Click **Stop**.

AXIOHM A226 Kiosk Printer



Features:

- Direct thermal printing
- 40 LPS (130 m/s) printing speed
- One-button programming
- 256 K up to 1792 K Flash-shared user memory

Technical Specifications

Environment

- Temperature: 41°F to 104°F (5° to 40°C)
- Relative Humidity: 10% to 90% non-condensing

Power Supply Requirements

- External auto-ranging 90 V AC / 265 V AC
- Idle power: 2.7 W
- Maximum power: 43 W

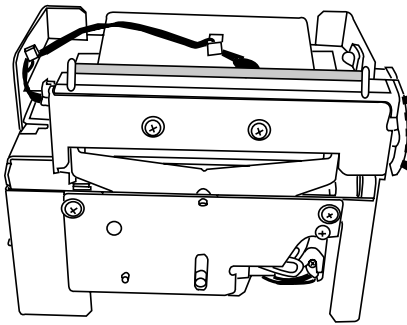
Communication

- Serial RS-232

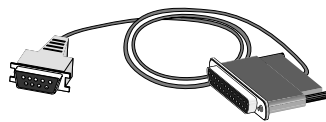
Components of the AXIOHM A226 Kiosk Printer

The A226 Kiosk Printer includes the following components:

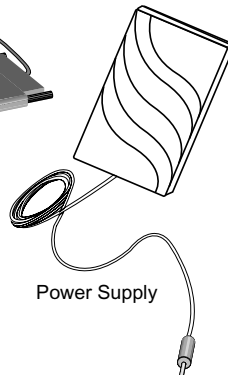
- A226 Kiosk Printer
- DB-9 female to DB-25 female communication cable
- Gender changer (DB-9 male to DB-9 male)
- Power supply, AXIOHM part number ADP5501: Input 100-240 V AC, 1.5 A maximum, 50-60 Hz; Output 24 V DC, 2.3 A



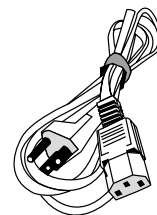
A226 Kiosk Printer



Communication Cable



Power Supply



Power Supply Cable

Troubleshooting the Customer Station AXIOHM A226 (Kiosk) Printer

1. Follow the Testing Procedure

See “Testing the Customer Station Printer.”

2. Inspect the Power

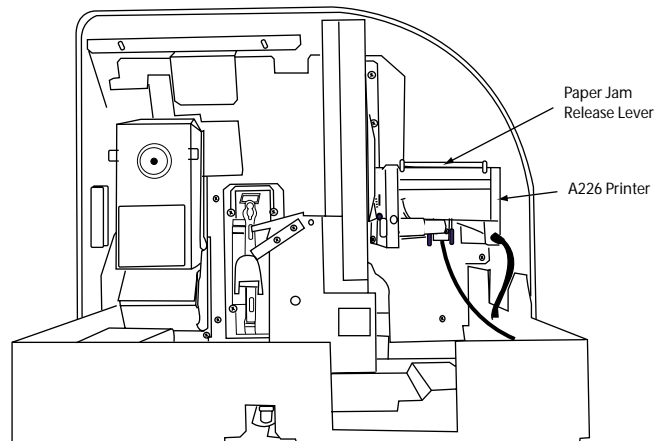
- 1 Ensure that the power cable is connected to the power connector on the side of the device.
 - 2 Ensure that the power cable is connected to the power bar.
 - 3 Press the power switch to turn on the Printer.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the underside of the device.
 - 2 Ensure that the data cable is connected to port 6 of the Edgeport.
-

4. Inspect the Paper

- 1 Ensure that the paper is thermal. One surface is smooth.
NOTE: *Thermal paper produces printouts because it is sensitive to heat.*
- 2 Ensure that when the paper is placed into the printer, the smooth surface is facing the bottom of the Printer.
- 3 Locate the paper jam release lever.

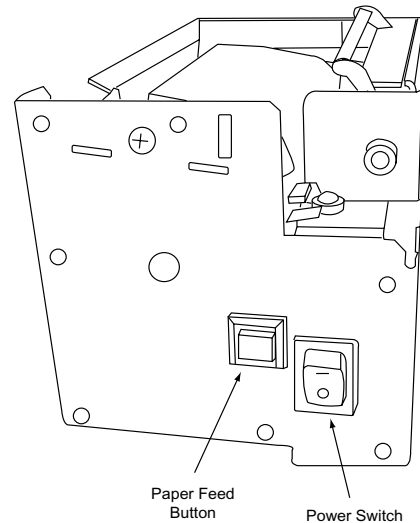


Troubleshooting the Customer Station AXIOHM A226 (Kiosk) Printer (Cont'd)

- 4 Push the paper jam release lever toward the back of the casing.
 - 5 If necessary, clear the paper jam and replace the paper.
-

5. Perform the Self-Test

- 1 Press and hold the **PAPER FEED** button.



- 2 Continue to hold the **PAPER FEED** button, then turn the Printer off, then on again.
 - 3 Release the **PAPER FEED** button when the Printer starts to print.
 - 4 Wait until the diagnostic form prints and the green LED starts to flash.
 - 5 Compare the settings on the printout with the settings in “[A226 Settings](#)” in “[Additional Information for the A226 \(Kiosk\) Printer.](#)”
-

6. Change the Printer Settings

NOTE: *The green LED flashes when you are in **Setup Mode**. You have approximately 5 seconds before the parameter is accepted and the Printer continues with the next setting.*

- 1 Turn off the Printer.
- 2 Hold the **PAPER FEED** button and turn on the Printer.

Troubleshooting the Customer Station AXIOHM A226 (Kiosk) Printer (Cont'd)

- 3 When the Printer begins to print, release the **PAPER FEED** button. The Printer prints the current configuration and the message **Press Feed Button Now to change setup** appears.
 - 4 Press and hold the **PAPER FEED** button for two seconds, then release it. The setup instructions print.
 - 5 Press and hold the **PAPER FEED** button for two seconds, then release it. The Printer configuration prints.
 - 6 Press the **PAPER FEED** button until the appropriate **Emulation Selected** setting displays.
EXAMPLE: Wait until **Axiohm A793** prints, then do not press **PAPER FEED** again.
 - 7 Wait approximately 5 seconds.
 - 8 Repeat step 6 and step 7 for all other settings.
 - 9 When configuration is complete, wait until the green LED stops flashing and the **Printer Ready.....** message prints.
-

Additional Information for the A226 (Kiosk) Printer

A226 Settings

Parameter	Setting
Printer Configuration	
Emulation	Axiohm A793
Media Low Sense	Equals Media Out
Print Contrast	Level 6
Font Options	
Character set	USA
Code Page	437: United States
Interface Auto Detect	Active
Serial Parameters (when used)	
Baud Rate	9600
Data Bits	8 BIT
Parity	NONE
Stop Bits	1 BIT
Flow Control	DTR/DSR
Receive Error	Ignore
Installed RAM	128KB
Cutter	Installed

Maintenance Procedures

There are no maintenance procedures for the AXIOHM A226 Printer.

Installing the AXIOHM A226 Printer (NextGen Customer Stations)

NOTE: This procedure is **ONLY** for the older paper feeders that have a bracket and spool.

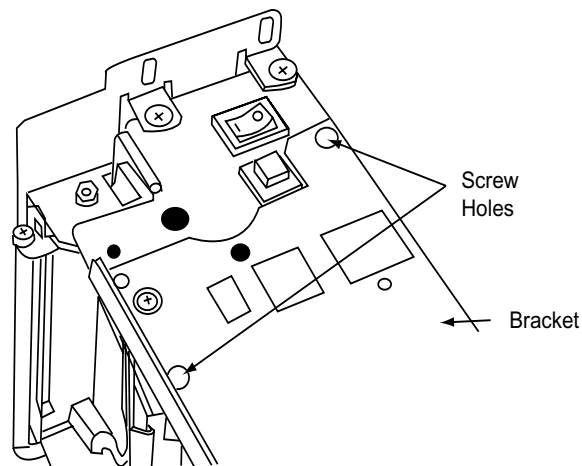
Requirements for this procedure:

- Phillips #2 screwdriver
- AXIOHM A226 Printer and components (communication cable, gender changer, power supply, and power cable)
- Printer bracket
- Paper spool
- 6/32 screws

Install the AXIOHM A226 Printer on a Left Customer Station

NOTE: The Printer is configured for a left Customer Station by default.

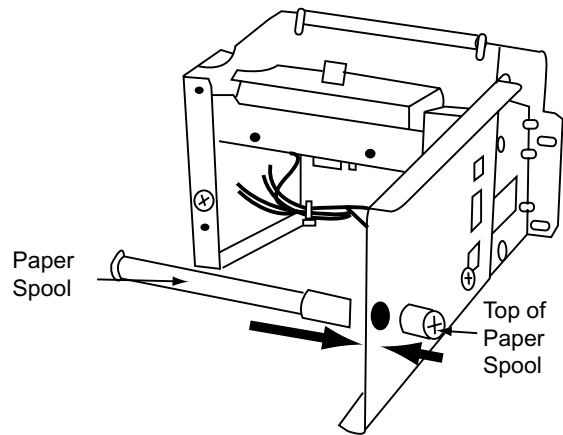
- 1 Position the Printer on its side, **Paper Feed** and **Power** buttons facing up.
- 2 Position the Printer bracket on the top of the Printer and align it with the screw holes.



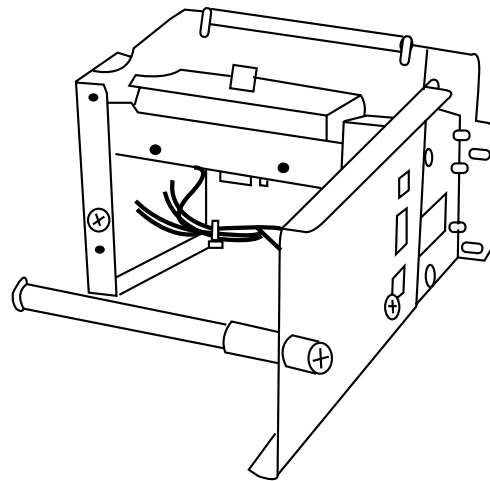
- 3 Fasten the four screws to secure the Printer bracket to the Printer.
- 4 Unscrew the top of the paper spool to remove it.
- 5 Align the top of the paper spool with the hole in the Printer bracket. Refer to the diagram below if necessary.

Installing the AXIOHM A226 Printer (NextGen Customer Stations) (Cont'd)

- 6 Align the paper spool with its top as shown below.



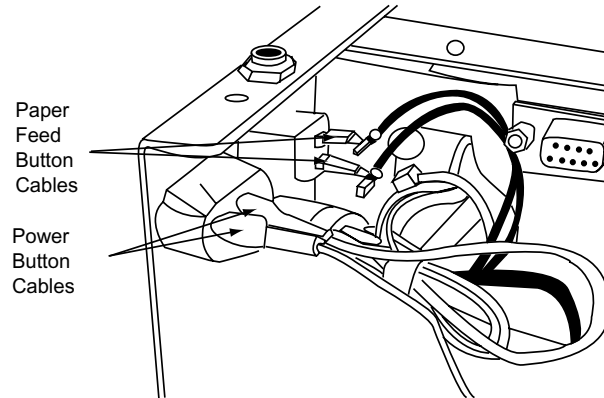
- 7 Screw the two parts of the paper spool together.



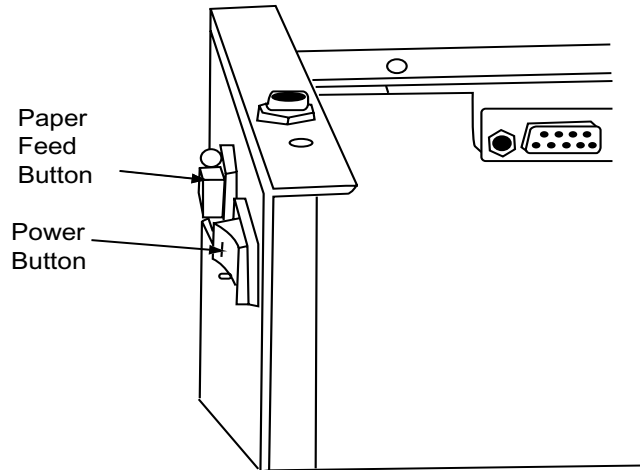
Installing the AXIOHM A226 Printer (NextGen Customer Stations) (Cont'd)

Install the AXIOHM A226 Printer on a Right Customer Station

- 1 Disconnect the two **Power** button cables (red) and the two **Paper Feed** cables (black).



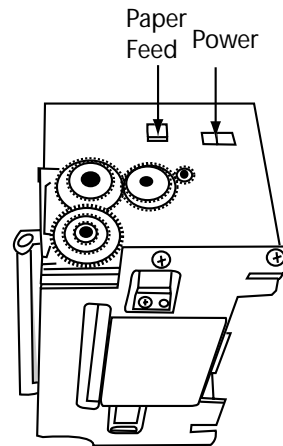
- 2 Squeeze the locktabs on the back of the **Power** button together.
- 3 Gently push the **Power** button forward to remove it.



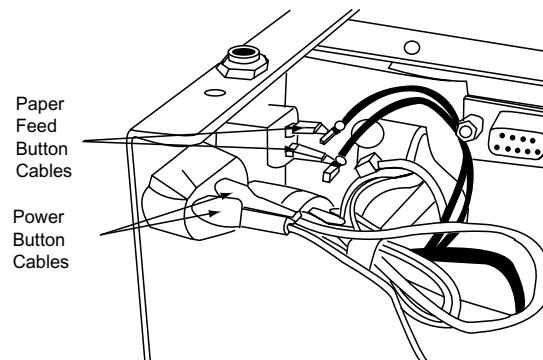
- 4 Repeat step 2 and step 3 for the **Paper Feed** button.

Installing the AXIOHM A226 Printer (NextGen Customer Stations) (Cont'd)

- 5 Insert the **Power** and **Paper Feed** buttons into the cut outs on the other side of the Printer.



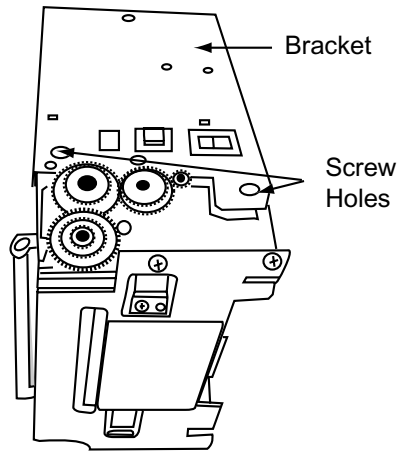
- 6 Push the buttons into place.
- 7 Connect the two **Paper Feed** button cables (black) and the two **Power** button cables (red).



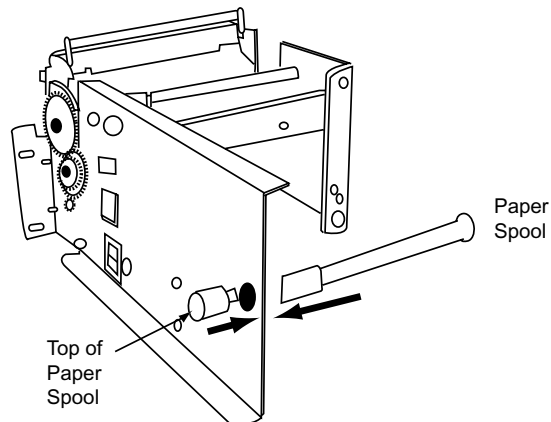
- 8 Position the Printer on its side, the **Paper Feed** and **Power** buttons facing up.

Installing the AXIOHM A226 Printer (NextGen Customer Stations) (Cont'd)

- 9 Align the bracket with the screw holes as shown below.

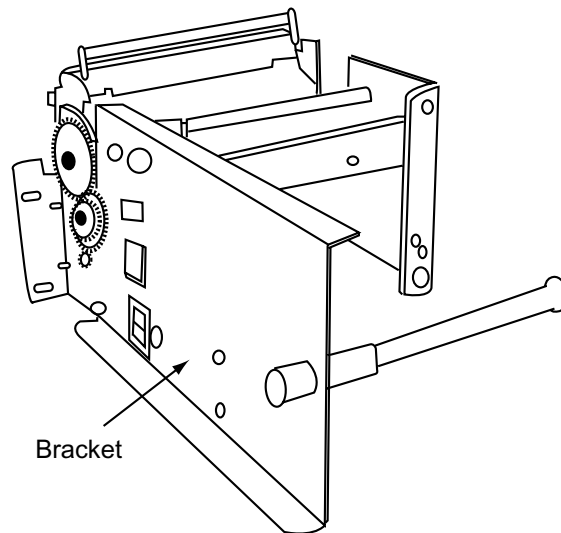


- 10 Fasten the four screws to secure the Printer to the bracket.
11 Unscrew the top of the paper spool to remove it.
12 Align the top of the paper spool with the hole in the Printer bracket.
Refer to the diagram below if necessary.
13 Align the paper spool with its top as shown below.



Installing the AXIOHM A226 Printer (NextGen Customer Stations) (Cont'd)

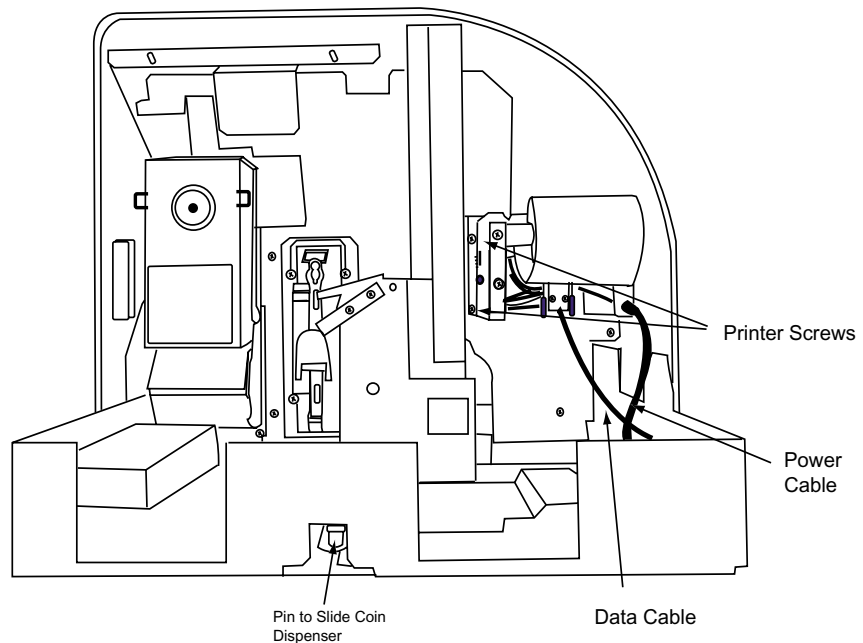
- 14 Screw the two parts of the paper spool together.



Installing the AXIOHM A226 Mounting Plate and Paper Cradle

1. Remove the Printer and Printer Plate

- 1 Go to the Customer Station.
- 2 Open the front cover of the casing to access the Printer.
- 3 Remove the rear access panel.
- 4 Remove the paper from the paper spool.
- 5 Disconnect the power and communication cables from the Printer.



Cash Module Tray: Rear View

- 6 Remove the coin tray from the Coin Dispenser.
 - a Locate the pin that secures the Coin Dispenser in place. Refer to the diagram above if necessary.
 - b Lift and hold the pin, then slide the Coin Dispenser toward the back of the casing until the coin tray is fully visible.
 - c Locate the power button on the Coin Dispenser.
 - d Turn off the Coin Dispenser.
 - e Remove the coin tray.
- 7 Release the pin.
- 8 Slide the Coin Dispenser toward the front of the casing and into position.
- 9 Close the front cover of the casing.

Installing the AXIOHM A226 Mounting Plate and Paper Cradle (Cont'd)

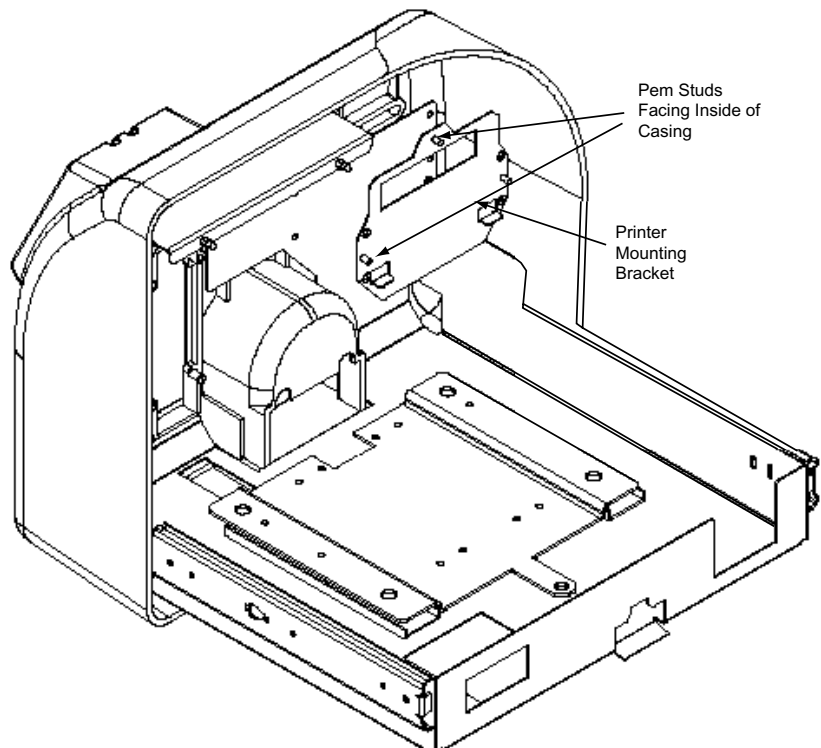
- 10 From the back of the station, remove the four screws that secure the Printer. Refer to the diagram above if necessary.
- 11 Remove the Printer.
- 12 Remove the four screws that secure the silver Printer interface plate to the front of the Printer.
NOTE: Do not damage the threads or heads of the screws.
- 13 Remove the Printer plate.

2. Install the New Printer Interface Plate

- 1 Place the new Printer interface plate on the front of the Printer.
- 2 Partially fasten the four screws removed earlier, then pull the interface plate as far away from the Printer as possible.
- 3 Fasten the screws completely.

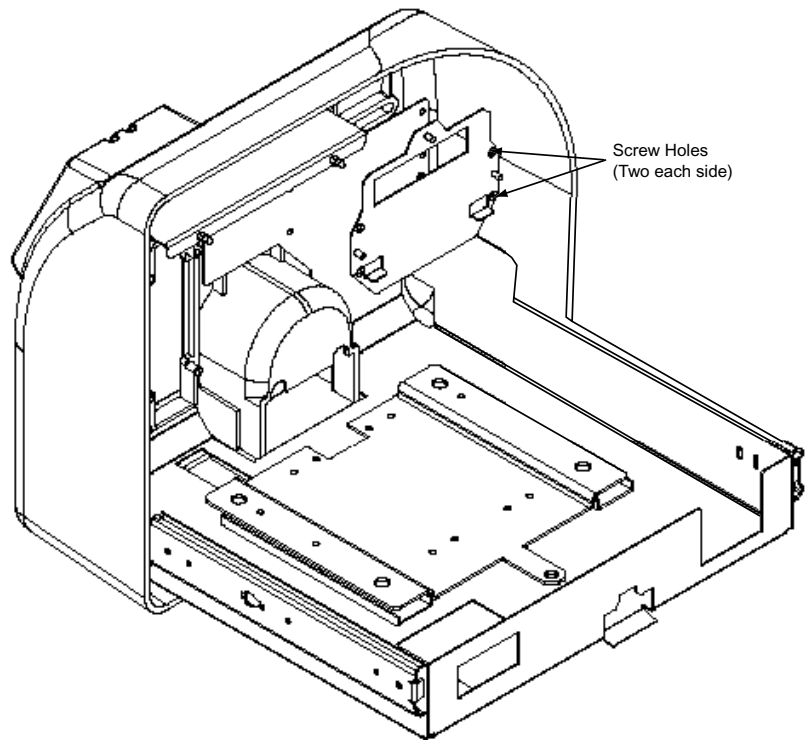
3. Install the New Printer Mounting Bracket

- 1 Position the Printer mounting bracket on the inside of the casing. Ensure that the pem studs face the inside of the casing.



Installing the AXIOHM A226 Mounting Plate and Paper Cradle (Cont'd)

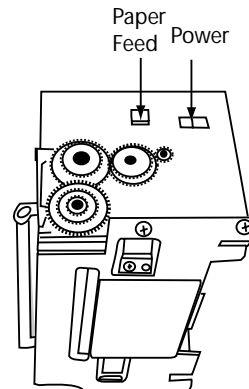
- 2 Partially fasten the four screws supplied in the retrofit kit.



- 3 Reposition the mounting bracket, then fasten the screws completely.

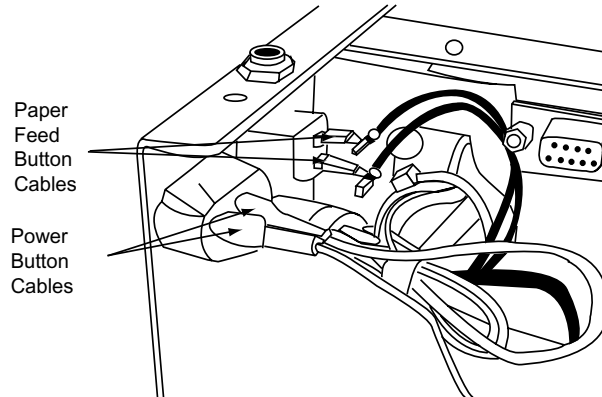
4. Install the Buttons on the Left Side of the Printer (If Necessary)

Perform this procedure if you are installing the Printer on a **right Customer Station**. On a right Customer Station, the Scanner Scale is on the right side (scanning direction right to left). You do **NOT** need to perform this procedure if the buttons are already installed on the same side as the Printer wheels, as shown below.

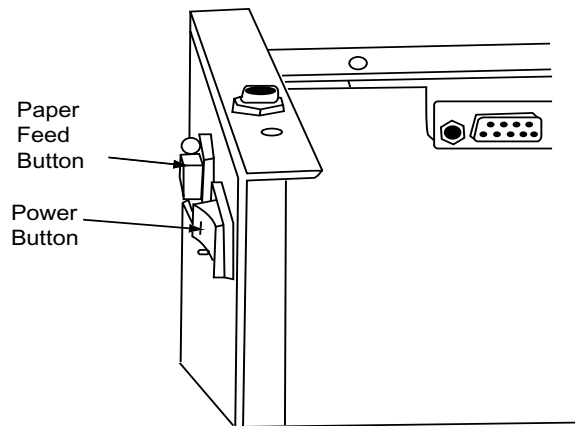


Installing the AXIOHM A226 Mounting Plate and Paper Cradle (Cont'd)

- 1 Disconnect the two **Power** button cables (red) and the two **Paper Feed** cables (black).



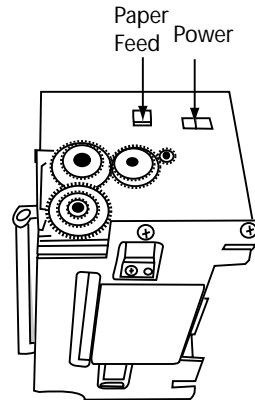
- 2 Squeeze the locktabs on the back of the **Power** button together.
- 3 Gently push the **Power** button forward to remove it.



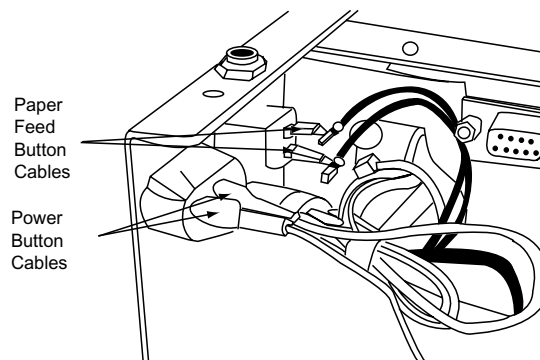
- 4 Repeat step 2 and step 3 for the **Paper Feed** button.

Installing the AXIOHM A226 Mounting Plate and Paper Cradle (Cont'd)

- 5 Insert the **Power** and **Paper Feed** buttons into the cut outs on the other side of the Printer.



- 6 Push the buttons into place.
- 7 Connect the two **Paper Feed** button cables (black) and the two **Power** button cables (red).

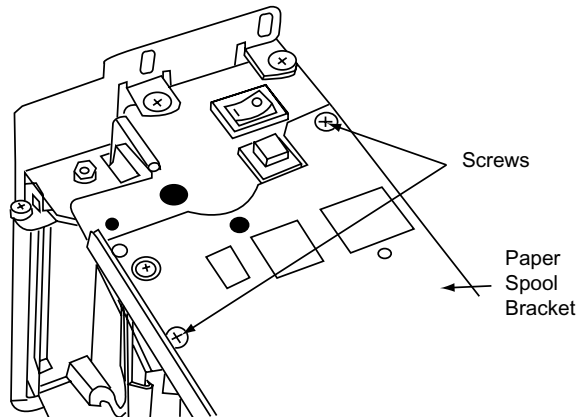


- 8 Position the Printer on its side, the **Paper Feed** and **Power** buttons facing up.

Installing the AXIOHM A226 Mounting Plate and Paper Cradle (Cont'd)

5. Remove the Paper Spool Bracket (If Present)

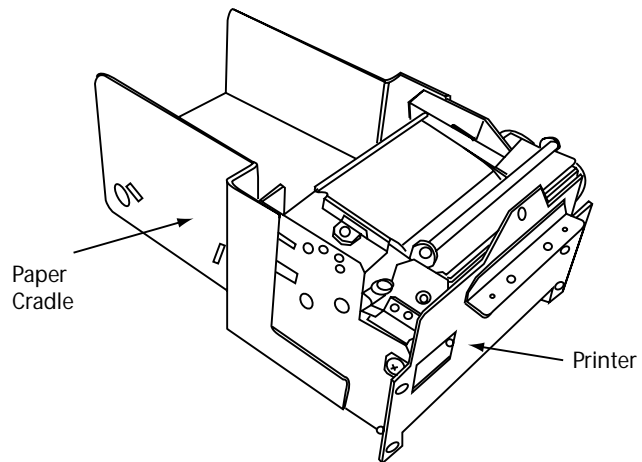
- 1 Remove the screws that secure the paper spool bracket to the Printer. Set aside.



- 2 Remove the paper spool bracket.

6. Install the New Paper Cradle

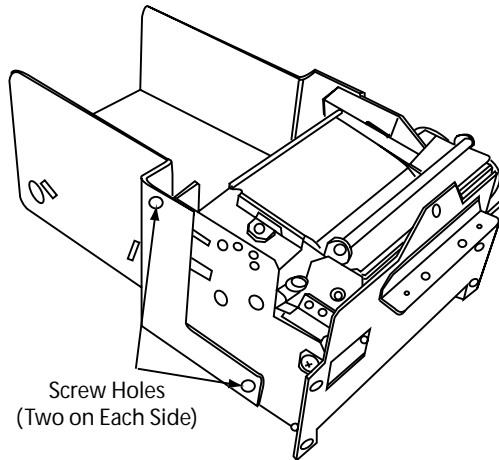
- 1 Position the Printer inside the paper cradle as shown below.



Installing the AXIOHM A226 Mounting Plate and Paper Cradle (Cont'd)

- 2 Fasten the four screws (two on each side) to secure the Printer to the paper cradle.

NOTE: Use the screws removed earlier. You may require extra screws.



7. Replace the Printer Inside the Casing

- 1 Align the Printer interface plate (front of the Printer) with the Printer mounting bracket.
- 2 Slide the Printer into the Printer mounting bracket.
- 3 Fasten the larger butterfly nut in the top pem stud of the mounting bracket.
- 4 Tighten the smaller butterfly nut in the outside pem stud. The outside pem stud is located beside the Coin Dispenser.
- 5 Connect the data cable.
- 6 Ensure that the power switch is in the OFF position.
- 7 Connect the power cable.
- 8 Turn on the Printer.
- 9 Load the paper into the paper cradle. Ensure that the smooth side of the paper is facing down. (The paper will curve upward.)
- 10 Feed the paper into the Printer.
The Printer resets.

Attendant Station Printer

Testing the Attendant Station Printer

1. Stop the Attendant Station Software

See “Stop the Attendant Station Software.”

2. Check the Settings

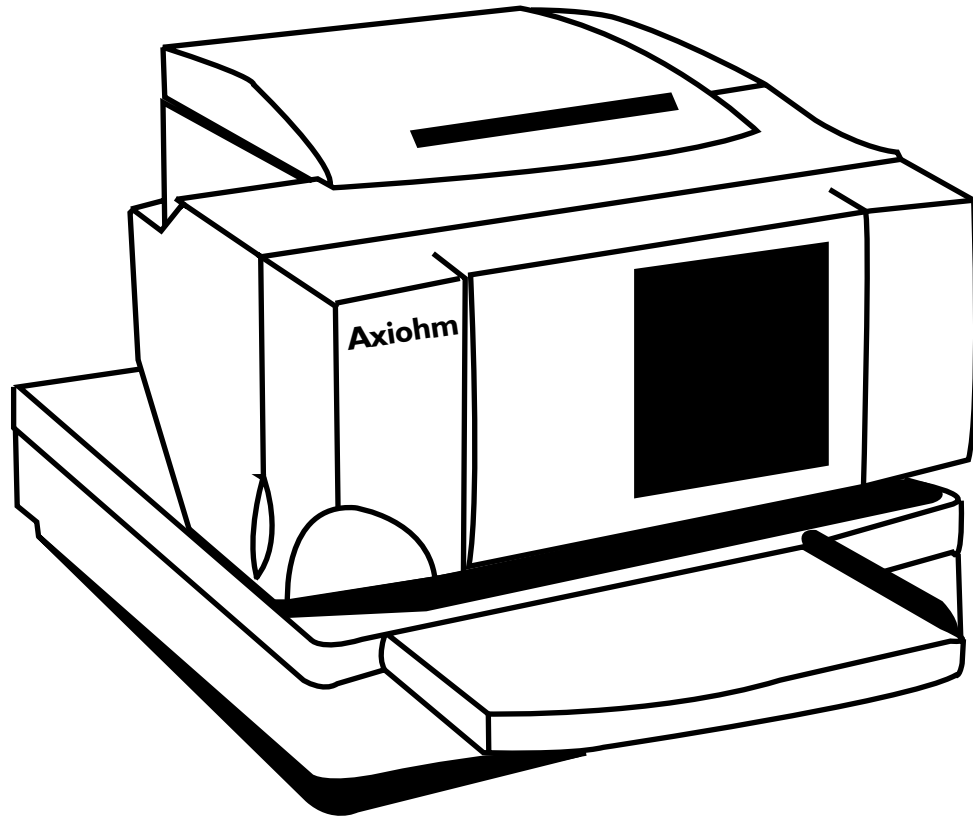
Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages see “Error Messages” at the beginning of this section. Error messages are also stored in the **Eventlog Viewer** and can be viewed when you exit the **Device Tester**.*

- 1 Click **Start**.
 - 2 Perform a Print Test.
 - a Click **RCPT PRINT**.
 - b Check the Printer for a text printout.
 - 3 Test the Check Endorsement function.
 - a Click **DI PRINT**.
 - b Insert a check facedown into the Printer.
The green light indicates that the Printer detects the check. The Printer prints on the check.
 - 4 Test the MICR function.
 - a Click **MICR**.
 - b Insert a check.
The Printer reads the MICR characters from the check.
 - 5 Test the Till.
 - a Click **POP TILL**.
 - b The Till opens.
 - 6 Click **Stop**.
-

AXIOHM A758/A760 Printer



Features:

- Clamshell paper loading
- 203 dpi receipt print resolution
- One-button configuration and flash memory
- Check flip
- Optional check MICRing
- Two-color printing (A760 only)
- USB connection (A760 only)

Technical Specifications

Power Supply Requirements

- Input: 100 to 240 V ac, 1.5/0.8 A, 50 to 60 Hz
- Output: 24 V dc, 2.3 A
- Maximum power: 55 W

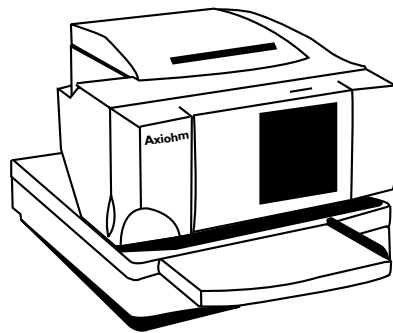
Communication

- Serial RS-232C

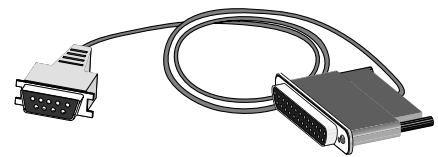
Components of the AXIOHM A758 Printer

The A758/A760 Printer includes the following components:

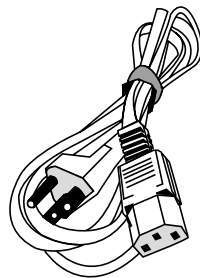
- A758/A760 thermal impact hybrid Printer
- DB-9 female to DB-25 female communication cable
- Gender changer (DB-9 male to DB-9 male)
- Power supply



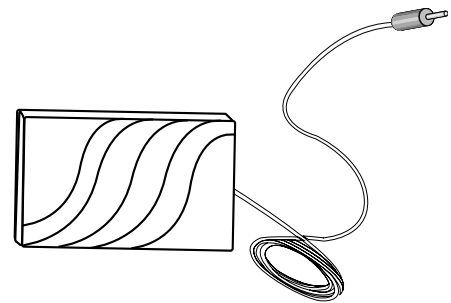
AXIOHM Printer



Communication Cable



Power Supply Cable



Power Supply

Troubleshooting the Attendant Station AXIOHM A758/ A760 Printer



The A758 Printer requires a cash drawer with a 12-V solenoid coil or a dual-sensing cash drawer. Do NOT use a cash drawer 24-V solenoid coil, as this can irreparably damage the Printer.

NOTE: The A760 has a two-color printing feature and a USB connection port.

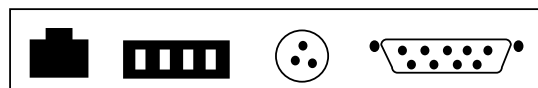
1. Follow the Testing Procedure

See “Testing the Attendant Station Printer.”

2. Check the Power

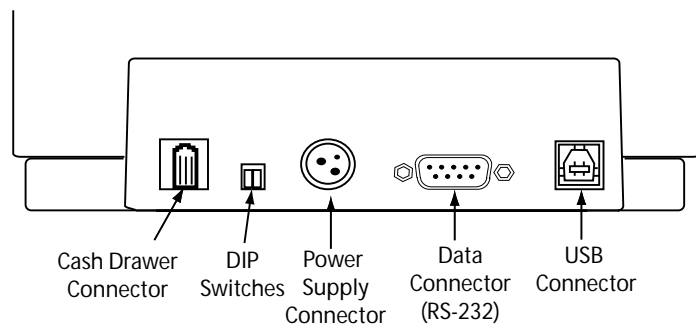
- 1 Locate the power cable on the back of the Printer.

A758 Printer



Till DIP Switches Power Data (RS-232)

A760 Printer



- 2 Ensure that the power cable is connected to the Printer.
- 3 Ensure that the power cable is connected and secured to the power bar.
- 4 Unplug the Printer and then plug it back in to cycle the power.

NOTE: The A758 uses the same power supply as the A794.

Troubleshooting the Attendant Station AXIOHM A758/A760 Printer (Cont'd)

3. Inspect the Data Cable

- 1 Locate the data cable on the back of the Printer.
 - 2 Ensure that the data cable is connected and secured to the device.
 - 3 Ensure that the data cable is connected to port 6 on the DIGI Box or Edgeport.
-

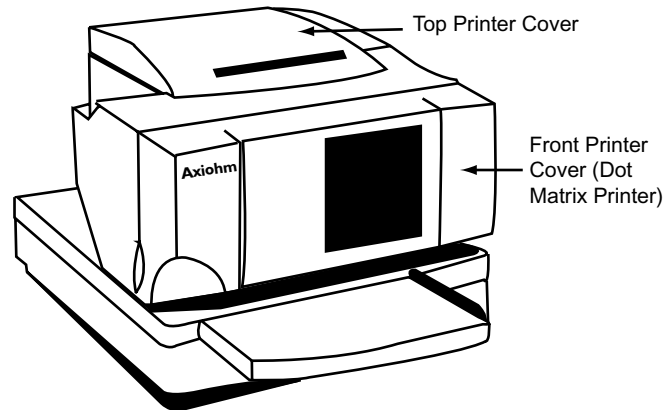
4. Inspect the DIP Switches

- 1 Locate the DIP switches on the back of the Printer. Refer to the diagram above if necessary.
 - 2 Ensure that all the DIP switches are set to OFF (down).
-

5. Reset the Printer

- 1 Lift the front cover of the dot matrix printer.

A758 Printer



- 2 Locate the black button on the right.
 - 3 Press the black button to reset the Printer.
 - 4 Close the front cover.
-

6. Check the Paper

- 1 Open the top Printer cover.

Troubleshooting the Attendant Station AXIOHM A758/A760 Printer (Cont'd)

- 2 Ensure that the paper is thermal. One surface is smooth.
NOTE: Thermal paper produces printouts because of its sensitivity to heat.
 - 3 Ensure that the paper is placed correctly into the Printer, with the smooth surface underneath.
-

7. Inspect the Ribbon

- 1 Lift the front cover to reveal the dot matrix printer head.
 - 2 Ensure that the ribbon is placed correctly in the Printer.
 - 3 Ensure that the ribbon is in good condition.
-

8. Perform the Self Test

- 1 Open the Printer cover.
 - 2 Press and hold the **PAPER FEED** button.
 - 3 Continue to hold the **PAPER FEED** button and close the Printer cover.
 - 4 When the Printer starts printing, release the **PAPER FEED** button.
 - 5 Verify the settings on the print out with the settings in the “Additional Information for the A758 Printer” section.
-

9. Change the Printer Settings

- 1 Locate the DIP switches on the back of the Printer.
- 2 Push DIP switch #1 up to set it to ON.
NOTE: DIP switches 2-4 are preset to OFF (down).
- 3 Open the Printer cover.
- 4 Locate the **RESET** button to the right of the dot matrix printer.
- 5 Press the **RESET** button, then immediately press the **PAPER FEED** button.
The **Configuration** menu prints.
- 6 Verify the settings on the print out with the setting in the “Additional Information for the A758 Printer” section.

Troubleshooting the Attendant Station AXIOHM A758/A760 Printer (*Cont'd*)

- 7 Follow the instructions on the print out to change the settings.
 - 8 Push DIP switch #1 down to exit the configuration mode.
 - 9 Reset the Printer.
-

Additional Information for the A758/A760 Printer

A758/A760 Settings

NOTE: *The A760 Printer requires a minimum software version of 399J.*

Parameter	Setting
H/W Parameters	
Flash Memory Size	512 KB
Flash Logos / Fonts	64 K
Flash User Storage	64 K
SRAM Size	256 K
CPU Clock Freq.	50 MHz
Head Setting	C
Print Density	100%
Max Speed	130 mm/sec
Max Power	55 W
Knife	Enabled
Paper Low Sensor	Enabled
MICR	Enabled
Check Flip	Disabled
MICR Dual Pass	Disabled
MICR DC offset	7F
Slip Position Option	Disabled
Slip Eject Option	Disabled
Comm. Interface	
RX Buffer Size	4096
Interface Type	RS232/USB
Parameters	
Baud Rate	9600 or 19 200
Data Bits	8
Stop Bits	1

Parameter	Setting
Parity	NONE
Flow Control	DTR/DSR
Reception Errors	Ignore
Alternate DTR/DSR	Disabled
Resid. Code Pages	437, 850
Logo(s) Defined	NO *Set to "Logo" if a logo should print on the receipt.
User Char(s) Defined	NO
Diagnostics	OFF
Printer Emulation	Axiohm A756
Printer ID Mode	A758: A758 Native ID A760: Emulated Printer ID
Default LPI	7.52
Carriage Return	Used as Print Command

A760 Paper Types

The A760 Printer can use three different types of paper. Change the type of paper in the **Configuration** menu. The three types of paper available are:

Paper Type Setting in Configuration Menu	Paper Type and Grade
Type 0	Monochrome grades Kanzaki P-310
Type 1	Two-color grades Kanzaki P-310 RB
Type 5	Two-color grades Kanzaki P-320 RB; Mitsubishi PB 770 (blue/black)

Maintenance for the Attendant Station Printer

Cleaning the Printer Cabinet (AXIOHM Models)

- Clean the Printer cabinet with a household cleaner that is safe for plastics. Test the cleaner on an unseen area first.
- If the receipt bucket is dirty, wipe it with a clean, damp cloth.

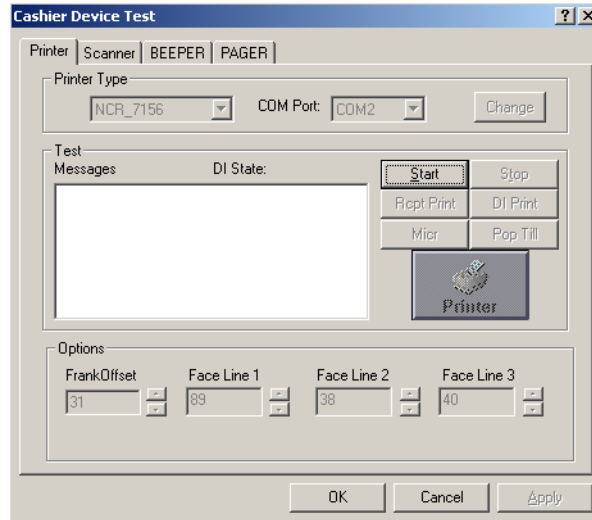
Cleaning the Thermal Print Head

- Do **NOT** use cleaners or chemicals to clean the print head or the inside of the Printer.
- Use a head-cleaning alcohol pen to wipe the thermal print head when it needs to be cleaned. Do **NOT** use the alcohol pen to clean other parts of the Printer.
- If printing problems are not solved by cleaning the print head, contact the U-Scan Support Center.

Additional Information for the Attendant Station Printers

Adjust the Check Face Printing and Franking Settings in the Device Tester

The **Device Tester** at certain stores allows you to adjust the check face printing and franking settings. You can adjust the four settings in the **Options** box at the bottom of the **Printer** tab.



NOTE: Check the regular lane to see whether the store logo should appear, and whether check face printing or franking is required.

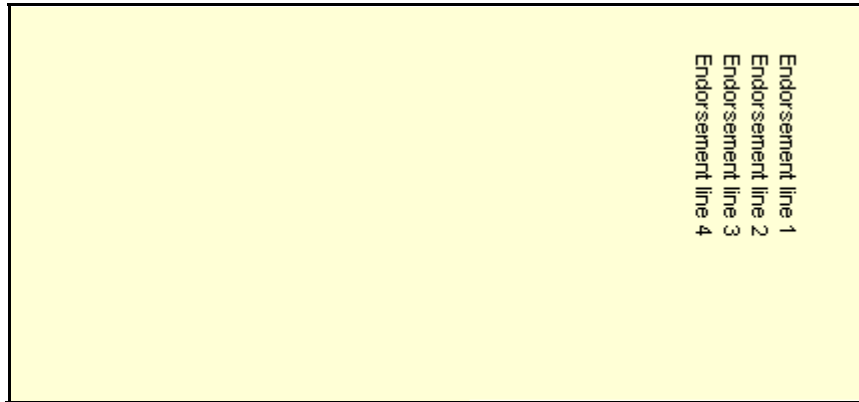
FrankOffset

The “franking” information is printed left-justified on the back of the check. Increase or decrease the **FrankOffset** value to adjust the offset of the printed information.

NOTE: The default value is **0** for the IBM 4610 Printer, and **31** for the AXIOHM A756/758.

EXAMPLES:

FrankOffset=0



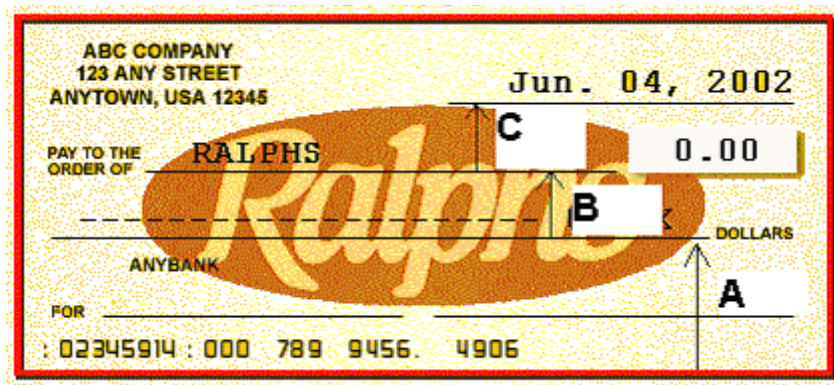
FrankOffset=8



Face Line1, 2, or 3

The front of the check is divided into three sections as shown below (A, B, and C).

Face Line 1 corresponds to section A, **Face Line 2** to section B, and **Face Line 3** to section C.



Adjust the value of a face line to increase or decrease the size of one the sections. If you decrease the value of face line, the information in the corresponding section prints lower on the check. If you increase the value of the face line, the information prints

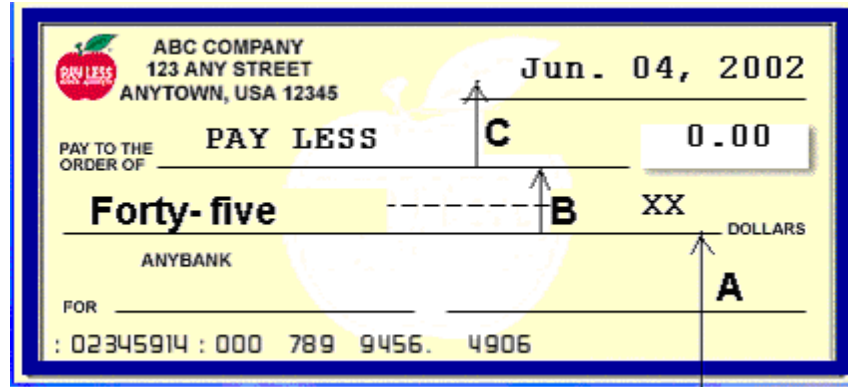
higher on the check. For example, decrease the value of **Face Line 1** to decrease the size of section A.

EXAMPLES:

Face Line 1=80

Face Line 2=34

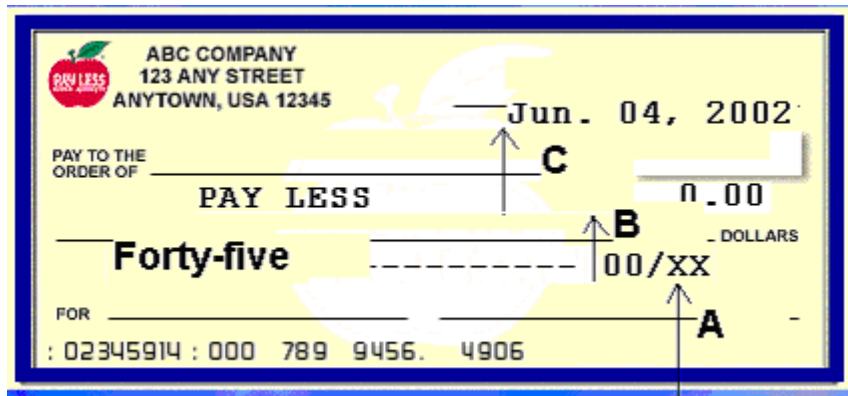
Face Line 3=44



Face Line 1=60

Face Line 2=34

Face Line 3=44



In the example above, the information in all three sections is printed lower on the check. This is because Face Line 2 is dependent on Face Line 1, and Face Line 3 is dependent on Face Line 2.

Testing the Scanner Scale in the Device Tester

1. Stop the Customer Software

See “Stop the Customer Software.”

2. Check the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages, see “Error Messages” at the beginning of this section. Error messages are also stored in the **Eventlog Viewer** and can be viewed when you exit the **Device Tester**.*

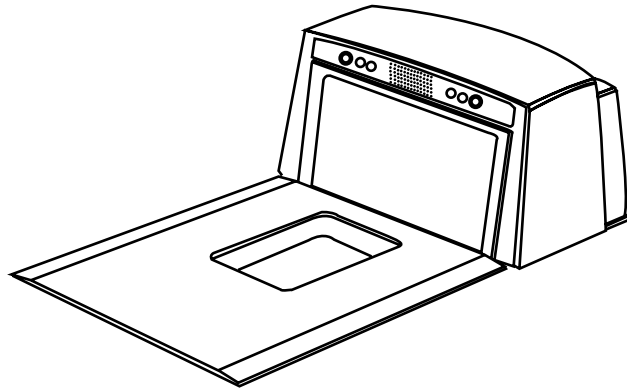
- 1 Click **Start**.
The current weight displays in the **Messages** box.
 - 2 Weigh an object on different areas of the Scanner Scale.
Ensure that the weight is constant.
 - 3 Click **ENABLE SCNR**.
 - 4 Scan a bar code.
 - 5 Ensure the bar code number in the **Messages** box is the same as the number of the bar code scanned in the previous step.
 - 6 Click **Stop**.
-

Scanner Scale Error Messages

Refer to the table below for a description of Scanner Scale error messages.

Error Message	Explanation	Solution
SCANNER(GOTBAD UPC, ZS)	Bad UPC was scanned	<ul style="list-style-type: none"> Scan another test bar code.
SCANNER::GOTUP C_WHILE_DISABLE D{XXXXXXXXXXXX }	A bar code was scanned when the scanner function was disabled	<ul style="list-style-type: none"> Enable the scanner function. Scan the bar code again.
SCALE(OVERWEIG HT)	The weight is too heavy for the Scanner Scale	<ul style="list-style-type: none"> Use less weight on the Scanner Scale.
SCALE(UNDERWEI GHT)	The Scanner Scale is indicating a weight lower than zero	<ul style="list-style-type: none"> Remove all items from the Scanner Scale. Zero the Scanner Scale.
SCALE(REZERO_FA ILURE)	Rezeroing the Scanner Scale failed	<ul style="list-style-type: none"> Verify the position of the platter. Ensure that there is no debris around the platter. Reset the Scanner Scale. Zero the Scanner Scale. Replace the Scanner Scale.
SCALE(MECHANIC AL_ERROR)	A general message indicating a Scanner Scale problem	<ul style="list-style-type: none"> Follow the troubleshooting procedures for the appropriate Scanner Scale.
DEVICE::OFFLINE{ ScannerScale}	Communication or power problem	<ul style="list-style-type: none"> Inspect the power connections. Inspect the communication cables. Verify the settings in the Device Tester.

FUJITSU 9950



FUJITSU 9950 Scanner Scale

Features:

- EAS compatibility
- Vendor coupon “expiration” date validation (not yet available with U-Scan)
- Firmware download from Computer
- 30 lb. (15 kg) weight capacity
- 360° scan zone
- 56 scan lines
- 4 667 lines scanned per second

Technical Specifications

Environment

- Temperature
Operating: 32°F to 104°F (0°C to 40°C)
Storage: -4°F to 140°F (-20°C to 60°C)
- Relative Humidity
Operating: 20% to 80% non-condensing
Storage: 10% to 90% non-condensing

Power

- Input: 100 to 240 V ac, 50 to 60 Hz, 14 W (scanning), 8 W (stand-by)
- Output: 12 V, 2.0 A

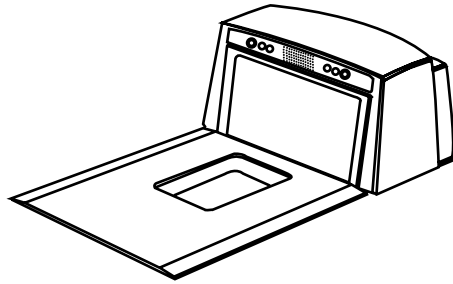
Communication

- FUJITSU data cable connects to Scanner Scale RS232C port and Edgeport (via DB-9 male to DB-25 female adapter)

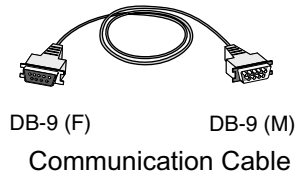
Components of the FUJITSU 9950

The FUJITSU 9950 Scanner Scale is made up of the following components:

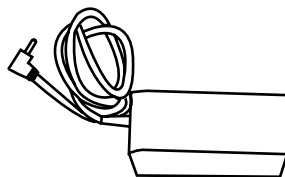
- FUJITSU 9950 Scanner Scale
- FUJITSU data cable (DB-9 male to DB-9 female)
- FUJITSU power supply



FUJITSU 9950 Scanner Scale



DB-9 (F) DB-9 (M)
Communication Cable



Power Supply



Power Cable

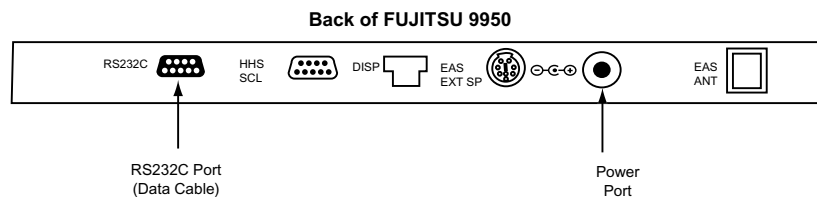
Troubleshooting the FUJITSU 9950 Scanner Scale

1. Follow the Testing Procedure

See “Testing the FUJITSU 9950 Scanner Scale.”

2. Check the Power

- 1 Remove the Scanner Scale from the Customer Station.
- 2 Ensure that the power adapter cable is connected to the power port on the Scanner Scale.



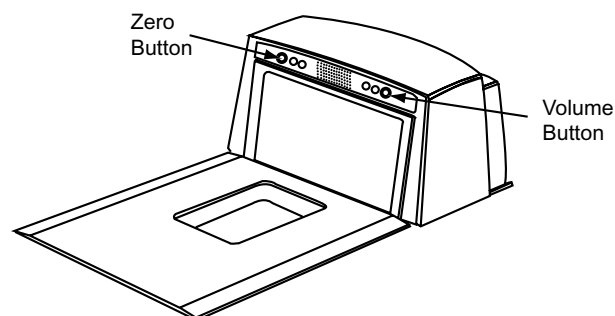
- 3 Ensure that the power cable is connected to the power adapter.
 - 4 Ensure that the power cable is connected to the power bar.
 - 5 Unplug the power cable, and then plug it back in to cycle the power.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the RS232C port on the Scanner Scale.
 - 2 Ensure that the data cable is connected to COM 5 (port 3) on the Edgeport.
-

4. Reset (Zero) the Scanner Scale

Press the **Zero** button.



Troubleshooting the FUJITSU 9950 Scanner Scale (*Cont'd*)

5. Program the Scanner Scale

Refer to “[Additional Information for the FUJITSU 9950 Scanner Scale](#)” for the bar code programming sequence.

FUJITSU 9950 Maintenance

Cleaning the Scanner Scale

- 1 Remove all items from the Scanner Scale.
- 2 Prepare a solution of one part glass cleaner and one part water.
- 3 Spray the solution on a lint-free cleaning pad or cloth, then wipe the device. Take care to avoid scratching the device surface.

NOTES: *Do **not** spray the cleaning solution directly on any surface.*

*Do **not** use alcohol, acetone, abrasive cleaning products or abrasive pads.*

- 4 If necessary, remove the top platter of the Scanner Scale to clean the underside of the glass.
- 5 Replace the platter.

Additional Information for the FUJITSU 9950 Scanner Scale

This section contains the following information:

- [LED Indications](#) (page 7): Table describing LED indications and possible solutions.
- [Upgrading the Firmware](#) (page 9): Procedure for upgrading the firmware for the FUJITSU 9950 Scanner Scale.
- [Calibrating the FUJITSU 9950 Scanner Scale](#) (page 9): Procedure for calibrating the FUJITSU 9950 Scanner Scale.
- [Setting the Metric Calibration Weight to 15 kg](#) (page 12): Bar code sequence for setting the Metric calibration weight to 15 kg.
- [Programming the FUJITSU 9950 Scanner Scale](#) (page 15): Bar code sequence for programming the FUJITSU 9950 Scanner Scale.

LED Indications

Refer to the following table if the LED is flashing.

LED Status	Issue	Solution
Flashing yellow	<ul style="list-style-type: none">• EPROM/ROM check sum error• RAM error• EEPROM check sum err	Contact the U-Scan Support Center.
Flashing yellow-green-yellow	<ul style="list-style-type: none">• Calibration required.	Calibrate the Scanner Scale. Refer to "Calibrating the FUJITSU 9950 Scanner Scale" on page 9.

Upgrading the Firmware

Perform this procedure at the project manager's request to upgrade the firmware.

Requirements:

- **Sy2_D112x.exe** utility
- 9-pin null Modem cable (female to female)

- 1 Connect the null Modem cable to the HHS SCL port on the back of the Scanner Scale.
- 2 Connect the null Modem cable to COM 1 of the Computer.
- 3 Restart the Computer.
- 4 Open the **Sy2_D112x.exe** utility.
The **Main Menu** appears.
- 5 Enter **1** for Program Download, then press **ENTER**.
- 6 Enter the firmware upgrade file name (example: **Nil04_14.bin**), then press **ENTER**.
The upgraded firmware downloads.
- 7 When the process is complete, exit the utility.
- 8 Restart the Computer.

Calibrating the FUJITSU 9950 Scanner Scale

The Scanner Scale may need to be calibrated if:

- It cannot be reset to zero.
- The weight measure has been changed from pounds to kilograms or vice versa.
- The LED flashes yellow-green-yellow to indicate a calibration error.
- The weight module has been replaced.

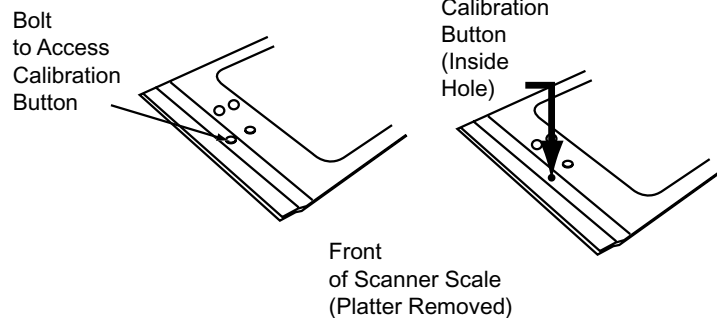
Continue with the following steps to ensure that the Scanner Scale meets the Office of Weights and Measures' requirements.

LEGAL NOTE

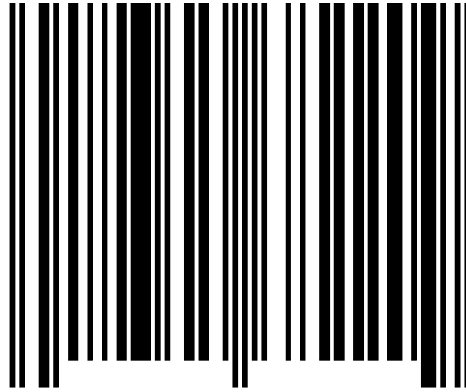
Certification of the Scanner Scales weighing apparatus is subject to federal, state and local Weights and Measures statutes and is restricted to authorized government agencies and/or duly registered agents thereof. Anytime a scale is calibrated, it should be properly sealed with a lead, wire or paper seal before being placed into service.

It is the user's responsibility to verify with the appropriate authorities in the area to ensure compliance with pertinent regulations before removing official seals or putting a newly calibrated Scanner Scale into service.

- 1 Remove the Scanner Scale platter.
- 2 Remove the bolt covering the calibration button.
- 3 Use a thin **non-conductive** stick to push and hold the calibration button.

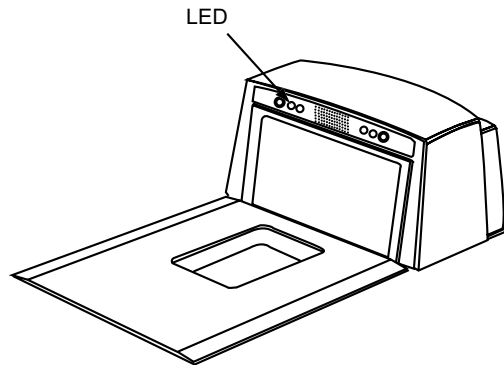


- 4 Continue to hold the calibration button down while you scan the **Enter Calibration Mode** bar code.



The Scanner Scale enters calibration mode. The Scanner Scale beeps and the LED turns yellow.

- 5 Replace the Scanner Scale platter.
- 6 Press the **Zero** button.
The Scanner Scale beeps and the LED turns green.
- 7 Press the **Zero** button again.
The Scanner Scale beeps and the LED flashes (yellow or green).
- 8 Look at the LED color.



- 9 Use the table below to determine the amount of weight to add to the Scanner Scale.

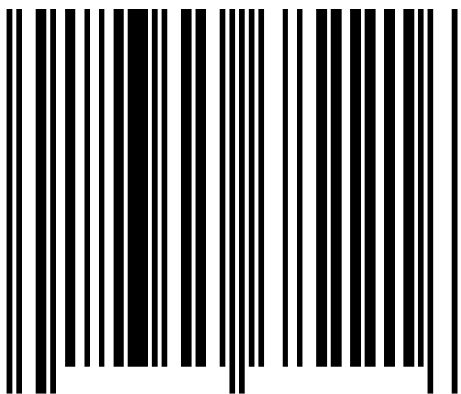
Weight Value	LED Status
20 lbs.	Flashing yellow and green
10 kg	Flashing yellow
4 kg	Flashing green

- 10 Add the appropriate amount of weight to the Scanner Scale.
- 11 Wait approximately 10 seconds.

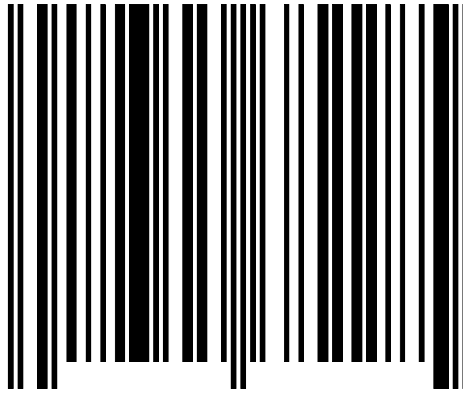
- 12** Press the **Zero** button.
The Scanner Scale beeps and the LED comes on.
- 13** Remove the weight from the Scanner Scale.
NOTE: *You must remove the weight within 10 seconds after the LED comes on.*
- 14** Remove the Scanner Scale platter.
NOTE: *If the Scanner Scale beeps and the LED flashes now, the calibration failed. Repeat the procedure. If the problem persists, contact the U-Scan Support Center.*
- 15** Replace the bolt over the calibration button.
- 16** Replace the Scanner Scale platter.
- 17** Ask the store manager to contact the Office of Weights and Measures to verify the calibration.

Setting the Metric Calibration Weight to 15 kg

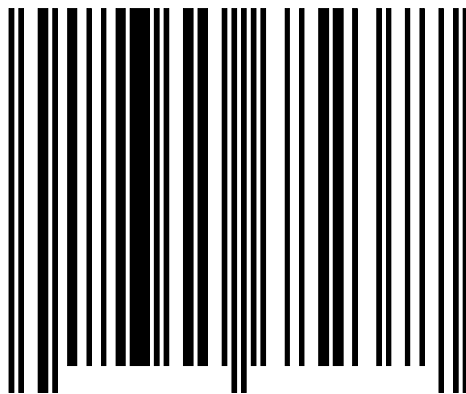
Scan the following bar codes if you wish to use 15 kg to calibrate the FUJITSU 9500 Scanner Scale.



Enter Setup Mode
68221C



Kilograms Setup
(Capacity 15x0.005kg)
68228C

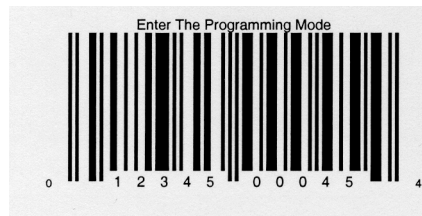


Complete
68237C

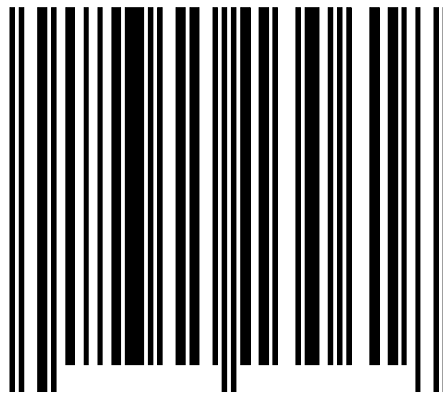
Programming the FUJITSU 9950 Scanner Scale

Scan the following bar codes to program the FUJITSU 9950 Scanner Scale.

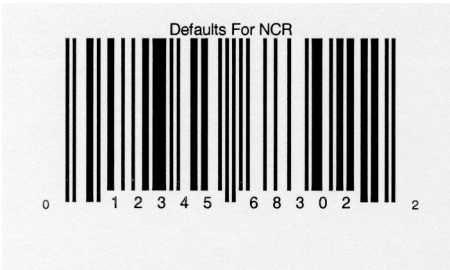
NOTE: *The orange LED flashes when the Scanner Scale reads a bar code.*

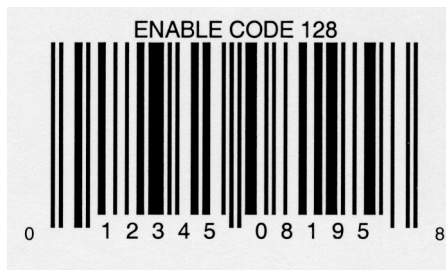


NOTE: *If you are scanning the bar codes in the **Device Tester**, the message **Offline** appears when this bar code is scanned. The green LED is on solid.*



Restore All Defaults





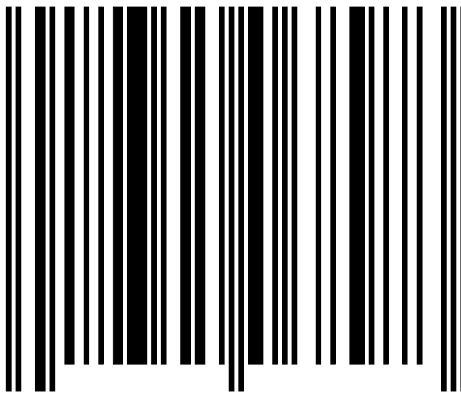




SAVE PREFIX/SUFFIX SETTINGS



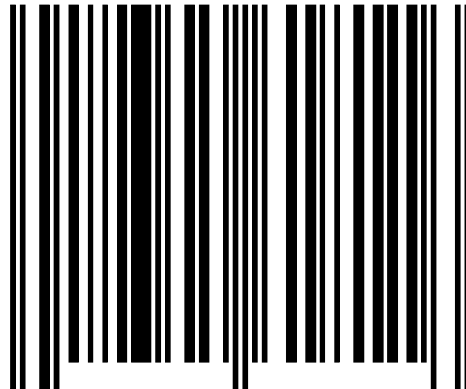
**Motor Timeout
2 Hours, 1 Minute**



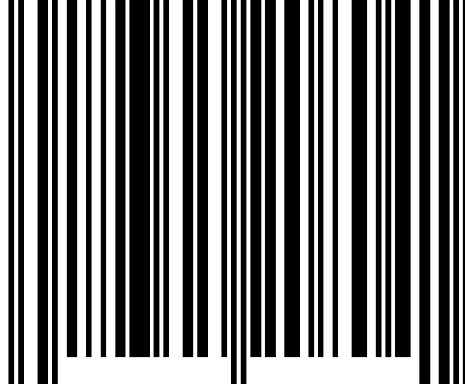
Enable C:\pos-Code\UPCA\EAN128

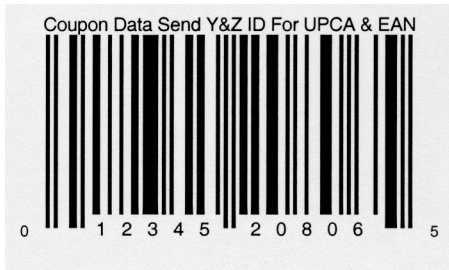


**Validation Of Vendor Coupon Date
Enable**

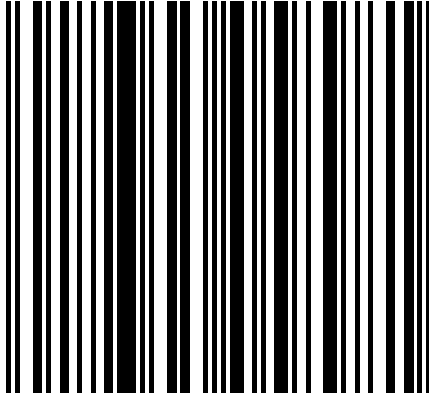


**For Expired Date: Issue Alert And
Send Data To Host**

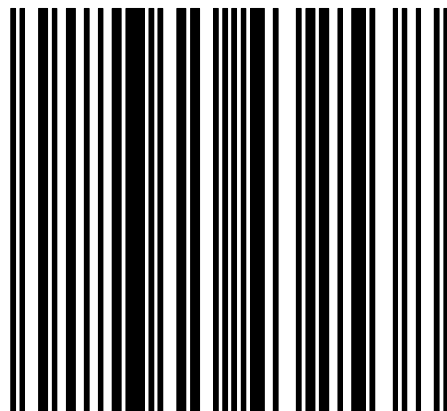




Same Label Timeout 200ms



Scanner Ready Beep Disabled





SEM Module

Testing the SEM Module in the Device Tester

1. Stop the Attendant Station Software

See “Stop the Attendant Station Software.”

2. Check the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

NOTE: *For an explanation of error messages, see “Error Messages” at the beginning of this section. Error messages are also stored in the **Eventlog Viewer** and can be viewed upon exiting the **Device Tester***

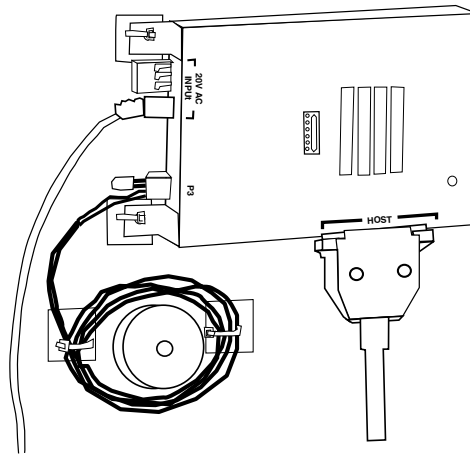
- 1 Click **Start**. If an error message appears in the **Messages** box, see “Troubleshooting the SEM Module.”
 - 2 Click **BEEP!**
If the test was successful, the **Messages** box displays **It says it beeps**.
 - 3 Click **Stop**.
 - 4 Click **OK**.
-

SEM Error Messages

Refer to the table below for a description of SEM error messages.

Error Message	Explanation
Problems with Beeper	Indicates that the SEM beeper is not responding due to communication problems or a faulty SEM module.

Troubleshooting the SEM Module



1. Follow the Testing Procedure

See “Testing the SEM Module.”

2. Inspect the Power

- 1 Ensure that the power cable is connected to the device.
 - 2 Ensure that the red LED on the device is blinking at a constant rate.
 - 3 Ensure that the power cord is connected to the power bar.
-

3. Inspect the Data Cable

- 1 Ensure that the data cable is connected to the device.
- 2 At the Attendant Station, ensure that the data cable is connected to port 7 on the DIGI Box.
- 3 At the Customer Station, ensure that the data cable is connected to port 5 on the DIGI Box.
- 4 Inspect the Beeper I/F Cable Connector on the SEM Module.

NOTE: *The pins in the Beeper I/F Cable Connector are very fragile.*

Troubleshooting the SEM Module (*Cont'd*)

4. Inspect the Fuse

- 1 Remove the SEM Module from the casing.
 - 2 Disconnect the data cable, beeper cable, and Coin Acceptor cable (at the Customer Station) from the SEM Module.
 - 3 Locate the four screws on the back of the SEM Module cover.
 - 4 Remove the four screws.
 - 5 Separate the circuit board from its cover.
 - 6 Remove the fuse.
 - 7 Inspect the fuse visually or test it with a continuity tester.
 - 8 If the fuse is defective, replace it with a fuse that has the same specifications.
-

Signature Capture

Testing the Signature Capture Device in the Device Tester

1. Stop the Customer Software (from the Attendant Station)

See “[Stop the Customer Software from the Attendant Station](#)” or “[Stop the Customer Software from the Customer Station](#).”

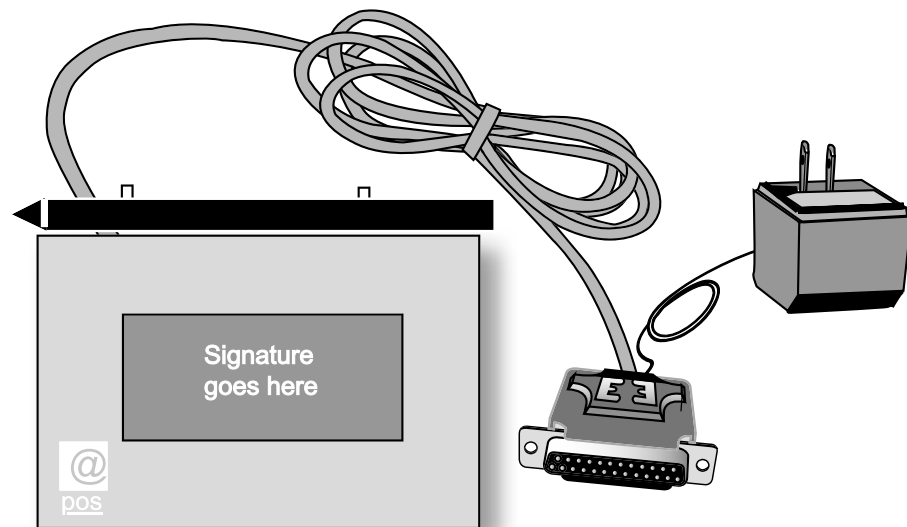
2. Verify the Settings

Refer to “Check the Settings” in the “Using the Device Tester” section of the Introduction.

3. Test the Device

- 1 Click **Start**.
The message **DEVICE::ONLINE{Signature Capture}**, appears in the **Messages** box.
 - 2 Click **Enable**.
 - 3 If you are testing the **@POS** Signature Capture, ensure that the green LED on the **@POS** turns on when you click **Enable**.
 - 4 Write on the Signature Capture.
 - 5 Ensure that the characters display properly on the Signature Capture pad and in the **Device Tester**.
 - 6 Verify any messages in the **Messages** box.
NOTE: *Error messages are also entered in the **Event Log Viewer**. You can view messages in the **Event Log Viewer** when you exit the **Device Tester**.*
 - 7 Touch **Stop**.
-

@POS PenWare 120



Features:

- Plastic stylus writing device and integrated holder
- Backlit resistive pressure-sensitive screen for electronic signature capture
- Monochrome for text and graphics display
- Real-time signature rendering

Technical Specifications

Environmental

- Temperature: 32°F - 105°F (0°C to 40°C)
- Relative Humidity: 0 to 9% non-condensing

Power

- 200 mA @9 V dc
- Power source: 9 V unregulated AC adapter

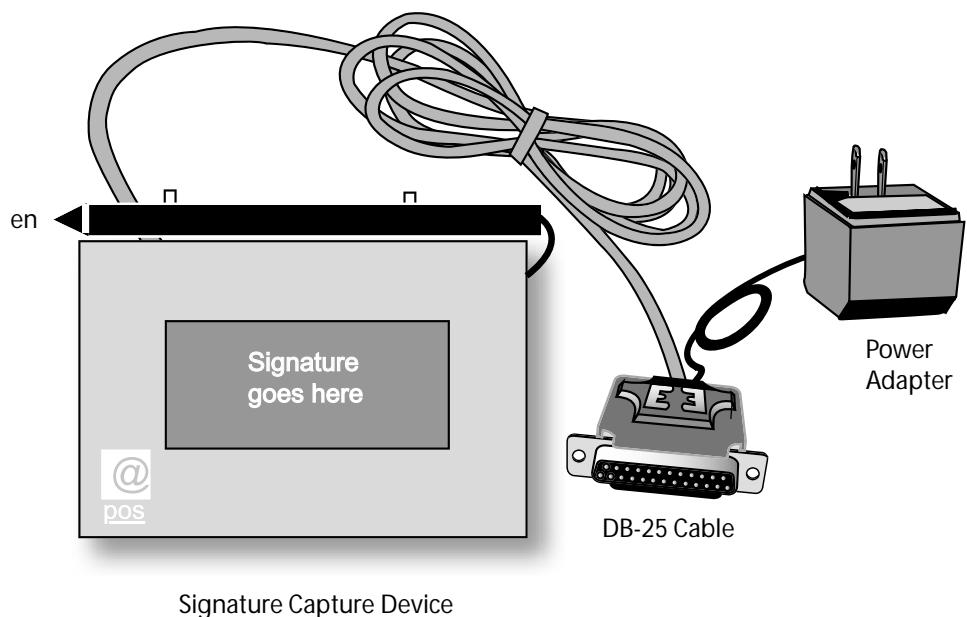
Communication

- RS-232 serial cable (DB-25)

Components of the @POS PenWare 120

The @POS PenWare 120 is made up of the following components:

- @POS Signature Capture pad
- DB-25 RS-232 communication cable (attached)
- Power adapter (attached)



Troubleshooting the @POS Signature Capture Device

1. Follow the Testing Procedure

See “Testing the Signature Capture Device.”

2. Inspect the Cable Connections

- 1 Ensure that the DB-25 cable is plugged into the DIGI Box or Edgeport.
- 2 Ensure that the power adapter is plugged into the power bar.

NOTE: *The pen does not require batteries. It does not need to be attached to the Signature Capture Device to function.*

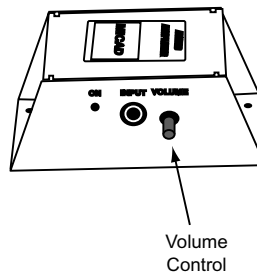
Speaker and Amplifier

Troubleshooting the Speaker and Amplifier

1. Inspect the Power Connections

- 1 Locate the Amplifier in the Customer Station casing.
- 2 Make sure that the LED on the Amplifier is on.
- 3 Make sure that the power cable is connected and secured to the Amplifier.
- 4 Make sure that the power adapter is properly connected and secured to the power bar.
- 5 Turn the volume dial on the Amplifier to cycle the power.

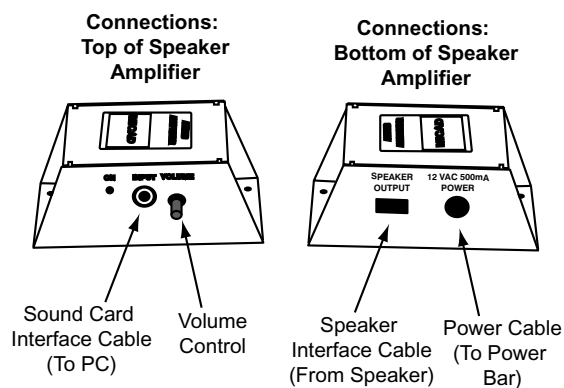
Top of Speaker
Amplifier



Troubleshooting the Speaker and Amplifier (Cont'd)

2. Inspect the Audio Connections

- 1 Locate the Speaker inside the Customer Station casing.
- 2 Make sure that the Speaker cables are properly secured to the Speaker terminals.
- 3 Locate the Amplifier inside the Customer Station casing.
- 4 Make sure that the sound card interface cable (RCA) is properly connected to the Amplifier.
- 5 Make sure that the Speaker interface cable is properly connected to the Amplifier.



- 6 Locate the Computer inside the Customer Station casing.
 - 7 Make sure that the sound card interface cable is plugged into the Speaker output on the Computer sound card.
-

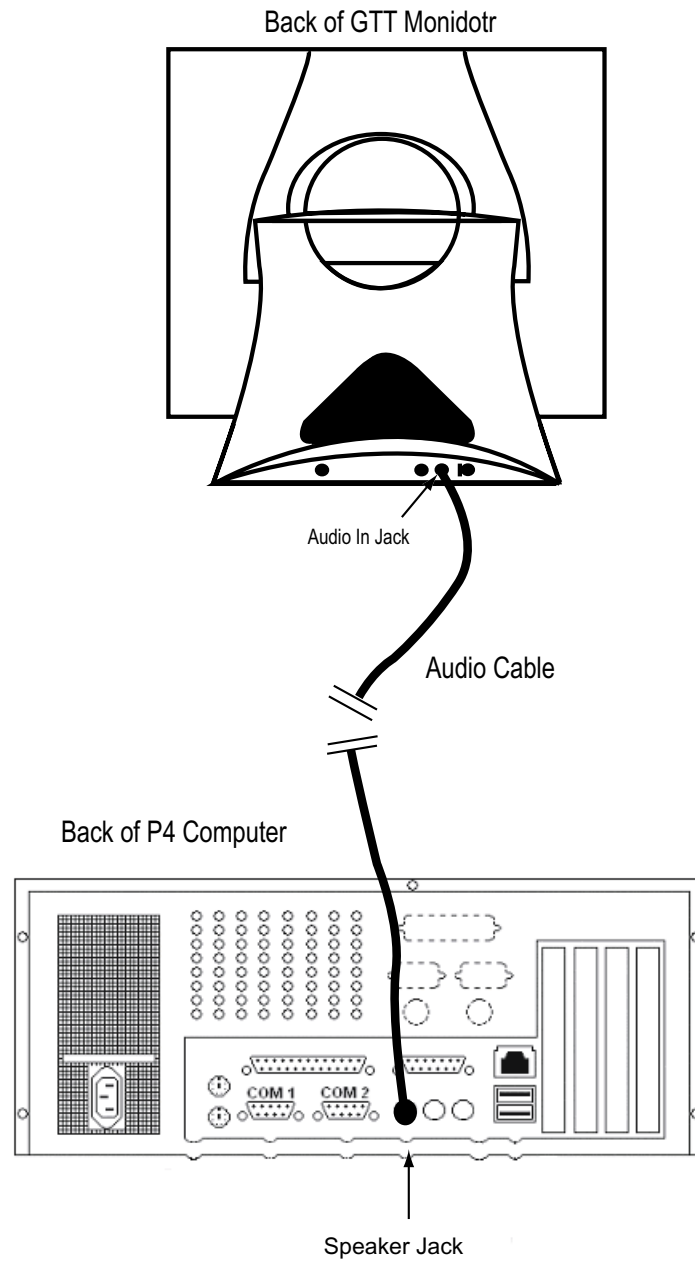
Troubleshooting the Speaker and Amplifier (*Cont'd*)

3. Inspect the Volume on the Amplifier

- 1 Put the Customer Station into **Maintenance Mode**.
- 2 In **Maintenance Mode**, set the volume to 100%.
- 3 Locate the Amplifier inside the Customer Station casing.
- 4 Set the volume on the Amplifier so that the volume is slightly louder than an acceptable level.
- 5 Use the **Maintenance Mode** utility to lower the volume to an acceptable level.
- 6 Access the **Launchpad** to start the Customer Station.

Speaker-4
Speaker_TB.fm
U-Scan Support Center: 1-800-204-0608

Attendant Station Sound System



The Attendant Station audio cable

- Is used only in a P4 system with a GTT Monitor
- Replaces the SEM Module at the Attendant Station

Technical Specifications

Environment

- Temperature: 50°F to 122°F (10° to 50°C)
- Relative Humidity: 90% non-condensing

Power Supply Requirements

- None

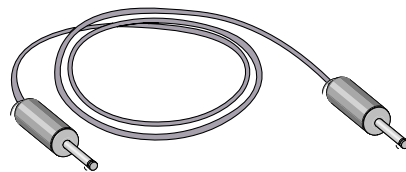
Communication

- Analog Audio

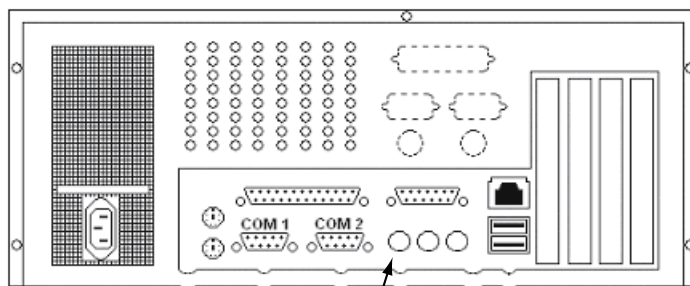
Components of the Attendant Station Sound System

The Attendant Station sound system includes the following components:

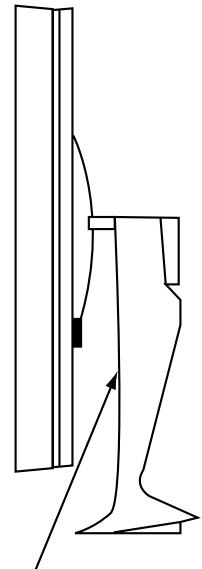
- On-board sound card
- Audio cable provided with GTT Monitor (6' M to M stereo headphone jack)
- Speakers (on GTT Monitor)



Audio Cable



P4 On-board Sound Card



GTT Monitor Speaker

Testing the Attendant Station Sound System in the Device Tester

1. Stop the Attendant Station Software

See “Stop the Attendant Station Software” at the beginning of this manual.

2. Check the Settings

- 1 In the Attendant Station **Device Test** window, select the **Beeper** tab.
 - 2 Ensure that the DLL is set to **Speaker.DLL**.
-

3. Test the Device

- 1 Click **Start**. If an error message appears in the **Messages** box, see “Troubleshooting the SEM Module.”
 - 2 Click **BEEP!**
If the test was successful, you hear a sound and the **Messages** box displays **It says it beeps**.
 - 3 Click **Stop**.
 - 4 Click **OK**.
-

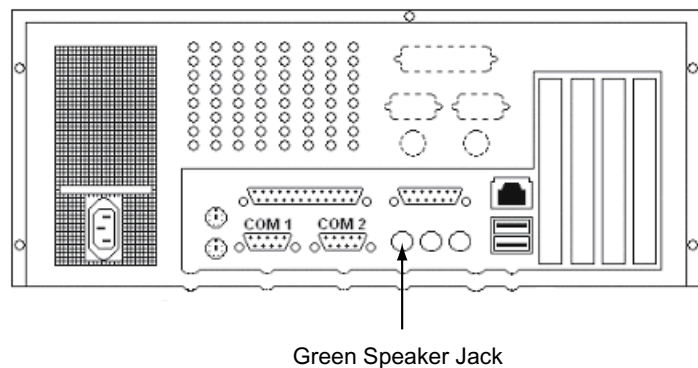
Troubleshooting the Attendant Station Sound System

1. Follow the Testing Procedure

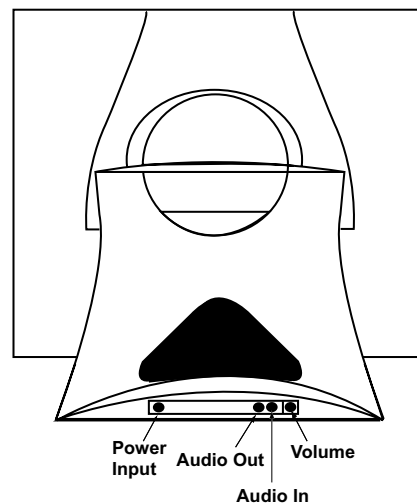
See “[Testing the Attendant Station Sound System in the Device Tester.](#)”

2. Inspect the Audio Cable

- 1 Ensure that the audio cable is connected to the green speaker jack on the Pentium 4 Computer.



- 2 Ensure that the audio cable is connected to the Audio In port on the back of the GTT Monitor.




3. Inspect the GTT Monitor Audio Input Settings

- 1 Locate the Volume/Power knob on the back of the GTT Monitor. Refer to the diagram above if necessary.
- 2 Turn the knob to ensure that the power is on.

Troubleshooting the Attendant Station Sound System (Cont'd)

- 3 Turn the Volume knob halfway to set the volume to 50%.
 - 4 Test the Attendant Station sound system in the **Device Tester** to verify the volume level.
 - a Stop the Attendant Station software.
 - b When the **Launchpad** appears, touch **Device Tester**.
 - c Enter the password (**1379**).
 - d Click the **Beeper** tab.
 - e Ensure that the DLL is set to **Speaker**.
 - f Click **Start**.
 - g Click **Beep**.
The message **It says it beeps** appears in the **Messages** box.
-

4. Inspect the Sound Card

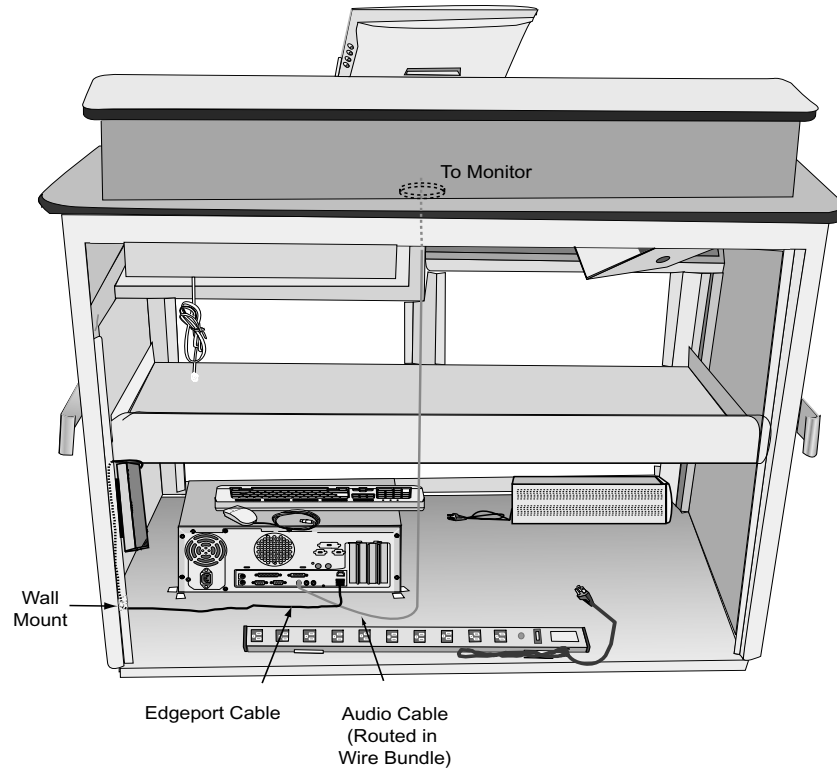
- 1 Go to **My Computer\Control Panel\Sounds and Multimedia**. The **Sound and Multimedia Properties** dialog box appears.
 - 2 Click the **Sounds** tab.
 - 3 Ensure that the **Sound Volume** is set halfway between **Low** and **High**.
 - 4 Play a sound in Windows 2000 to ensure that the sound card is working properly.
 - a In the **Sound Events** list, click **Default beep**.
 - b Click the **Play** icon. 
-

Replacing the Attendant Station Audio Cable

NOTE: *If you replace the audio cable, route the cable as it was routed before. DO NOT CHANGE THE ORIGINAL CABLE ROUTING.*

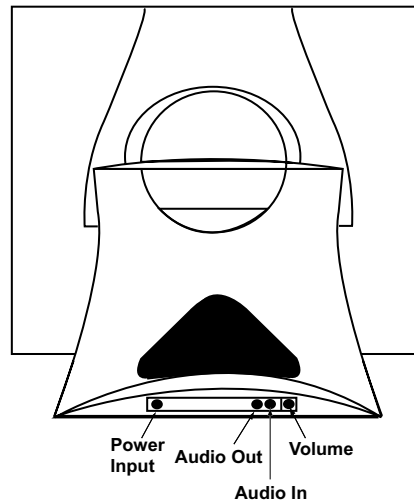
1. Remove the Attendant Station Audio Cable

- 1 Go to the U-Scan Attendant Station.
- 2 Locate the Audio cable from the sound card to the GTT Monitor.

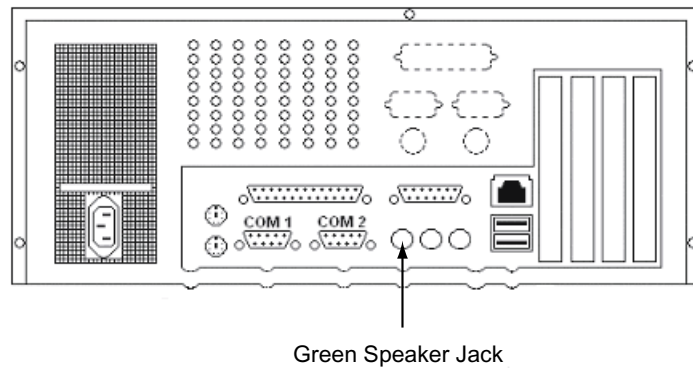


Replacing the Attendant Station Audio Cable (Cont'd)

- 3 Disconnect the audio cable from Audio In port on the back of the GTT Monitor.



- 4 Disconnect the audio cable from the speaker jack on the Computer.



2. Replace the Audio Cable

Perform “[Remove the Attendant Station Audio Cable](#)” in reverse.

POWERVER

Troubleshooting the POWERVER UPS



Ensure that only U-Scan components are to connected the U-Scan power bars. Connecting other components to the U-Scan power bars can overload the UPS.

1. Inspect the Power Connections

- 1 Locate the UPS inside the casing of the Attendant or the Customer Station.
- 2 Locate the UPS power cable.
- 3 Ensure that the UPS is connected to the isolated ground socket.
NOTE: *This socket is labeled with a black triangle.*
- 4 Locate the power bar power cable.
- 5 Ensure that the power bar power cable is plugged into one of the UPS battery backup sockets.

2. Check the Status of the Power Bar

- 1 Locate the power bar inside the casing of the Attendant or Customer Station.
 - 2 Ensure that the power bar is on.
 - 3 Locate the circuit breaker on the side of the power bar.
 - 4 Ensure that the circuit breaker is in the appropriate position.
 - 5 Reset the circuit breaker if it has been tripped.
 - 6 Shut down the Computer.
 - 7 Turn the power bar on and then off again to cycle the power.
-

Troubleshooting the POWERVAR UPS (Cont'd)

3. Check the Power Socket and Input AC Circuit Breaker

CAUTION: Only use a multimeter if you know how to use it. Set the multimeter to AC voltage.

- 1 Locate the socket (labeled with a black triangle) on the inside of the Customer or Attendant Station casing.
 - 2 Shut down the Computer.
 - 3 Power off the UPS.
 - 4 Unplug the UPS from the socket.
 - 5 Verify the status of the socket with a multimeter. The multimeter should measure 100-115 V ac.
- OR
- Plug the lane light into the socket and verify that the light turns on.
- 6 Locate the circuit breaker on the back of the UPS.
 - 7 Press the circuit breaker to reset the UPS.
 - 8 Locate the **SITE WIRING FAULT LED** on the back of the UPS.
 - 9 If the **SITE WIRING FAULT LED** is on, an electrician must check the socket.

4. Check the UPS Switch Settings

- 1 Locate the DIP switches on the back of the UPS.
 - 2 Ensure that the DIP switches are in the OFF position.
 - 3 Locate the **START-UP ON BATTERY** switch on the back of the UPS.
 - 4 Ensure that the **START-UP ON BATTERY** switch is set to the OFF position.
-

Troubleshooting the POWERVAR UPS (Cont'd)

5. Check the UPS Alarm Status

- 1 Ensure that the UPS is on.
 - 2 Verify the UPS LED status. (Refer to “POWERVAR Indicators and Controls” in “[Additional Information for the POWERVAR UPS.](#)”)
 - 3 If the UPS is emitting a tone, refer to “POWERVAR Troubleshooting Chart” in “[Additional Information for the POWERVAR UPS.](#)”
-

6. Perform the UPS Self Test

- 1 Locate the UPS inside the Customer or Attendant Station casing.
- 2 Ensure that the UPS is on.
- 3 Shut down the Computer.
- 4 Power off the power bar.
- 5 Press the **Test/Silence** button on the front of the UPS.
- 6 Ensure that the **Battery Mode** LED turns on briefly.

Additional Information for the POWERVAR UPS

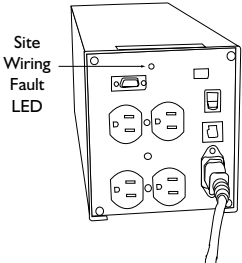
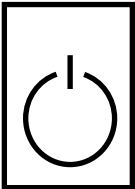

Use the following table to troubleshoot problems with the POWERVAR UPS. Before you begin to troubleshoot, ensure that you have checked the following conditions:

- The POWERVAR is plugged into a functioning socket.
- The line voltage to the POWERVAR is within the specified range.
- The circuit breaker on the back of the POWERVAR had been reset.

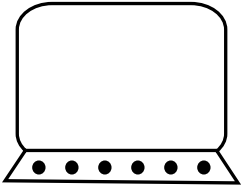



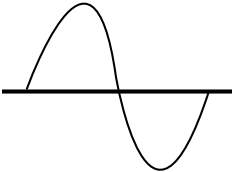
POWERVAR Troubleshooting Chart

Problem	Possible Causes	Solutions
The UPS cannot be turned on and there is no audible alarm.	The On/Off button was not pressed long enough.	<ul style="list-style-type: none"> • Press and hold the On/Off button for at least 3 seconds. • Check the socket that POWERVAR is plugged in to. Test the socket for line voltage. • Plug in the input power cable. • Reduce the load on the UPS and reset the circuit breaker.
The Overload LED is on and a continuous audible alarm sounds.	The POWERVAR is overloaded.	<ul style="list-style-type: none"> • Remove any device (except the PC) from the POWERVAR output to reduce the load on the POWERVAR. If the Overload LED extinguishes, contact the U-Scan Support Center.
The Low/Replace Battery LED is on.	The battery voltage is too low or the battery is dead.	<ul style="list-style-type: none"> • Charge the battery for at least 6 hours, then reset the POWERVAR. • If the LED still comes on after you charge the battery, replace the battery.
The Site Wiring Fault LED is on.	There is a problem with the site wiring.	Call an electrician to check the site wiring.
The UPS does not provide the expected backup time.	The battery is not fully charged or the battery is dead.	<ul style="list-style-type: none"> • Charge the battery for approximately 6 hours and then test it again.
The POWERVAR functions normally, but the computer will not turn on.	The computer input power cable is loose or is not connected.	Connect the computer input power cable.
The UPS beeps occasionally.	The UPS is operating normally.	No action is required.

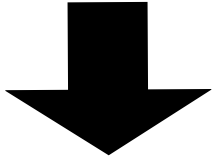
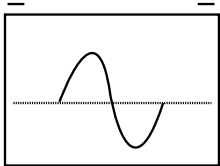
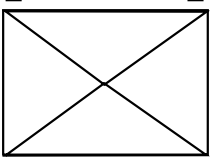
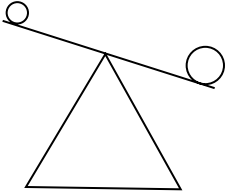
POWERVAR Indicators and Controls

Label or Position	Name	Status on start-up	Function
	Site Wiring Fault LED	N/A	<p>Illuminates when the POWERVAR is connected to an AC socket that is improperly wired. The Site Wiring Fault LED illuminates to indicate that a safety ground wire is missing or that the phase and neutral wiring is reversed.</p> <p>NOTE <i>Check this LED during installation. If it illuminates, call an electrician.</i></p>
	On/Off button	N/A	<p>Turns the POWERVAR on or off if pressed for more than 3 seconds. If the Start Manager's back panel switch is enabled when you press the On/Off button, the POWERVAR "cold-starts" on its internal battery.</p>
	Test/Silence button	N/A	<p>Activates the self-test mode when the POWERVAR is operating on AC power. During the self-test mode, the POWERVAR tests the battery and inverter before it returns to AC supply. Close all open files before you initiate a self test.</p> <p>The POWERVAR sounds an alarm when the AC power fails. The Test/Silence button silences this alarm. The alarm sounds again when the battery power begins to run low.</p>

POWERVAR Indicators and Controls

Label or Position	Name	Status on start-up	Function
	Load Monitor LEDs	OFF	Show the current load percentage. The first four LEDs each indicate approximately 20% of the load. When the last LED is on, it indicates that the equipment connected to the POWERVAR is consuming 110% of the rated capacity.
	Battery Monitor LEDs	ON <i>NOTE</i> <i>Some of the Battery Monitor LEDs may be off if the battery charge state is low.</i>	Show the charge capacity of the internal battery (0 - 100%). Each LED indicates approximately 20% of the full charge.
	Outlet Monitor LEDs	All ON	These LEDs indicate the output outlet status as controlled by the Configuration Manager. The Configuration Manager treats the outlets 1 and 2 (Bank 1) as a group. Outlets 3 and 4 (Bank 2) are also a group. You cannot control outlets 1 and 2 or outlets 3 and 4 separately. You can only control Bank 1 and Bank 2 separately.
	Voltage Manager Boost	OFF	Illuminates when the Voltage Manager detects a low voltage condition and compensates by increasing the voltage to the POWERVAR input.
	Voltage Manager Normal	ON	Illuminates when the Voltage Manager determines that the input line voltage is normal and within parameters.

POWERVAR Indicators and Controls

Label or Position	Name	Status on start-up	Function
	Voltage Manager Buck	OFF	Illuminates when the Voltage Manager detects an overvoltage condition and compensates by reducing the voltage to the POWERVAR input.
	Battery Mode LED	OFF	Illuminates when the AC power is lost or the Test/Silence button is pressed to start a self test. In Battery Mode, the POWERVAR operates on its internal batteries. This LED stays on until the AC power returns or until the self test is complete.
	Battery Weak LED	OFF	Illuminates when the battery needs to be charged or replaced. If the LED is still on after the batteries have been charged for 12 hours, replace the internal batteries.
	Overload LED	OFF	Illuminates when the POWERVAR is overloaded. Reduce the load by disconnecting any (except the PC) from the POWERVAR. If the LED goes out, contact the U-Scan Support Center. NOTE <i>The POWERVAR may shut down if it operates in an overloaded condition.</i>

Configuration Manager

The Configuration Manager controls the operation parameters of the POWERVAR through the DIP switches on the back panel.

DIP Switch Settings for 120V/240V

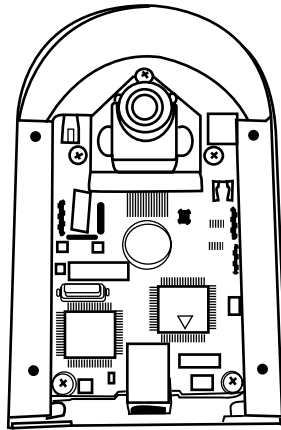
1	OFF
2	OFF
3	OFF
4	Not used

Operational Tests

Test the backup function

- 1 Power off the connection equipment.
- 2 Press the **Test/Silence** button on the front panel.
The **Battery Mode** LED illuminates briefly.
OR
Unplug the input power cable of the POWERVAR.
The POWERVAR beeps every four seconds while the power cable is unplugged.
The **Battery Mode** LED illuminates constantly.
- 3 Power on the Computer.
- 4 Ensure that the **Overload** LED is off.
- 5 If the **Overload** LED is on, remove the least critical devices until the **Overload** LED extinguishes.
- 6 Press the **Test/Silence** button again or unplug the UPS to perform the backup test again.

Customer Station USB Camera



The USB Camera has the following features:

- Low light sensitivity (<1 lux)
- Resolutions: 1280x960, 640x480, 352x288, 320x240, 176x144, 160x120, and 128x96
- Frame rates by resolution: 15 fps at 640 x 480; 30 fps at 320 x 240; 60 fps at 160 x 120.
- Exposure control: manual and automatic gain and shutter control, automatic white balance, manual color balance, color saturation controls
- Color formats: 16,8 million TrueColor (24-bit RGB), RGB555
- Grayscale formats: YUV16, YUV12, YUV9 and 256 (8-bit B&W)
- Compression: VLCE lossless compression technology
- Lens: removable 6.5mm F:2.0 adjustable focus
- Sensor: color CCD
- Scan frequencies: 60, 50, 30, 25, 15, 12,5, 7.5, 6.25, and 4 Hz
- Shutter rate controls: 1/4 second to over 1/30 000 second

As part of the U-Scan system, the USB Camera allows the attendant to view the Customer Station Scanner Scale directly on the **Main Screen** of the U-Scan Attendant Station. The lane window displays the picture of the items on the Scanner Scale as shown below.



Technical Specifications

Power Supply Requirements

None (USB-powered)

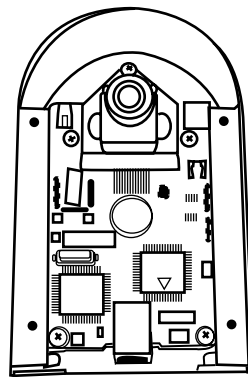
Communication

USB cable to lower USB port on Computer

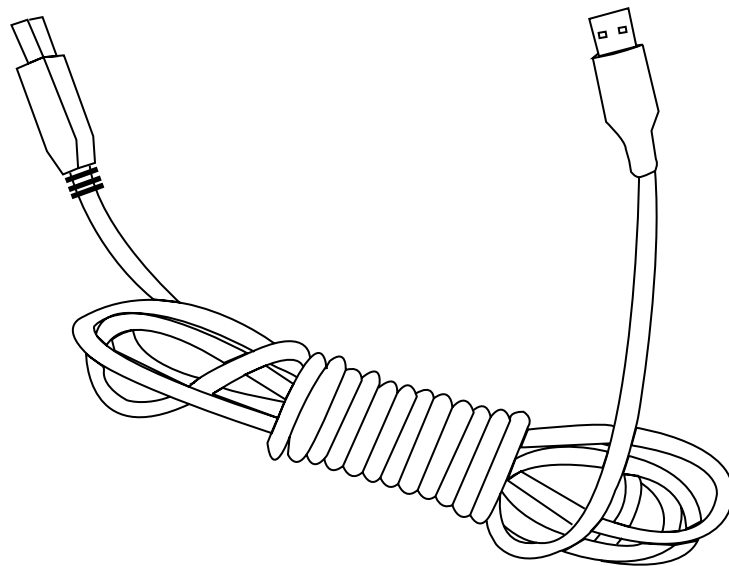
Components of the USB Camera

The USB Camera includes the following components:

- USB Camera
- USB Camera cable



USB Camera



USB Camera Cable

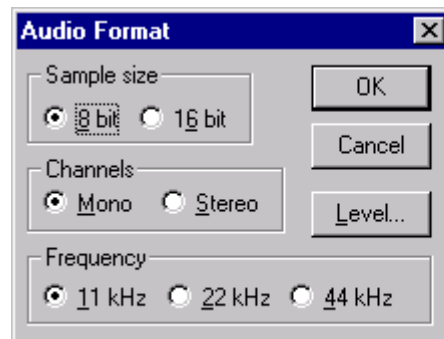
Troubleshooting the USB Customer Station Camera

1. Inspect the Cable Connections

- 1 Locate the Camera cable.
 - 2 Ensure that the Camera cable is properly connected to the lower USB port of the Computer.
-

2. Verify the Software Settings

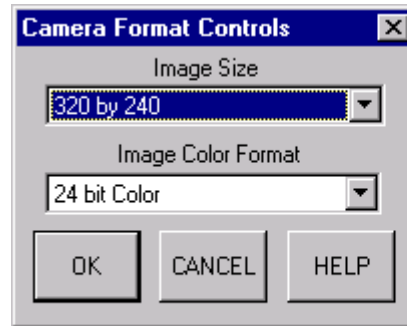
- 1 Go to **Start>Programs>ViCam Utilities>VicamVidcap** and start the utility.
- 2 Ensure that you are getting an image from the Camera.
- 3 In the **VicamVicap** utility, go to **Options>Audio Format**. The **Audio Format** dialog box appears.
- 4 Refer to the diagram below for the correct settings.



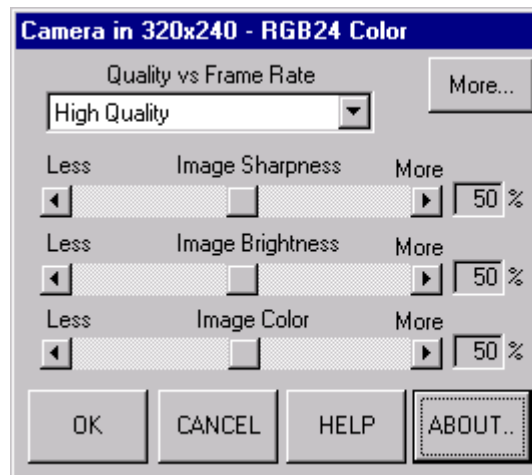
- 5 Correct the settings if necessary.
- 6 Click **OK**.
- 7 In the **VicamVicap** utility, go to **Options>Video Format**. The **Camera Format Controls** dialog box appears.

Troubleshooting the USB Customer Station Camera (Cont'd)

- 8 Refer to the diagram below for the correct settings.



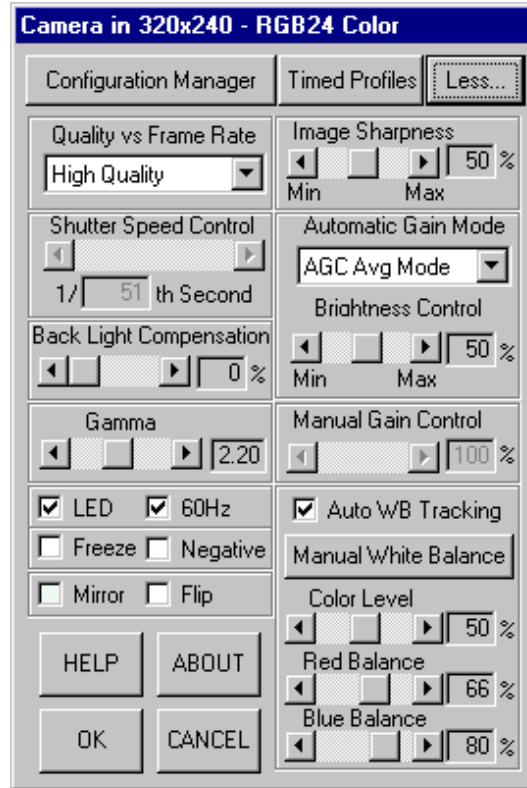
- 9 Correct the settings if necessary.
- 10 Click **OK**.
- 11 In the **Vicam Vidcap** utility, go to **Options>Video source**.
The **Camera in 320x240 - RGB24 Color** dialog box appears.
- 12 Refer to the diagram below for the correct settings.



- 13 Correct the settings if necessary.
- 14 Click **OK**, but do not close the **Camera in 320x240 - RGB24 Color** dialog box.
- 15 Click **More...**
A more detailed settings dialog box appears.

Troubleshooting the USB Customer Station Camera (Cont'd)

- 16 Refer to the diagram below for the correct settings.



NOTE: *The settings **Manual Gain Control**, **Red Balance**, and **Blue Balance** fluctuate.*

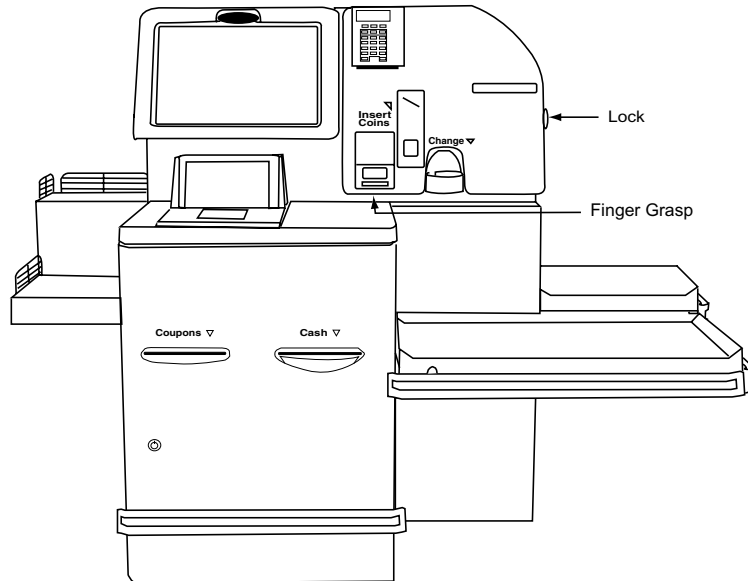
- 17 Correct the settings if necessary.
- 18 Click **OK**.
- 19 Exit the **Vicam Vicap** utility.

Replacing the USB Customer Station Camera

NextGen Station

1. Access the Monitor

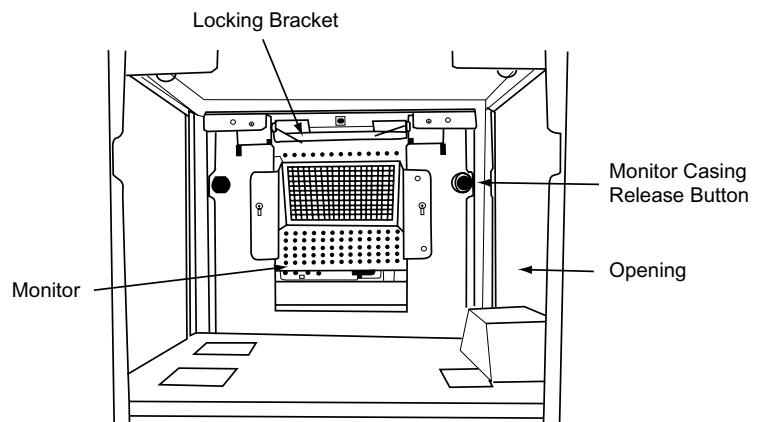
- 1 Pull out the front tray.
 - a Locate the lock on the side of the casing.



- b Insert the key in the lock and turn it 1/4 of a turn.
 - c Locate the finger grasp under the Bill Acceptor.
 - d Grasp the handle with one hand and place your other hand on the rounded edge of the plastic cover.
 - e Pull the casing toward you until it is fully extended.

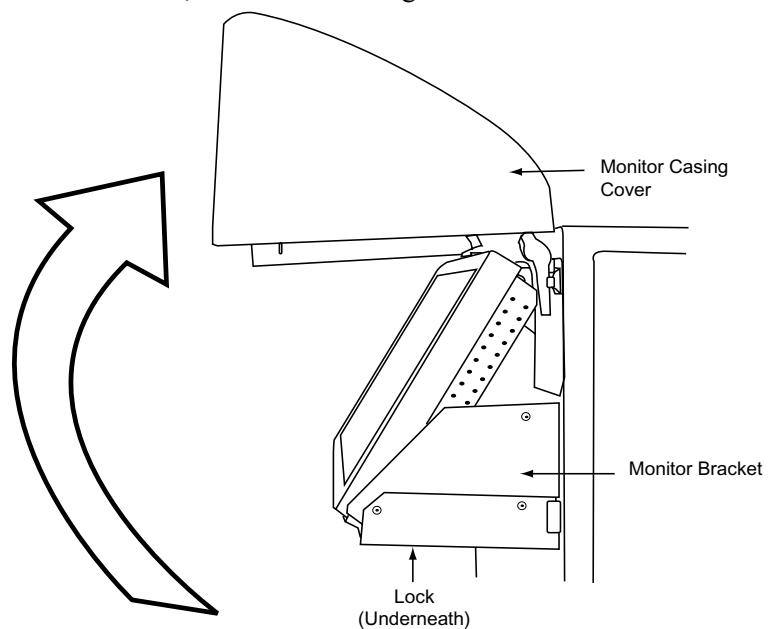
Replacing the USB Customer Station Camera (Cont'd)

- 2 Reach through the opening and locate the Monitor casing release button inside the Monitor casing.



Rear View: Monitor

- 3 Press the button, then lift the casing cover.

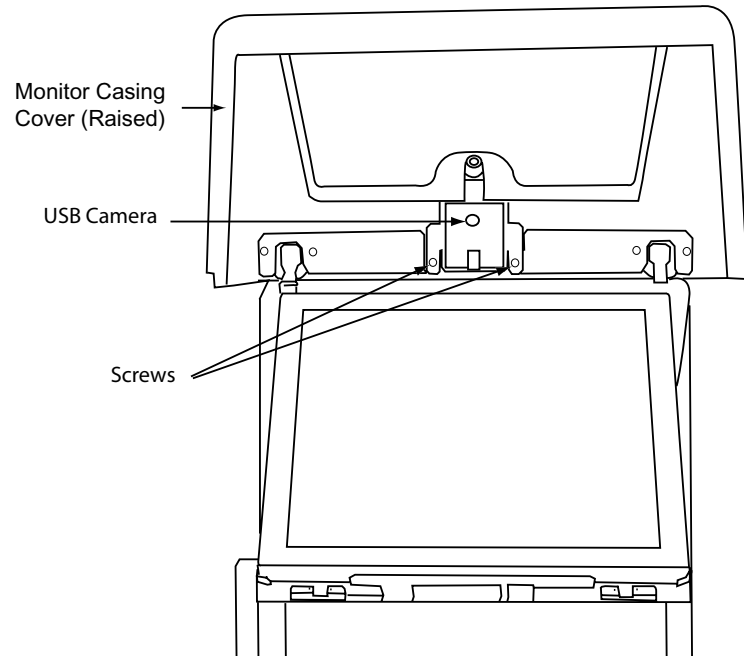


2. Removing the USB Camera

- 1 Locate the USB Camera.
- 2 Disconnect the USB Camera cable.

Replacing the USB Customer Station Camera (Cont'd)

- 3 Remove the two screws that secure the USB Camera to the casing.



- 4 Slide the USB Camera out of the casing.

3. Replacing the USB Camera

- 1 Slide the USB Camera into position.
 - 2 Fasten the two screws that secure the USB Camera to the casing.
 - 3 Connect the USB cable.
 - 4 Close the front cover of the Monitor casing.
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Additional Information for the USB Camera

Installing the USB Camera Drivers

Procedure Requirements:

- **ViCAM6858.exe** copied from the FTP site (**205.205.27.5\Optimal-FTP\optimal\Drivers\NT5\3COM_CAM**) for Windows 2000 systems

1. Disconnect the USB Camera

Disconnect the USB Camera cable from the lower USB port on the Computer.

2. Install the USB Camera Driver


- 1 Locate the file **ViCAM6858.exe** on your laptop.
OR
Insert the diskette on which **ViCAM6858.exe** is copied.
- 2 Double-click **ViCAM6858.exe**.
The **ViCAM Utilities** dialog box appears.
- 3 Click **Finish**.
The **ViCAM Color Digital Video Camera Utilities Setup Welcome** dialog box appears.
- 4 Click **Next**.
The **Software License Agreement** dialog box appears.
- 5 Click **Yes** to accept the terms of the Software License Agreement.
The **Choose Destination Location** dialog box appears.

Installing the USB Camera Drivers (*Cont'd*)

- 6 Click **Next** to accept the default location (**C:\Program Files\ViCAM**).
The **Select Program Folder** dialog box appears.
 - 7 Click **Next** to accept the default program folders (**ViCAM Utilities**).
The **Start Copying Files** dialog box appears.
 - 8 Confirm that your selections are correct.
 - 9 Click **Next**.
The USB Camera drivers install.
 - 10 The **Setup Complete** dialog box appears.
 - 11 Click **Finish** to restart the Computer.
-

3. Test the USB Camera

- 1 Connect the USB Camera cable to the lower USB port on the Computer.
 - 2 Go to **Start>Programs>ViCAM Utilities>ViViewer**.
 - 3 Ensure that the image from the USB Camera displays on the screen.
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FUJITSU

T H E P O S S I B I L I T I E S A R E I N F I N I T E