VX 820 DUET

Reference Guide
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Maintenance and Cleaning
Cleaning the VX 820 DUET

CHAPTER 6
Troubleshooting Guidelines
Fixing an Unresponsive Printer
Fixing a Printer Paper Jam

CHAPTER 7
Service and Support
Service Returns
Accessories and Documentation
Power Supply
Thermal Printer Paper
Power Cord
Documentation
Use this guide as the primary source of information for setting up and installing the VX 820 DUET.

**Audience**

This guide provides a simple description of the VX 820 DUET’s features as well as basic information for the device’s installation and configuration.

**Organization**

This guide is organized as follows:

**Chapter 1, Terminal Overview.** Provides an overview of the VX 820 DUET.

**Chapter 2, Setup.** Explains the setup and installation of VX 820 DUET, selecting its location, and establishing connections with other devices.

**Chapter 3, Verix Terminal Manager.** Describes password-controlled, Verix Terminal Manager operations, as well as how to use it to perform a variety of test and configuration procedures.

**Chapter 4, Specifications.** Discusses power requirements and dimensions of the VX 820 DUET.

**Chapter 5, Maintenance and Cleaning.** Explains maintenance of the VX 820 DUET.

**Chapter 6, Troubleshooting Guidelines.** Provides troubleshooting guidelines for problem related to the VX 820 DUET’s installation and configuration.

**Chapter 7, Service and Support.** Provides information for contacting your local VeriFone service provider and on how to order accessories or documents from VeriFone.
To learn more about VX 820 DUET, refer to the following set of documents:

- VX 820 Certifications and Regulations Sheet  
  VPN - DOC282-001-EN-A
- VX 820 Quick Installation Guide  
  VPN - DOC282-002-EN-A
- VX 820 Installation Guide  
  VPN - DOC282-003-EN-A
- VX 820 Reference Guide  
  VPN - DOC282-004-EN-A
- VX 820 Stylus Quick Installation Guide  
  VPN - DOC282-005-EN-A
- VX 820 Stand Adaptor Quick Installation Guide  
  VPN - DOC282-006-EN-A
- VX 820 DUET Certifications and Regulations Sheet  
  VPN - DOC282-011-EN-A
- VX 820 DUET Quick Installation Guide  
  VPN - DOC282-012-EN-A
- VX 820 DUET Installation Guide  
  VPN - DOC282-013-EN-A
- Verix eVo Volume I: Operating System Programmers Manual  
  VPN - DOC00301
- Verix eVo Volume II: Operating System and Communication Programmers Manual  
  VPN - DOC00302
  VPN - DOC00303
Various conventions are used to help you quickly identify special formatting. Table 1 describes these conventions and provides examples of their use.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blue</strong></td>
<td>Text in blue indicates terms that are cross references.</td>
<td>See Guide Conventions.</td>
</tr>
<tr>
<td><strong>Italics</strong></td>
<td>Italic typeface indicates book titles or emphasis.</td>
<td>You <em>must</em> not use this unit underwater.</td>
</tr>
<tr>
<td><strong>NOTE</strong></td>
<td>The pencil icon is used to highlight important information.</td>
<td>RS232-type devices do not work on the VX 820 DUET communication port.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
<td>The caution symbol indicates hardware or software failure, or loss of data.</td>
<td>The unit is not waterproof or dustproof, and is intended for indoor use only.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
<td>The lighting symbol is used as a warning when bodily injury might occur.</td>
<td>Due to risk of shock do not use the terminal near water.</td>
</tr>
</tbody>
</table>
**Acronym Definitions**  
Various acronyms are used in place of the full definition. Table 2 presents acronyms and their definitions.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definitions</th>
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<tr>
<td>AC</td>
<td>Alternating Current</td>
</tr>
<tr>
<td>DC</td>
<td>Direct Current</td>
</tr>
<tr>
<td>ECR</td>
<td>Electronic Cash Register</td>
</tr>
<tr>
<td>ITP</td>
<td>Internal Thermal Printer</td>
</tr>
<tr>
<td>LCD</td>
<td>Liquid Crystal Display</td>
</tr>
<tr>
<td>MSAM</td>
<td>Micromodule-size Security Access Module</td>
</tr>
<tr>
<td>MSR</td>
<td>Magnetic Stripe Reader</td>
</tr>
<tr>
<td>OS</td>
<td>Operating System</td>
</tr>
<tr>
<td>PC</td>
<td>Personal Computer</td>
</tr>
<tr>
<td>PIN</td>
<td>Personal Identification Number</td>
</tr>
<tr>
<td>POS</td>
<td>Point-of-Sale</td>
</tr>
<tr>
<td>RAM</td>
<td>Random Access Memory</td>
</tr>
<tr>
<td>RJ45</td>
<td>Registered Jack 45</td>
</tr>
<tr>
<td>RS232</td>
<td>Recommended Standard 232</td>
</tr>
<tr>
<td>SAM</td>
<td>Security Access Module</td>
</tr>
<tr>
<td>SDIO</td>
<td>Secure Digital Input/Output</td>
</tr>
<tr>
<td>SC</td>
<td>Smart Card (Integrated Chip Card)</td>
</tr>
<tr>
<td>UART</td>
<td>Universal Asynchronous Receiver-Transmitter</td>
</tr>
<tr>
<td>USB</td>
<td>Universal Serial Bus</td>
</tr>
</tbody>
</table>
Terminal Overview

This chapter provides a brief description of the VX 820 DUET.

**VX 820 DUET**

The VX 820 DUET is a complimentary solution for the VX 820. The VX 820 takes the most usable and ergonomic hand-held PIN pad payment device and takes it to a new level by adding a color touchscreen display, a larger keypad, and integrated contactless capability. The addition of the VX 820 DUET, which includes the base with the PIN pad, provides banking sector customers with a competitively-priced high-end countertop solution. It also provides merchants with a stable platform where they can place the PIN pad for handling PIN entry and contactless activity.

**Features at a Glance**

The following is a list of features of the VX 820 DUET:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Thermal Printer</strong></td>
<td>• Below 18 lines per second (LPS).</td>
</tr>
<tr>
<td></td>
<td>• Supports a 47mm wide by 25 meter long paper roll</td>
</tr>
<tr>
<td></td>
<td>• Out-of-Paper Sensor</td>
</tr>
<tr>
<td></td>
<td>• Double-height, double-width print and inverse printing</td>
</tr>
<tr>
<td></td>
<td>• Print column width option for 24/32/42 characters/line</td>
</tr>
<tr>
<td></td>
<td>• Supports existing PIN pad fonts</td>
</tr>
<tr>
<td></td>
<td>• Supports Eurocurrency symbol</td>
</tr>
<tr>
<td></td>
<td>• Supports up to ten user downloadable logos within a 16x16 to 240x384 size</td>
</tr>
<tr>
<td></td>
<td>• Supports 256 Kbytes of user downloadable fonts</td>
</tr>
<tr>
<td><strong>Terminal Interface</strong></td>
<td>• USB Host Port with a 5Vdc, 500mA power supply</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>• Supports powered 4-wire serial port</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>• 56 Kbps Standard Dial-up Modem (Conexant ‘Harley’ chipset solution) with RJ11 connector at the back of the base</td>
</tr>
<tr>
<td></td>
<td>• 10/100 Base T Ethernet with RJ45 connector at the back of the base</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>• Supplied by an external universal-input power supply (9.3 VDC/4A)</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>• Verix eVo OS</td>
</tr>
<tr>
<td><strong>Printer Firmware</strong></td>
<td>• New printer firmware developed based on STM MCU STM32F103VCT6 plus Seiko thermal printer mechanism LTPJ245G-S384-E.</td>
</tr>
</tbody>
</table>
Table 3  VX 820 DUET Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>• Verix-Ported Applications</td>
</tr>
<tr>
<td></td>
<td>• SoftPay</td>
</tr>
<tr>
<td></td>
<td>• Custom developed applications</td>
</tr>
<tr>
<td>Firmware Upgrades</td>
<td>• Printer firmware can be upgraded by downloading a new firmware file to the VX 820.</td>
</tr>
<tr>
<td>Tools</td>
<td>• SDK: Compiler, linker, debugger, and other application tools</td>
</tr>
<tr>
<td>Modem Country Profile</td>
<td>• Modem country profile should reside in OS and loaded to Conexant ‘Harley’s modem chip through USB upon power-up.</td>
</tr>
</tbody>
</table>
Setup

This chapter describes the setup procedure for VX 820 DUET, in the following sections:

• Selecting a Location
• Unpacking the Shipping Carton
• Examining the VX 820 DUET Features
• Managing Cable Connections
• Managing the Power Supply

Selecting a Location

Use the following guidelines to select a location for the VX 820 DUET.

Ease of Use

• Select convenient location for both merchant and cardholder.
• Select a flat support surface, such as a countertop or table.
• Select a location near a power outlet and the terminal, ECR, or computer connected to the VX 820 DUET. For safety, do not string cables or cords across a walkway.

Environmental Factors

• Do not use the unit where there is high heat, dust, humidity, moisture, or caustic chemicals or oils.
• Keep the unit away from direct sunlight and anything that radiates heat, such as a stove or a motor.
• Do not use the VX 820 DUET outdoors.

CAUTION

The VX 820 DUET is not waterproof or dustproof, and is intended for indoor use only. Any damage to the unit from exposure to rain or dust can void any warranty.
**SETUP**

**Unpacking the Shipping Carton**

- **Electrical Considerations**
  - Avoid using this product during electrical storms.
  - Avoid locations near electrical appliances or other devices that cause excessive voltage fluctuations or emit electrical noise (for example, air conditioners, electric motors, neon signs, high-frequency or magnetic security devices, or computer equipment).
  - Do not use the VX 820 DUET near water or in moist conditions.

<table>
<thead>
<tr>
<th>WARNING</th>
<th>Due to risk of shock or damage, do not use the VX 820 DUET near water, including a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.</th>
</tr>
</thead>
</table>

**Unpacking the Shipping Carton**

Open the shipping carton and carefully inspect its contents for possible tampering or shipping damage. The VX 820 DUET is a secure product and any tampering can cause it to cease to function or to operate in an unsecured manner.

1. Remove and inspect the contents of the shipping carton. The VX 820 DUET carton includes the following components:
   - VX 820 DUET Base
   - VX 820 DUET PIN Pad
   - Cable (connecting the PIN Pad to the base)
   - Power pack
   - Power cord
   - Paper Roll

2. Remove all plastic wrapping from the components.

3. Save the shipping carton and packing material for future repacking or moving of the device.

<table>
<thead>
<tr>
<th>WARNING</th>
<th>Do not use a unit that has been tampered or damaged.</th>
</tr>
</thead>
</table>

- The VX 820 DUET comes equipped with tamper-evident labels. If a label or component appears damaged, please notify the shipping company and your VeriFone service provider immediately.

| NOTE | The package can, or most likely will contain the PIN pad and possibly other accessories that are included in a standard terminal package. |
Examining the VX 820 DUET Features

Before you continue with the installation process, familiarize yourself with the VX 820 DUET features:

The VX 820 DUET includes the following features:

- The **PIN pad Cradle** where the VX 820 is placed.
- A **Power Socket** where the power cable is plugged.
- A **Paper Door** where the paper roll is placed.
- An **Internal Thermal Printer** at the below paper door for printing.
- A **USB Port**.
- A **PIN Pad Port** for connecting the DUET to a VX 820.
- A **Serial Port**
- An **Ethernet (10BaseT) Port**.
- A **Phone Line Port**.
Connecting the VX 820 DUET Base to a VX 820 PIN Pad

Connect the VX 820 DUET to the VX 820 using the following steps:

1. Unscrew the latch on the upper-right corner of the rear VX 820’s back then slide it open.

Figure 2 Removing the Latch

2. Attach the connector to the slot then screw the latch back on.

Figure 3 Attaching the Connector
3 Place the VX 820 on the VX 820 DUET base.

![Figure 4 Mounting the VX 820](image)

4 Insert the power plug into the socket on the right side of the DUET Base.

![Figure 5 Connecting the Power Cord](image)

**NOTE**

The cable from VX 820 PIN Pad needs to be connected to the VX 820 DUET Base first before the power supply can be plugged in.

The VX 820 DUET does not have an LED to indicate if it is powered on. To verify if the connection is working and the unit is indeed powered on, use the backlight of the VX 820's LCD as a reference.

**CAUTION**

Using an incorrectly rated power supply can damage the unit or cause it not to work properly. Use only a power pack with VPN CPS10936-3F-(R) (see Specifications for detailed power supply specifications).
Installing a Paper Roll

A fast, quiet integrated thermal printer (ITP) is built into the VX 820 DUET Base. Before you can process transactions in the VX 820 PIN Pad that require a receipt or record, you must install a roll of thermal-sensitive paper in the printer.

The ITP uses a roll of single-ply, thermal sensitive (VPN PPR252-001-01-A). A pink out-of-paper indicator line appears at paper’s the edge towards the end of the roll indicating that there is enough paper remaining to complete at least one last transaction.

**CAUTION**

Poor-quality paper can jam the printer and create excessive paper dust. To order high-quality VeriFone paper, refer to Accessories and Documentation.

Store thermal paper in a cool, dry, dark area. Handle thermal paper carefully: impact, friction, temperature, humidity, and oils affect the color and storage characteristics of the paper.

Never load a roll paper with folds, wrinkles, tears, or holes at the edges in the print area.

To install a Paper Roll

1. Lift the paper door up.

2. Lift the paper tray and remove any partial roll of paper.

3. Hold the roll so the paper feeds from the bottom of the roll.
4  Place the paper roll into the printer tray.

Figure 7  Loading Paper Roll

5  Pull the paper up past the glue residue on the paper roll.

6  Close the paper roll cover by gently pressing on the cover until it clicks, allowing a small amount of paper past the glue residue to extend outside the printer door.

CAUTION
To prevent damaging the print roller, always gently press down on the paper roll cover to close it.

7  Tear the paper off against the serrated strip in the printer.

Figure 8  Closing Paper Door
Managing Cable Connections

The VX 820 DUET has five ports to facilitate different types of cable connections:

1. Phone Line Connection
2. Ethernet Connection
3. Direct USB Connection
4. RS232 Connection
5. Serial PIN pad Port Connection

Serial PIN pad Port Connection

Connect the VX 820 PIN Pad to the DUET Base through the PIN pad port. See Connecting the VX 820 DUET Base to a VX 820 PIN Pad.

Figure 9  VX 820 PIN Pad Connected via Phone Line

Phone Line Connection

Connect the VX 820 to a phone line outlet or modem using a standard phone line cable through the DUET base connection ports. Connect one end of the cable to the phone line port at the back of the DUET and the other into a any standard phone outlet.

Figure 10  VX 820 DUET Connected via Phone Line
**Ethernet Connection**

Connect the VX 820 to a network or to another device with an ethernet port using a standard RJ-45 ethernet cable through the DUET base connection ports. Connect one end of the ethernet cable to the appropriate port at the back of the DUET Base and the other into its corresponding socket.

![Figure 11 VX 820 DUET Connected via Ethernet Cable](image)

**Direct USB Connection**

Connect the VX 820 to other USB enabled devices such as a bar code reader with a standard USB cable through the DUET Base connection ports. Connect one end of the USB cable to the corresponding port at the back of the DUET Base and the other end to the desired device.

![Figure 12 VX 820 DUET Connected via USB Cable](image)
RS232 Connection
Connect the VX 820 to other devices such as an electronic cash register using a standard RS232 cable through the DUET Base connection ports. Connect one end of the RS232 cable to the corresponding socket at the back of the DUET Base and the other end to the desired related device.

Managing the Power Supply
Before connecting a power supply, disconnect the power pack cord from the power outlet.

Connect and route all cables between the VX 820 DUET, ECR, and PC before plugging the power pack cord into a wall outlet or surge protector.

WARNING
Do not plug the power pack into an outdoor outlet or operate the VX 820 DUET outdoors. Also, disconnecting power during a transaction can cause transaction data files not yet stored in memory to be lost.

NOTE
To protect against possible damage caused by lightning strikes and electrical surges, VeriFone recommends installing a power surge protector.
Terminal Manager

This chapter describes a category of device functions called Terminal Manager Operations. For more information on Terminal Manager Operations, please refer to the VX 820 Reference Guide (VPN DOC282-004-EN-A):

- Press ENTER and 7 keys at the same time and enter the password to open the Verix Terminal Manager (VTM).
- Since files are loaded into specific groups, VTM users can view files, delete files, and manage configuration variables.
- Use the system and file group passwords to secure applications and information on the device.
- Use the Terminal Manager menus and submenus to configure devices; download and debug applications; perform diagnostics such as changing console settings, managing keys and view device information; and perform routine tests and device maintenance.

Verix Terminal Manager is used exclusively by those responsible for configuring, deploying, and managing on-site VX 820 device installations. Since VX 820 DUET is used with the VX 820, the Terminal Manager mode for the DUET is dependent on the VX 820 with a few changes (see Terminal Manager Changes).

### Using the Terminal Manager

Use the Verix Terminal Manager functions to perform different subsets of related tasks:

- **Application programmers** configure a development device, download development versions of the VX 820 application program, then test and debug the application until it is validated and ready to be downloaded to other devices.

- **Deployers of VX 820 DUET devices to end-user sites** perform the specific tasks required to deploy a new VX 820 DUET device on-site, including configuring the device, downloading application software, and testing the device prior to deployment.

- **Device administrators or site managers** change passwords, perform routine tests and device maintenance, and configure devices for remote diagnostics and downloads by telephone.

To perform the subset of tasks that corresponds to a job, select the appropriate Terminal Manager menu(s) and execute the corresponding procedure(s).
To prevent unauthorized use of the Verix Terminal Manager menus, the VX 820 DUET device OS requires a system password each time you enter Terminal Manager. To access the Terminal Manager password entry screen, simultaneously press the ENTER and 7 keys. The default, factory-set system password is “166831.” Use the following key sequence to enter this password:

1 6 6 8 3 1 ENTER

After entering the correct password, the device enters the Terminal Manager and displays the first Terminal Manager main menu. You can now cycle through all Terminal Manager main menus.

Since VX 820 is mounted to the VX 820 DUET, you can refer to the VX 820 Reference Guide (VPN DOC282-004-EN-A) for the terminal manager mode concerning the VX 820. However, note that once the PIN pad is mounted on the DUET, the following components in the terminal manager changes:

<table>
<thead>
<tr>
<th>Table 4 Terminal Manager Changes</th>
<th>VX 820 only</th>
<th>VX 820 with DUET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modem Type</td>
<td>MDM TYPE = 0</td>
<td>MDM TYPE = 40</td>
</tr>
<tr>
<td>Printer</td>
<td>PRINTER = 0</td>
<td>PRINTER = 1</td>
</tr>
<tr>
<td></td>
<td>PRINTER DIAG = &quot;NO PRINTER&quot;</td>
<td>PRINTER DIAG = **</td>
</tr>
</tbody>
</table>

** This calls the normal Verix V printer diagnostic.
This chapter discusses power requirements, dimensions, and other specifications of the VX 820 DUET.

The following specifications describe the VX 820 DUET physical and electrical characteristics.

**Model**
VX 820 DUET

**Power Pack**
Input rated: 100 - 240V AC, 50/60 Hz; Output rated: 9.3V DC 4A LPS Power

**Printer**
Integrated thermal printer; Below 18 lines per second; Print column width option for 24/32/42 characters/line; Paper roll 47mm wide by 25 meter long, single ply.

**Modem**
Standard 56 Kbps Dial-up Modem.

**VX 820 DUET Base**
Dimensions
Length: 194.5 mm (7.66 in.). Width: 103.8 mm (4.09 in.). Height: 123.5 mm (4.86 in.). Unit Weight: 635g (1.4lbs).

**VX820 PIN Pad**
Dimensions
Length : 173.25 mm (6.82 in.); Width: 87 mm (3.43 in.); Depth: 31.7 mm (1.25 in.); Unit weight: 0.27 Kg (0.6 lbs.).

**Shipping Weight**
Shipping Weight: 1920g (4.24 lbs).

**Output Power**
Serial Port Output Power: 9V DC, 450mA.
USB Host Port Output Power: 5V DC, 500mA.
Environmental, Regulatory, and Performance Specifications

The VX 820 DUET meets all the necessary environmental, regulatory, and performance standards for its intended use and expected market. VeriFone recognizes its responsibility to minimize the environmental impacts of its operations and products.

This device is not intended for outdoor use and is certified for indoor use only.

Temperature and Humidity

Operating Temperature and Humidity
- Temperature: 0°C to +50°C (+32°F to +122°F)
- Humidity: 5% to 90% RH, non-condensing

Storage Temperature and Humidity
- Temperature: -30°C to +60°C (-22°F to +140°F)
- Humidity: 5% to 90% RH, non-condensing
Maintenance and Cleaning

The VX 820 DUET has no user-serviceable parts.

Cleaning the VX 820 DUET

To clean the unit, use a clean cloth slightly dampened with water and a drop or two of mild soap. For stubborn stains, use alcohol or an alcohol-based cleaner. For best results, use a Verifone Cleaning Kit (refer to the Accessories and Documentation section).

CAUTION

Never use thinner, trichloroethylene, or ketone-based solvents – they can deteriorate plastic or rubber parts.

Do not spray cleaners or other solutions directly onto the keypad or display.
Cleaning the VX 820 DUET
Troubleshooting Guidelines

The troubleshooting guidelines provided in the following section are included to assist you to successfully install and configure your VX 820 DUET. If you have problems operating your VX 820 DUET, please read through these troubleshooting examples.

If the problem persists even after performing the outlined guidelines or if the problem is not described below, contact your local VeriFone representative for assistance. Typical examples of malfunction you may encounter while operating your VX 820 DUET device and steps you can take to resolve them are listed.

**NOTE**

The VX 820 DUET comes equipped with tamper-evident labels. The device contains no user serviceable parts. Do not, under any circumstance, attempt to disassemble the device. Perform only those adjustments or repairs specified in this guide. For all other services, contact your local VeriFone service provider. Service conducted by parties other than authorized VeriFone representatives may void warranty.

**CAUTION**

Use only a VeriFone-supplied power pack. Using an incorrectly rated power supply may damage the device or cause it not to work as specified. Before troubleshooting, ensure that the power supply matches the requirements specified at the bottom of the device. (See Specifications for detailed power supply specifications.) Obtain the appropriately rated power supply before continuing with troubleshooting.
Fixing an Unresponsive Printer

If the printer does not work properly:

- Check the power connection.
- Check that the printer has paper and that the roll is properly installed. Open the paper door and install a new roll of printer paper if necessary. (See Installing a Paper Roll.)
- Run the system mode printer diagnostic.
- If the problem persists, contact your VeriFone distributor or service provider.

Fixing a Printer Paper Jam

If paper jams inside the printer:

1. Lift the paper door at the bottom of the cradle.
2. Remove the damaged paper roll and clear the feed mechanism.
3. Install a roll of printer paper, as described in Installing a Paper Roll.

If the problem persists, it may be due to poor paper quality. Install a new roll of higher-quality paper.

WARNING

Poor-quality paper may jam the printer. To order high-quality VeriFone paper, refer to Service and Support.
Service and Support

For VX 820 DUET problems, contact your local VeriFone representative or service provider.

For VX 820 DUET product service and repair information:

- USA – VeriFone Service and Support Group, 1-800-834-4366, Monday - Friday, 8 A.M. - 8 P.M., eastern time.
- International – Contact your VeriFone representative.

Service Returns

Before returning the VX 820 DUET to VeriFone, you must obtain a Merchandise Return Authorization (MRA) number. The following procedure describes how to return one or more VX 820 DUET for repair or replacement (U.S. customers only).

1. Gather the following information from the printed labels (see Figure 14) on the bottom of each VX 820 DUET to be returned:
   - Product ID, including the model and part number. For example, “M282-xxx-xx” and “PTID xxxxxxxx.”
   - Serial number (S/N xxx-xxx-xxx).

2. Within the United States, call VeriFone toll-free at 1-800-834-4366.

3. Select the MRA option from the automated message. The MRA department is open Monday–Friday, 8 A.M.–8 P.M., eastern time.

4. Give the MRA representative the information gathered in Step 1.
   If the list of serial numbers is long, you can fax the list, along with the information gathered in Step 1, to the MRA department at 1-727-953-4172 (U.S.).
   - Please address the fax clearly to the attention of the “VeriFone MRA Dept.”
   - Include a telephone number where you can be reached and your fax number.

NOTE

International customers, please contact your local VeriFone representative for assistance with your service, return, or replacement.
- You will be issued MRA number(s) and the fax will be returned to you.

**NOTE**

One MRA number must be issued for each VX 820 DUET you return to Verifone, even if you are returning several of the same model.

5 Describe the problem(s) and provide the shipping address where the repaired or replacement unit must be returned.

6 Keep a record of the following items:

  - Assigned MRA number(s).
  - VeriFone serial number assigned to the VX 820 DUET you are returning for service or repair (serial numbers are located on the bottom of the Base unit (see Figure 14).
  - Shipping documentation, such as air bill numbers used to trace the shipment.
  - Model(s) returned (model numbers are located on the VeriFone label on the bottom of the VX 820 DUET Base).

![Information Label on Unit Bottom](image-url)

**Figure 14** Information Label on Unit Bottom
VeriFone produces accessories and documentation for the VX 820 DUET. When ordering, please refer to the part number in the left column.

VeriFone Online Store at [www.store.verifone.com](http://www.store.verifone.com)

- USA – VeriFone Customer Development Center, 1-800-834-4366, Monday - Friday, 7 A.M. - 8 P.M., eastern time
- International – Contact your VeriFone representative

### Power Supply

Power packs are optional, except in certain instances.

- PWR258-001-01-A DC Power Pack (Universal)

### Thermal Printer Paper

- PPR252-001-01-A Width: 47mm; Length 25m.

### Power Cord

- CBL000-036-02-A United States of America

Various others, by country: contact your local VeriFone representative or service provider to identify the best power cord for your needs.

### Documentation

To learn more about VX 820 DUET, refer to the following set of documents:

- VX 820 Certifications and Regulations Sheet VPN - DOC282-001-EN-A
- VX 820 Quick Installation Guide VPN - DOC282-002-EN-A
- VX 820 Installation Guide VPN - DOC282-003-EN-A
- VX 820 Reference Guide VPN - DOC282-004-EN-A
- VX 820 Stylus Quick Installation Guide VPN - DOC282-005-EN-A
- VX 820 Stand Adaptor Quick Installation Guide VPN - DOC282-006-EN-A
- VX 820 DUET Certifications and Regulations Sheet VPN - DOC282-011-EN-A
- VX 820 DUET Quick Installation Guide VPN - DOC282-012-EN-A
- VX 820 DUET Installation Guide VPN - DOC282-013-EN-A
- Verix eVo Volume I: Operating System Programmers Manual VPN - DOC00301
- Verix eVo Volume II: Operating System and Communication Programmers Manual VPN - DOC00302