



BE PAYMENT READY

# Moneris® VX 520

## Reference Guide





## Need help?

**Web:** [moneris.com/support-VX520](https://moneris.com/support-VX520)

**Toll-free:** 1-866-319-7450

Record your Moneris merchant ID here:

---

# Contents

<b>Setting Up Your Terminal</b> .....	<b>4</b>
<b>Before you get started</b> .....	<b>5</b>
<b>Hardware setup</b> .....	<b>6</b>
Completing the hardware setup.....	7
Tips for moving through the menus on the terminal.....	8
Setting up the terminal password.....	9
<b>Communications setup</b> .....	<b>10</b>
Using dynamic IP.....	10
Using static IP.....	10
Using dial communications as backup for IP (optional).....	11
Using dial.....	11
Entering the initialization phone number.....	12
<b>Entering merchant IDs and terminal IDs</b> .....	<b>13</b>
<b>Initialization and logon</b> .....	<b>14</b>
<b>Additional options</b> .....	<b>15</b>
Changing the terminal language.....	15
Enabling tipping, cashback, or invoice number.....	15
For basic tip processing.....	15
For cashback option.....	16
For invoice number.....	16
Password protection on manual entry.....	16
Enabling password protection on manual entry.....	16
Changing manual entry options.....	17
Enabling Gift & Loyalty programs.....	17
Gift & Loyalty initialization.....	17
Dial communications setup.....	18
<b>Enroll in Merchant Direct®</b> .....	<b>20</b>
<b>Using Your Terminal</b> .....	<b>21</b>
<b>Moneris VX 520</b> .....	<b>22</b>
Terminal keys and hardware.....	23
<b>Card types</b> .....	<b>24</b>
Magnetic stripe card.....	24
Chip card.....	24
Contactless card.....	24
<b>Cardholder verification</b> .....	<b>25</b>
Cardholder verification methods (CVM).....	25
Cardholder verification limit.....	25
<b>Card entry options</b> .....	<b>26</b>

Insert: Chip cards .....	26
Wave/Tap: Contactless cards .....	26
Maximum Contactless Dollar Value (CDV).....	26
Swipe: Magnetic stripe cards .....	27
Manual card entry .....	27
<b>Transactions.....</b>	<b>28</b>
General guidelines.....	28
Purchase .....	28
Partially Approved Purchase .....	28
Advice .....	28
Pre-authorization.....	29
Pre-auth Completion .....	29
Refund .....	29
Correction.....	30
Delete Pre-auth .....	30
Balance Inquiry .....	31
Merchant and customer prompts .....	31
Merchant prompts.....	31
Customer prompts.....	33
<b>Receipts .....</b>	<b>37</b>
Signing credit card receipts .....	37
Merchant copy.....	37
Cardholder copy .....	37
Reprinting receipts .....	37
Card masking .....	37
Signatureless transactions.....	38
Maximum Signatureless Dollar Values (SDV).....	38
Receipt samples.....	38
Credit/Debit card Purchase receipt .....	38
.....	38
Partial Approval receipt sample.....	39
Useful codes .....	39
<b>Reports .....</b>	<b>40</b>
Masking on reports.....	40
Transaction Inquiry.....	40
Merchant Sub-totals report.....	40
Pre-auth Transactions report .....	41
Tip report.....	41
Stored Transactions report.....	41
Deposit Totals report.....	42
Clerk Sub-totals report .....	42
EMV Parameters report.....	43
Batch History report .....	43
<b>Administrative transactions.....</b>	<b>44</b>
Logon .....	44

Logoff .....	44
Re-initialization .....	44
Batch Reclaim .....	45
<b>End-of-day process .....</b>	<b>46</b>
Merchant close .....	46
System close .....	46
<b>Troubleshooting .....</b>	<b>48</b>
Error messages .....	48
Equipment issues.....	54
<b>Merchant Support .....</b>	<b>55</b>




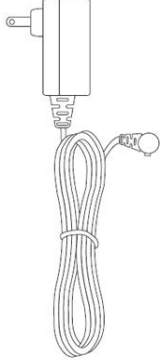
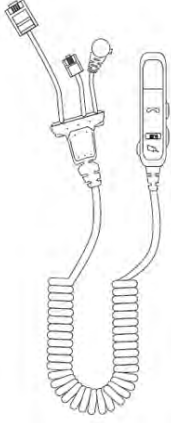

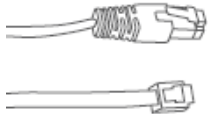
# Setting Up Your Terminal

In this section, we go over everything you need to know to set up your VX 520 terminal.

You can also view our setup videos online at [moneris.com/support-VX520](https://moneris.com/support-VX520).

## Before you get started

1. Use the table below to confirm that you received all the necessary items in your Welcome Kit.

 <p>VX 520 TERMINAL</p>	 <p>POWER CABLE</p>
 <p>ALL-IN-ONE CONNECTION CABLE WITH MAGIC BOX</p>	 <p>PAPER ROLL</p>  <p>ETHERNET CABLE AND/OR DIAL CABLE</p>


2. If your terminal will communicate with the Moneris host over high-speed Ethernet, review the **Moneris IP Readiness Checklist** (available at [moneris.com/checklist](https://moneris.com/checklist)) to ensure that your Ethernet service is ready to support your terminal.
3. Make sure you have the following information:
  - Your 13-digit Moneris **Merchant ID** (found in your “Important information” email).
  - Settlement responsibility (found in your Welcome Email): **System Close** (Moneris closes your batch at the end of each day), or **Merchant Close** (you are responsible for closing your batch at the end of each day).
  - Optional features e.g., **gift cards**, **loyalty cards**, **Ernex Terminal ID** (found in your Moneris Gift & Loyalty Welcome letter).

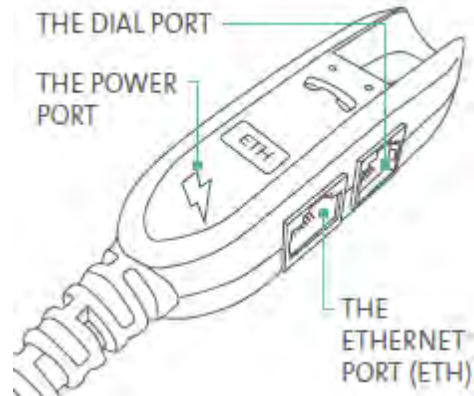
If any of the above required elements are missing, please call Moneris Customer Care toll-free at **1-866-319-7450**.


# Hardware setup

Follow these instructions to set up your terminal hardware.

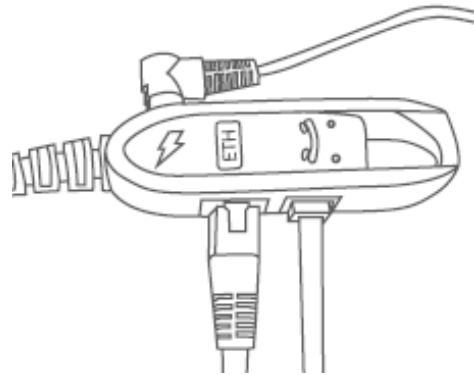
## 1 Connecting the cables to the Magic Box on the all-in-one cable

- a. Insert the Ethernet cable into the **ETH** port.
- b. Insert the dial cable into the dial port (marked with the  symbol).



- c. Insert the power cable into the power port (marked with the  symbol).

**Important: You must use the exact power cable provided by Moneris to work with the Moneris VX 520 terminal. Failure to do so may affect the operability of, or cause damage to, the equipment.**



- d. Proceed to [Completing the hardware setup](#) on page 7.



## Completing the hardware setup

### 2 Connecting the other ends of the cables

a. Plug the other end of the Ethernet cable into the router/switch/hub/internal wiring – whatever is applicable to the high-speed Internet service at your specific location (please refer to the **Moneris IP Readiness Checklist** if necessary; available at [moneris.com/checklist](http://moneris.com/checklist)).

b. Plug the other end of the dial cable into an analog phone jack.


**Recommendations:** Use a dedicated phone line for the terminal. Sharing the line with another device can cause communication problems on the terminal. If using a splitter, test both devices and note that the terminal and the other device cannot use the phone line at the same time.

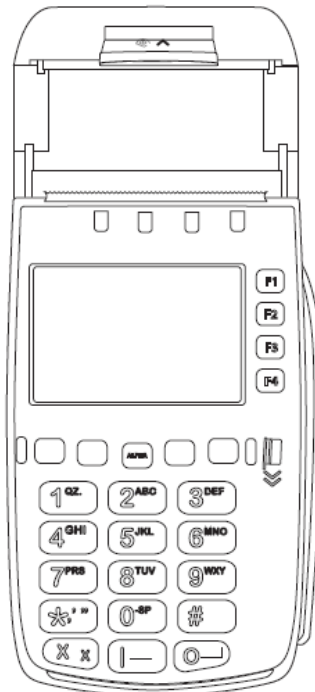
c. Plug the other end of the power cable into a wall jack.

**Recommendation:** Use an extension cord with surge protection.

### 3 Load paper

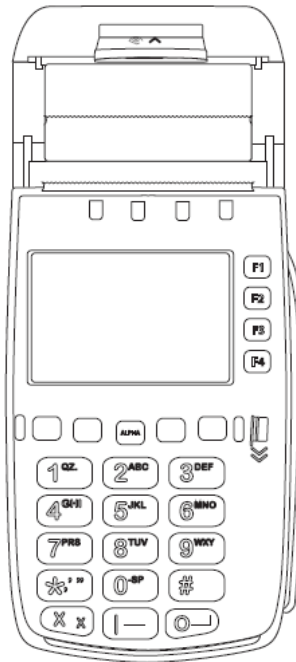
**Note:** You must use thermal-sensitive paper rolls. Shop for point-of-sale supplies and paper online at [shop.moneris.com](http://shop.moneris.com).

a. Open the paper well (located above the display screen): Look for the  symbol on the dark plastic latch, gently pull up on the latch, then lift the paper well lid up and back.



e. Prepare the new paper roll: Remove the sticker and unwind the roll past any sticker residue on the paper, then tear off the unwound portion of the paper.

- f. Place the paper roll into the paper well so that the paper rolls out from the underside of the roll.




- g. Pull the leading edge of the paper up until any glue residue on the paper roll is past the cutting teeth of the printer.
- h. Close the printer cover and lock it by gently pressing directly on it until it clicks shut.
- i. Tear off the loose end of the paper by pulling it down then sideways across the metal teeth.
- j. From the applications menu, select **DEBIT & CREDIT**, and then press the **3** key to feed paper through the printer to ensure it is working properly.
- k. Press the \* (**asterisk**) key to return to the applications menu.
- l. Proceed to [Setting up the terminal password](#) on page 9.


#### 4

#### Remove the protective film (if applicable)

- a. If your VX 520 terminal has a protective film covering the display screen, peel the film off.
- Hint:** Peel from the top right to the bottom left corner.

### Tips for moving through the menus on the terminal

- To scroll down or up, press the first purple key on the left. The arrow above the key indicates the direction (e.g., if the arrow points down, you can scroll down).
- To change the direction of the arrow, press the yellow  key.

- To select a menu item, press the grey function key (**F1**, **F2**, **F3** or **F4**) that it appears beside.
- To finish entering information and move on to the next step, press the green  key.


## Setting up the terminal password

**Important:** You will need to use this password every time you log on and whenever you need to change settings, so be sure to create a password you can remember that is difficult for others to guess.

**Note:** If the manager password is entered incorrectly five times in a row, the terminal will lock and will be unable to perform transactions. To unlock the terminal, contact Moneris Customer Care at **1-866-319-7450** and request a password reset.


1. At the applications menu, select **DEBIT & CREDIT**.

The Change Password menu appears.

2. At the “New Password:” prompt, key in a password to be used as your manager password and press the green  key.

**Note:** The password must be 5-10 digits long and must consist of numbers only.

The “Confirm:” prompt appears.

3. Re-key the manager password and press the green  key.

The applications menu appears.

4. Proceed to Communications setup on page 10.

## Communications setup

Your terminal must be configured to communicate with the Moneris host.


1. Ensure the communications cables are properly connected to the all-in-one cable based on your communications type before proceeding with these steps. Refer to *Hardware setup* on page 6 for more information.
2. Do one of the following based on your requirements:
  - If you are using dynamic IP as default, proceed to [Using dynamic IP](#) below.
  - If you are using static IP as default, proceed to [Using static IP](#) below.
  - If you are using dial as default, proceed to [Using dial](#) on page 11.

### Using dynamic IP

The terminal is already configured for dynamic IP communications. Proceed to [Using dial communications as backup for IP \(optional\)](#) on page 11.



### Using static IP

**Important: Disconnect the Ethernet cable from the all-in-one cable BEFORE completing these steps.**

1. From the applications menu, press the **2** key.  
The VCS Ethernet screen appears.
2. Press the **first purple key on the right** (below the  icon).  
The Ethernet Config menu appears.
3. On the Ethernet Config menu, select **IP**.  
The IP Configuration menu appears.
4. On the IP Configuration menu, at the “IP Settings” prompt, select **Edit**.
5. Select **Static**.
6. If your Ethernet network requires the parameters listed below, perform steps 7 and 8 for each parameter. Otherwise go to step 9.




**Note:** *Contact your Internet Service Provider (ISP) to determine the addresses for these parameters.*

- IP Address
  - Subnet mask
  - Gateway IP Address
  - DNS1 IP Address
  - DNS2 IP Address
7. Select **Next** to view these parameters.

8. Select **Edit** to key in the address for each of these parameters. To key in a period (.), press the **1** key, then the press the **ALPHA** key once. Press the green  key when finished entering each parameter.
9. Once all five static IP parameters have been entered, select **Exit**, then select **Yes** to save changes.  
The system repairs the connection and prompts you to press any key.
10. Press any key on the keypad to return to the Ethernet Config menu.
11. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.
12. Re-connect the Ethernet cable to the **ETH** port on the Magic Box (see page 6).
13. Proceed to Entering merchant IDs and terminal IDs on page 13.



## Using dial communications as backup for IP (optional)



When you have finished setting up communications for IP:

1. Plug in the dial cable: Follow the Connecting the cables to the Magic Box on the all-in-one cable steps on page 6.
2. On the applications menu, select **DEBIT & CREDIT**.
3. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
4. Select **Setup**, key in the manager password and press the green  key.
5. Scroll down and select **Host**.
6. Select **Next** until “Backup Support” appears.
7. Select **Edit**, select **Next** until “Auto Backup” appears, and then select **Slct**.
8. Select **Exit**, then select **OK** to save changes.
9. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.




## Using dial

Ensure the dial communication cable is properly connected to the all-in-one cable before proceeding with these steps. Refer to Connecting the cables to the Magic Box on the all-in-one cable on page 6 for more information.

1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Select **Setup**, key in the manager password and press the green  key.
4. Scroll down and select **Host**.
5. At the “Comm Link Type” prompt, select **Edit**, select **Next** until “Dial” appears, then select **Slct**.
6. Select **Next** until “Settle Comm Type” appears.


7. At the “Settle Comm Type” prompt, select **Edit**, select **Next** until “Dial” appears, then select **Slct**.
8. Select **Exit**, then select **OK** to save changes.  
The Setup menu appears.
9. If you need to dial a prefix (for example, a 9) to connect to an outside line, complete the steps below. If not, go to step 10.
  - a. On the Setup menu, scroll down and select **Terminal**.
  - b. Select **Next** until “PABX Code” appears.
  - c. Select **Edit**, key in the prefix (e.g., 9) and press the green  key.
  - d. Select **Exit**, then select **OK** to save changes.
10. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.
11. Proceed to Entering the initialization phone number below.

### Entering the initialization phone number






1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Select **Setup**, key in the manager password and press the green  key.
4. Scroll down and select **Comm**.
5. On the Edit CPT menu, select **Next** until “Pri Init Phone” appears.
6. Select **Edit**, key in the initialization phone number as follows, and then press the green  key.

**Note:** Do not enter dashes (-) or spaces between the numbers.

If your merchant ID begins with:	Key in:
00301	1-888-699-7299
00302	1-888-358-8602
00304	1-888-332-8433




7. Select **Exit**, then select **OK** to save changes.
8. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.
9. Proceed to Entering merchant IDs and terminal IDs on page 13.

## Entering merchant IDs and terminal IDs

1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Select **Setup**, key in the manager password and press the green  key.
4. Scroll down and select **Merchant**.  
“Term Id” appears.
5. Select **Edit**, key in the **Moneris Terminal ID** (the eight-digit number starting with “M2” found on the side of the terminal, e.g., M2123456) and press the green  key.  
**Note:** To key in the letter M, press the **6** key, then press the **ALPHA** key once.
6. Select **Next** until “Merch Num.” appears.
7. Select **Edit**, key in your 13-digit **Moneris Merchant ID** (e.g., 0030123456789) and press the green  key.
8. Select **Exit**, then select **OK** to save changes.
9. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.
10. Proceed to [Initialization and logon](#) on page 14.

## Initialization and logon

Before processing any transactions, you must initialize your terminal with the Moneris host, and then logon.

1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Scroll down and select **Initialize**.
4. When “Retain ID?” appears, select **Yes**.
5. When “Transmitting...” and “Receiving...” appear, please wait while the terminal communicates with Moneris.
6. When the initialization is finished, “Init Successful” appears on the terminal, then the transactions menu appears.
7. On the transactions menu, press the green  key to access the CONFIGURATION menu.
8. Scroll down and select **Host Logon**.
9. At the “Password:” prompt, key in the manager password and press the green  key.  
“Logon Success” appears, then the transactions menu appears.

Your terminal is ready to process transactions.



## Additional options

There are several options that you can choose to enable on your terminal to enhance its functionality.



**Note:** All instructions in this section begin at the applications menu.

### Changing the terminal language

**Note:** The terminal language can only be changed AFTER the terminal has been successfully initialized (see [Initialization and logon](#) on page 14).

1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the second purple key from the left.  
The Set Language screen appears.
3. Select **ENG** (English) or **FRN** (French).  
The transactions menu reappears in the selected language.

### Enabling tipping, cashback, or invoice number

1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Select **Setup**, key in the manager password and press the green  key.  
The SETUP menu appears.

### For basic tip processing

To enable basic tip processing (where the terminal only prompts the customer to enter an amount), follow the steps below.

1. From the SETUP menu, select **Terminal**.
2. Select **Next** until “Tip Processing” appears.
3. Select **Edit**, select **Next** until “On - Prompt” appears, then select **Slt**.
4. Select **Exit**, then select **OK** to save changes.

The terminal returns to the SETUP menu.

Other tipping options include Enhanced Tip, Guided Tip, TipNone, and Default Tip. For information on configuring these tipping options, refer to the “Tip Processing” topic in the **VX 520 Webhelp** available at [moneris.com/support-VX520](https://moneris.com/support-VX520).


## For cashback option

To change the default values for cashback and to optimize dial communications for use with cashbacks, please refer to the **VX 520 Webhelp** available at [moneris.com/support-VX520](https://moneris.com/support-VX520).

1. From the SETUP menu, select **Terminal**.
2. Select **Next** until “CashBack Option” appears.
3. Select **Edit**, then select **On**.
4. Select **Exit**, then select **OK** to save changes.

The terminal returns to the SETUP menu.

## For invoice number



1. From the SETUP menu, select **Merchant**.
2. Select **Next** until “Ask Inv Num?” appears.
3. Select **Edit**, then select **On**.
4. Select **Exit**, then select **OK** to save changes.
5. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.

## Password protection on manual entry

These parameters allow the merchant to control the manual entry of card information on the terminal keypad.


### Enabling password protection on manual entry

**Important: Moneris strongly recommends using the default value of “On” to help reduce the risk of fraudulent transactions which can later be disputed and charged back.**




1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Select **Setup**, key in the manager password and press the green  key.
4. Select **Terminal**.
5. Select **Next** until “Manual Password” appears.
6. Select **Edit**.
7. To enable password prompting on manual card entry, select **On** (recommended).

OR

To disable password prompting on manual card entry, select **Off**.

8. Select **Exit**, then select **OK** to save changes.
9. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.

## Changing manual entry options

1. From the applications menu, select **DEBIT & CREDIT**.
2. When the transactions menu appears, press the green  key to access the CONFIGURATION menu.
3. Select **Setup**, key in the manager password and press the green  key.
4. Select **Terminal**.
5. Select **Next** until “Manual Entry” appears.
6. Select **Edit**, then select **Next** to move through the options. Choose from one of the following options:
  - To enable manual entry of all credit cards on the terminal, select **On**.
  - To disable manual entry of all credit cards on the terminal, select **Off**.
  - Do not select “Disable” unless instructed to do so by Moneris Customer Care.Once your option is displayed, press **Slect** to select it.
7. Select **Exit**, then select **OK** to save changes.
8. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.




## Enabling Gift & Loyalty programs





Didn't order gift cards or a loyalty program but would like to find out more? Please call us at **1-855-219-3084**.

### Gift & Loyalty initialization

**Note:** *If you are using IP communications, follow these instructions to initialize the Gift & Loyalty program on your terminal.*

*If you are using dial communications, go to the [Dial communications setup](#) section on page 18 first. Once the dial communications setup has been completed, return to this section and follow these initialization instructions.*

1. From the applications menu, select **GIFT & LOYALTY**.
2. When the Gift & Loyalty transactions menu appears, scroll down and select **Setup**.
3. Key in the manager password and press the green  key.
4. Select **Merchant**.  
“Merchant ID” appears.
5. Select **Edit**, key in your **Moneris Merchant ID** and press the green  key.
6. Select **Next**.  
“Moneris Term ID” appears.
7. Select **Edit**, key in the **Moneris Terminal ID** and press the green  key.



8. Select **Next**.  
“Ernex Term ID” appears.
9. Select **Edit**, key in the **Ernex Terminal ID** (provided to you when Moneris confirmed your terminal order) and press the green  key.
10. Select **Exit**, then select **OK** to save changes.
11. When the terminal returns to the Setup menu, select **Comm**.
12. Select **Next** until “Device Type” appears.
13. Make sure the “Device Type” is set to **7C**. If it is, select **Exit** and go to step 16. If it is not, go to step 14.
14. Select **Edit**, key in **7C**, and press the green  key.  
**Note:** To key in the letter C, press the **2** key, then press the **ALPHA** key three times.
15. Select **Exit**, then select **OK** to save changes.
16. When the terminal returns to the Setup menu, scroll down and select **Initialization**.  
“Ernex Term ID:” appears.
17. Press the green  key.  
The terminal will complete the initialization and return to the Setup menu.
18. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.  
Your terminal is ready to process gift card and loyalty card transactions.

#### For instructions on performing:


- gift card transactions, please refer to the **Moneris VX 520 Gift Card Program Reference Guide**.
- loyalty card transactions, refer to the **Moneris VX 520 Loyalty Programs Reference Guide**.

These guides are available at [moneris.com/support-VX520](https://moneris.com/support-VX520).

### Dial communications setup

1. From the applications menu, select **GIFT & LOYALTY**.
2. When the Gift & Loyalty transactions menu appears, press the **6** key to access the Quick Setup menu.
3. Key in the manager password and press the green  key.
4. On the Quick Setup menu, select **Communications** and then select **View**.  
“Comm Link Type” appears.
5. Select **Edit**, select **Next** until “Dial” appears, then select **Slect**.
6. Select **Exit**, then select **OK** to save changes.
7. Press the red  key twice to return to the Gift & Loyalty transactions menu.

8. Scroll down and select **Setup**.

9. Key in the manager password and press the green  key.

10. Select **Comm**.

“Pri Auth Phone” appears.

11. Select **Edit**, key in the **authorization phone number** as follows, and press the green  key.

**Note:** Do not enter dashes (-) or spaces between the numbers.

If your merchant ID begins with:	Key in:
00301	1-888-699-7299
00302	1-888-358-8602
00304	1-888-332-8433

12. Select **Next**.

“Sec Auth Phone” appears.


13. Select **Edit**, key in the **same authorization phone number** as above and press the green  key.

14. Select **Exit**, then select **OK** to save changes.


15. If you need to dial a prefix (for example, a 9) to connect to an outside line, complete the steps below. Otherwise proceed to step 16.

a. On the Setup menu, scroll down and select **Terminal**.

b. Select **Next** until “PABX Code” appears.

c. Select **Edit**, key in the prefix (e.g., 9) and press the green  key.

d. Select **Exit**, then select **OK** to save changes.

16. Press the red  key, then press the \* (**asterisk**) key to return to the applications menu.

17. Proceed to [Gift & Loyalty initialization](#) on page 17.

## Enroll in Merchant Direct®

Merchant Direct is the Moneris online tool for accessing all of your merchant reports, including end-of-day reports. To sign up for Merchant Direct, follow these steps.

**Note:** *If you have already enrolled for Merchant Direct, you do not have to enroll again.*

1. Go to [moneris.com](https://moneris.com).
2. In the top right area of the screen, click **Login** and select **Merchant Direct**.
3. Click **Online Enrolment**.
4. Fill in the fields in the online form to complete your enrolment.



# Using Your Terminal

In this section, we go over everything you need to know to use your VX 520 terminal, including how to perform transactions and end-of-day processes.

## Moneris VX 520

Use this handheld, all-in-one POS solution to process transactions at the point of sale (POS).

When prompted, you (and sometimes your customer) will key in information on the terminal. If your customer is required to key in information, pass the terminal to the customer. When the customer has finished keying in the information, retrieve the terminal and complete the transaction.





## Terminal keys and hardware

### 1 Integrated printer


### 2 Embedded contactless reader

#### F1 to F4 keys

- 3 Multi-function keys that correspond to the options displayed on the right-hand side of the display.

### 4 Magnetic stripe reader

#### Purple keys

- Function keys that correspond to the icons (if any) displayed on the screen above them:
  - Arrow key.** First purple key on the left, located under the ↓ or ↑ icon. Scrolls up or down. Press the yellow  key to toggle between scrolling up and down.
  - LANG key.** The second purple key on the left. Accesses the Set Language menu.
  - Reprint key.** The second purple key from the right. Displays the REPRINT menu.
  - Reports key.** The first purple key on the right. Displays the REPORTS menu.

5

#### ALPHA key

- 6 To key in alphabetic characters, press the numeric key on the keypad labelled with the desired character, then press the **ALPHA** key until that character is displayed.

#### Asterisk (\*) key

- 7 Returns to the applications menu (displays the applications available, including DEBIT & CREDIT).

#### Red key

- 8 Cancels the current operation.

#### Yellow key

- 9 Clears displayed data one character at a time.
- Changes the direction of the arrow icon above the first purple key on the left.

#### Green key

- 10 Accepts displayed data.
- Submits keyed in data.
- Displays the CONFIGURATION menu when pressed at the transactions menu.

### 11 Chip card reader

## Card types

The Moneris VX 520 supports the following card types and formats. These card types are not mutually exclusive. A single card can include a magnetic stripe, a chip, and contactless functionality.

### Magnetic stripe card

- A card with a magnetic stripe
- The card is swiped on the magnetic stripe reader

### Chip card

- A card with a chip
- The card is inserted into the chip reader

### Contactless card

- In this guide, the term “contactless card” includes:
  - a card with contactless functionality. Supported card brands include: Visa®, Mastercard®, American Express®, Discover®, and *Interac*®,
  - a mobile device, such as a smartphone, tablet or smartwatch,
  - other contactless-enabled items such as a key fob or a mobile tag.
- The card is tapped on the embedded contactless reader
- All contactless card formats and any related software are the responsibility of the cardholder (e.g. downloading a digital app from their financial institution).
- Cardholders with a mobile device (e.g., a smartphone) are responsible for loading their card information into their digital wallet.

# Cardholder verification

## Cardholder verification methods (CVM)

Many transactions require cardholder verification. This means your customer must provide proof that they are the valid cardholder by performing one of the cardholder verification methods below. The terminal will prompt your customer (or you) for the appropriate CVM.

When verification is required, follow these general guidelines:

- for a transaction where a card is swiped, the cardholder signs the merchant copy of the receipt;
- for a transaction where a card is inserted, the cardholder enters their PIN on the terminal. In some cases, the cardholder may need to sign the merchant copy of the receipt.
- for a transaction where a card is tapped, the cardholder signs the merchant copy of the receipt unless the amount is below the CVM limit.
- For a transaction where a mobile device is tapped, the cardholder enters their passcode on their mobile device if the amount is above the CVM limit. If the cardholder has already entered their passcode, they will not be prompted again during the transaction.

## Cardholder verification limit


- This is the maximum dollar amount for performing a tapped credit transaction without cardholder verification.
- To determine the cardholder verification limit for a card, print an EMV Parameters report (see instructions on page 43). Look under each card type for the “Contactless CVM Limit:” value.
- If the final transaction amount is greater than the limit specified (in the case of Visa, equal to or greater than), then the cardholder must perform one of the cardholder verification methods outlined above.
- In most cases, this limit does not apply to:
  - Credit transactions where the card is swiped or inserted
  - *Interac* Debit transactions where the card is swiped or inserted

These transactions require cardholder verification regardless of the transaction amount.

## Card entry options

### Insert: Chip cards

1. Wait for the “Swipe Card:”, “Swipe/Insert:” or “Swipe/Tap/Insert:” prompt to appear on the terminal.
2. Either you or the customer inserts the card into the terminal’s chip reader.
3. The customer may be prompted to key in a PIN.

**Note:** *If the customer is prompted to key in a password, have the customer pass the device back to you. Press the red  key to cancel the transaction, then start a new transaction.*

4. The chip card must remain inserted until the “Please Remove Card” prompt appears.

**Note:** *Unless the device prompts otherwise, do not swipe a chip card even if the card has a magnetic stripe.*



### Wave/Tap: Contactless cards

**Note:** *The transaction amount must be equal to or less than the maximum Contactless Dollar Value (see below).*

1. Wait for the “Swipe Card:”, “Swipe/Insert:” or “Swipe/Tap/Insert:” prompt to appear on the terminal.
2. The customer taps their card on the terminal’s display screen.

**Note:** *When a contactless card is tapped, the contactless LED indicators on the top of the terminal flash green to confirm that the embedded contactless reader successfully read the card.*

3. Note the following:
  - Your merchant account must be configured for contactless functionality.
  - Only Purchases, Refunds, and Balance Inquiries can be processed using a contactless card.
  - The transaction amount must be equal to or less than the maximum Contactless Transaction Limit set for the card (see below).
  - The card must be within 0.5 in. (1.3 cm) of the screen, but it does not have to touch it.
  - The card must be tapped or waved by itself (the customer cannot leave the card in their wallet and wave it in front of the screen).



### Maximum Contactless Dollar Value (CDV)

To determine the maximum CDV for a card, print an EMV Parameters report (see page 43) and locate the **Contactless Trans Limit** parameter under the report’s record for the card. A CDV of 999999 means there is no maximum limit.

## Swipe: Magnetic stripe cards






1. Wait for the “Swipe Card:”, “Swipe/Insert:” or “Swipe/Tap/Insert:” prompt to appear on the terminal.
2. **Swipe the card** on the terminal’s magnetic stripe reader.

**Note:** If the card has a chip and the terminal is enabled to read chip cards, the card must be inserted into the chip reader unless the device prompts otherwise.




## Manual card entry

If all available card entry methods fail, you may manually enter the card number for credit cards and some chip debit cards.

1. The “Swipe Card:”, “Swipe/Insert:” or “Swipe/Tap/Insert:” prompt appears on the terminal.
2. **Key in the card number** and press the green  key.
3. **Key in the card’s expiry date** and press the green  key.
  - If the “Password:” prompt appears, key in the manager password and press the green  key.
  - If the “Imprint Card Press OK Key” prompt appears, take an imprint of the card and press the green  key.
4. **Key in the card’s validation code** and press the green  key to continue the transaction.

## Transactions

All instructions in this section begin at the transactions menu. To access the transactions menu from the applications menu, select **DEBIT & CREDIT**. To access the transactions menu from any screen in the DEBIT & CREDIT application, press the red  key repeatedly until the transactions menu appears.


### General guidelines

1. Determine the transaction to be processed (e.g., Purchase or Refund).
2. Establish the means of payment (credit or debit).
3. Enter the card data on the terminal (see pages 26 to 27).
4. Follow the prompts\* (see pages 31 to 37).
5. Process receipts (see pages 37 to 39).

\*Prompts may vary depending on variables such as terminal setup, merchant setup, and card type.

### Purchase

Credit or debit purchase of goods or services.

1. Select **Purchase**.
2. Key in the purchase amount, press the green  key, then follow the prompts. Refer to the Merchant and customer prompts tables (see pages 31 to 37).
3. Process receipts (see pages 37 to 39).


### Partially Approved Purchase

A Partial Approval of a Purchase transaction occurs when a cardholder pays for the Purchase with a pre-paid credit card, but the value on the pre-paid card is less than the purchase amount.

The amount on the pre-paid card is approved, i.e., part of the total purchase amount is approved. Prompts are displayed indicating how much of the purchase amount is still owed (e.g., “Amount Due \$5.00”). That amount can then be paid by another pre-paid credit card or a different tender type (e.g., a credit card, a debit card, or cash).

### Advice



Completes a voice-authorized (IVR) purchase.

1. Select **Advice**.
2. Key in the advice amount, press the green  key, and then follow the prompts. Refer to the Merchant and customer prompts tables (see pages 31 to 37).

3. Process receipts (see pages 37 to 39).

## Pre-authorization

Authorizes a temporary amount when the final purchase amount is unknown (e.g., hotel or car rental).

1. Select **Pre Auth**, then on the Pre Auth menu, select **Pre Auth**.
2. Key in the pre-authorization amount and press the green  key, then follow the prompts. Refer to the Merchant and customer prompts tables (see pages 31 to 37).
3. Process receipts (see pages 37 to 39).
4. When the terminal returns to the Pre Auth menu, press the red  key to return to the transactions menu.




**Note:** *When the final purchase amount is known, you must perform a Pre-auth Completion (see below) for the final amount using the same card number.*

## Pre-auth Completion

Used to finish a Pre-authorization once the final amount is known.

**Important: The Completion must be performed on the same terminal using the same card number as the Pre-authorization.**

**Note:** *The credit card does not need to be present for a Completion transaction.*



1. Select **Pre Auth**, then select **Completion**. If prompted, key in the manager password and press the green  key.
2. Key in the **six-digit sequence number** (Seq #) from the Pre-authorization receipt (see page 38), press the green  key, and then follow the prompts on the terminal. Refer to the Merchant and customer prompts tables (see pages 31 to 37).
3. Approve the pre-authorization amount, or key in a new amount and press the green  key, then follow the prompts.

**Note:** *To release the pre-authorized funds, key in an amount of \$0.00.*

4. Process receipts (see pages 37 to 39).

## Refund


Credits a customer's account for a previous Purchase.

1. Select **Refund**. If prompted, key in the manager password and press the green  key.
2. Key in the **refund amount**, press the green  key and then follow the prompts. Refer to the Merchant and customer prompts tables (see pages 31 to 37).
3. Process receipts (see pages 37 to 39).

## Correction

Cancels (voids) a previous Purchase or Refund.

**Note:** *Credit card Corrections MUST be processed in the same batch as the original transaction.*

1. Scroll down and select **Correction**. If prompted, key in the manager password and press the green  key.

The “Correct Last” prompt appears.

2. Select the transaction to correct:


- To select the last transaction performed, select **Yes**, then go to step 3.

OR


- To select a different transaction:

a. Select **No**. The “Retrieve By” prompt appears.

b. Search for the transaction:

- Select **Seq#**, then key in the **sequence number** and press the green  key, then go to step 3.

OR

- Select **Acct**, then key in the **last four digits of the card number** and press the green  key, then go to step 3.


3. To confirm the displayed transaction is the one you wish to correct, select **Yes**.

OR

To view the next matching transaction, select **Next** until the desired transaction is located, then select **Yes**. The terminal prints the receipt and returns to the transactions menu.


## Delete Pre-auth

Deletes a Pre-authorization before it is completed.

1. Select **Pre Auth**, then select **Del PreAuth**. If prompted, key in the manager password and press the green  key.

2. At the “Retrieve By” prompt, search for the Pre-authorization transaction:

- To search by **sequence number**:

- Select **Seq#**, key in the sequence number and press the green  key.

OR

- To search by the **card number**:

- Select **Acct**, key in the **last four digits of the card number** and press the green  key.




- To confirm that the displayed Pre-authorization is the one you wish to delete, select **Yes**.

OR



To view the next Pre-authorization, select **Next** until the desired Pre-authorization is located, then select **Yes**.

The terminal displays “PREAUTH DELETED” and returns to the Pre Auth menu.

- Press the red  key to return to the transactions menu.

## Balance Inquiry

Prints a cardholder receipt indicating the dollar value available on a pre-paid credit card.

- Scroll down and select **Balance Inq**. If prompted, key in the manager password and press the green  key.
- At the “Swipe Card:” prompt, swipe the pre-paid credit card on the terminal.
- Wait while the terminal communicates with the Moneris host.
- If the pre-paid card allows it, the terminal displays “Balance: \$###.##”. Press the green  key to continue.

The terminal displays “Prt Cust Cpy”.

- To print the customer copy of the Balance Inquiry receipt, select **Yes**.

OR

To return to the transactions menu without printing a receipt, select **No**.

The terminal returns to the transactions menu.

**Note:** The terminal only prints one copy of the Balance Inquiry receipt: the customer copy.

## Merchant and customer prompts










These tables list prompts that you and your customers might see during a POS transaction, along with the actions to take for each prompt.





### Merchant prompts

This table lists common transaction prompts that appear on the terminal in alphabetical order.

**Note:** Only some of the prompts listed below will appear for any one transaction.


Merchant prompt		Merchant action
<Application name>		<ul style="list-style-type: none"> <li>To select a debit or credit card as payment for the amount due, select <b>DbCr</b>.</li> <li>To select cash and finish the transaction, select <b>Cash</b>.</li> </ul>
<b>Amount Due</b>	<b>DbCr</b>	
<b>\$##.##</b>	<b>Cash</b>	



Merchant prompt		Merchant action
<Application name> <b>Partial Appr</b> ###.##	<b>Yes</b> <b>No</b>	<ul style="list-style-type: none"> <li>To confirm the Partial Approval transaction, select <b>Yes</b>.</li> <li>To cancel the transaction and return to the transactions menu, select <b>No</b>.</li> </ul>
<b>Account #:</b>		Key in the <b>card number</b> and press the green  key.
<b>Auth #:</b>		Key in the <b>Voice Authorization Number</b> that you wrote on the paper sales draft when you called Moneris Customer Care for IVR voice authorization.
<b>Code present?</b>	<b>No</b> <b>Xread</b>	<ul style="list-style-type: none"> <li>If the validation code is not there, select <b>No</b>.</li> <li>If the validation code is not readable, select <b>Xread</b>.</li> </ul>
<b>Customer Press OK To Continue</b>		Pass the terminal to your customer.
<b>Exp Date (MMYY):</b>		Key in the <b>card's expiry date</b> and press the green  key.
<b>Imprint Card Press OK Key</b>		Take an imprint of the credit card and press the green  key.
<b>Invoice #:</b>		<ul style="list-style-type: none"> <li>Key in the <b>invoice number</b> and press the green  key.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Simply press the green  key to leave blank.</li> </ul>
<b>Last 4 digits:</b>		Key in the last four digits of the card number and press the green  key.
<b>Orig Auth #</b>		<p>Key in the <b>six-digit Appr Code</b> printed on the original receipt (see page 38).</p> <p><b>Note:</b> The approval code may contain both alphabetic and numeric characters. To key in alphabetic characters, press the numeric key on the keypad labeled with the desired character, then press the <b>ALPHA</b> key until that character is displayed.</p> <p>If you do not have the Appr Code, press the green  key to bypass the prompt.</p>
<b>Promo Code:</b>		Key in the <b>six-digit private label promotion code</b> and press the green  key.
<b>Reference #:</b>		Key in the <b>customer reference number</b> (0 to 16 digits) and press the green  key.








Merchant prompt	Merchant action
<b>Return To Clerk</b>	When the customer sees this prompt, retrieve the terminal, then press the green  key to continue the transaction. If Cash Back is enabled, check for the cashback amount on this screen.
<b>Swipe Card:</b>	Swipe the card on the terminal.
<b>Tear Receipt and Press OK Key</b>	Tear off the receipt and press the green  key.
<b>Validation Code:</b>	If the code is on the signature strip on the back of the card: <ul style="list-style-type: none"> <li>▪ Key in the <b>three- or four-digit number</b> and press the green  key.</li> </ul> If the code is not there or is not readable: <ul style="list-style-type: none"> <li>▪ Press the green  key to leave this blank.</li> </ul>

## Customer prompts

This table lists common customer transaction prompts that appear on the terminal in alphabetical order.

Customer prompt	Customer action(s)
<Application name> <b>Amount Due</b> \$ <b>##.##</b> <b>Return to Clerk</b>	Returns the terminal to you.  <b>Note:</b> <i>This message appears during a Partial Approval transaction, where the pre-paid credit card does not have enough value to cover the Purchase total. Inform the cardholder that there is an additional amount due.</i>
<b>Add Tip?</b>  <b>Yes</b> <b>No Tip</b>	<ul style="list-style-type: none"> <li>▪ To add a tip amount to the transaction: <ul style="list-style-type: none"> <li>▪ Selects <b>Yes</b>, keys in the tip amount and presses the green  key.</li> </ul> </li> <li>▪ To continue without adding a tip: <ul style="list-style-type: none"> <li>▪ Selects <b>No Tip</b>.</li> </ul> </li> </ul>
<b>Amount OK?</b> \$ <b>##.##</b> <b>Yes</b> <b>No</b>	Confirms that the purchase amount is correct and selects <b>Yes</b> to accept it.

Customer prompt		Customer action(s)
<b>Cash:</b> \$ XX \$ YY \$ ZZ Other		<ul style="list-style-type: none"> <li>▪ To select a displayed amount:               <ul style="list-style-type: none"> <li>▪ Presses the <b>F1</b>, <b>F2</b>, or <b>F3</b> key beside the desired amount.</li> </ul> </li> <li>▪ To key in a different amount:               <ul style="list-style-type: none"> <li>▪ Selects <b>Other</b>, keys in a different amount and presses the green  key.</li> </ul> </li> </ul>
<b>Cashback?</b> or <b>Purchase Cashback?</b>		<ul style="list-style-type: none"> <li>▪ To receive Cashback:               <ul style="list-style-type: none"> <li>▪ Selects <b>Yes</b>.</li> </ul> </li> <li>▪ To continue without Cashback:               <ul style="list-style-type: none"> <li>▪ Selects <b>No</b>.</li> </ul> </li> </ul>
<b>Do Not Remove Card</b>		Leaves the chip card inserted in the reader until instructed to remove it.
<b>Enter PIN &amp; OK:</b>		Keys in their <b>PIN</b> (Personal Identification Number) and presses the green  key.
<b>Partial Appr</b> Yes \$##.## No		<ul style="list-style-type: none"> <li>▪ To confirm the Partial Approval on their pre-paid credit card:               <ul style="list-style-type: none"> <li>▪ Selects <b>Yes</b>.</li> </ul> </li> <li>▪ To cancel the transaction and return to the transactions menu:               <ul style="list-style-type: none"> <li>▪ Selects <b>No</b>.</li> </ul> </li> </ul>
<b>Please Remove Card</b>		Removes their chip card from the reader.
<Program name> <b>OK?</b>	<b>Yes</b> <b>No</b>	Selects <b>Yes</b> to confirm that the displayed card program should be used to process the transaction.
<Program name> <b>SELECT NEXT</b> <b>OK</b>		<ul style="list-style-type: none"> <li>▪ To select the displayed program: Selects <b>OK</b>.</li> <li>▪ To view the next program on the card: Selects <b>SELECT NEXT</b>.</li> </ul>
<b>Purchase</b> <b>Select Acct</b>	<b>CHQ</b> <b>SAV</b>	<ul style="list-style-type: none"> <li>▪ For Chequing account:               <ul style="list-style-type: none"> <li>▪ Selects <b>CHQ</b>.</li> </ul> </li> <li>▪ For Savings account:               <ul style="list-style-type: none"> <li>▪ Selects <b>SAV</b>.</li> </ul> </li> </ul>

Customer prompt	Customer action(s)
<b>Purchase</b> <b>Select Language</b>  <b>ENG</b> <b>FRN</b>	<ul style="list-style-type: none"> <li>For English prompts: Selects <b>ENG</b> (ENGLISH).</li> <li>For French prompts: Selects <b>FRN</b> (FRENCH).</li> </ul>
<b>Purchase</b> <b>Total OK?</b> <b>\$        XX.XX</b>	<b>Yes</b> <b>No</b> Confirms that the total Purchase + Cashback + Tip amount is correct and presses the green  key (or selects <b>Yes</b> ).
<b>Purchase</b> <b>Total:</b> <b>\$XX.XX</b>  <b>Customer Press</b> <b>OK to Continue</b>	Presses the green  key.
<b>Purchase</b> <b>Total:</b> <b>\$XX.XX</b>  <b>Enter Tip:</b> <b>\$        0.00</b>	<ul style="list-style-type: none"> <li>Enters a tip amount and presses the green  key.</li> </ul> OR <ul style="list-style-type: none"> <li>Leaves the amount at \$0.00 and presses the green  key.</li> </ul>
<b>Return To Clerk</b>	Returns the terminal to you.
<b>Tip</b>  <b>XX %</b> <b>YY %</b> <b>ZZ %</b> <b>Other</b>	<ul style="list-style-type: none"> <li>To select a pre-configured tip percentage, presses the <b>F1</b>, <b>F2</b>, or <b>F3</b> key.</li> <li>To use another percentage, selects <b>Other</b>, keys in the amount, and presses the green  key.</li> </ul>
<b>Tip: \$0.00</b>	<ul style="list-style-type: none"> <li>Keys in a dollar amount and presses the green  key.</li> <li>If the customer does not wish to leave a tip, leaves blank and presses the green  key.</li> </ul>

Customer prompt	Customer action(s)
<p><b>Tip Type:</b></p> <p style="text-align: center;">%</p> <p style="text-align: center;">\$</p> <p style="text-align: center;"><b>No Tip</b></p>	<ul style="list-style-type: none"> <li>▪ To choose from a list of tip percentages: <ul style="list-style-type: none"> <li>▪ Selects %.</li> </ul> </li> <li>▪ To enter a tip dollar amount: <ul style="list-style-type: none"> <li>▪ Selects \$.</li> </ul> </li> <li>▪ To continue without adding a tip: <ul style="list-style-type: none"> <li>▪ Selects <b>NoTip</b>.</li> </ul> </li> </ul>

# Receipts

## Signing credit card receipts

### Merchant copy

Always retain this copy for your records, but note:

- If a signature line is printed, obtain the cardholder's signature.
- You do not need to obtain a signature if any of the following messages are printed:
  - VERIFIED BY PIN
  - NO SIGNATURE REQUIRED

### Cardholder copy

Give this copy to the customer, but note:

- If a merchant signature line is printed, sign this copy.

## Reprinting receipts

Prints a duplicate customer copy of a receipt.

**Note:** For signatureless transactions, only the customer copy is printed. To print signatureless transaction details for your records, perform a Transaction Inquiry (see page 40).


**Note:** For debit transactions, if the terminal is set to print the merchant copy only, the reprint receipt feature prints the customer copy.

1. Press the **Reprint** key (second purple key from the right).

The REPRINT menu appears.

2. To reprint the last transaction receipt, select **Last Receipt**.

OR

To print a different receipt, select **Any Receipt**, key in the **transaction sequence number** (Seq#) and press the green  key.

The terminal prints the duplicate receipt and returns to the transactions menu.

## Card masking

To reduce the risk of fraudulent card use, masking and truncation are applied to card numbers printed on receipts and reports. Masking replaces a card's numbers (except for the last four) with "\*"s (e.g., \*\*\*\*\*1234). Truncation prints only the last four digits of a card (e.g., 1234). The expiry date is not printed on any copy of any receipt.

## Signatureless transactions

A customer signature is not required for swiped or tapped Purchase transactions if the total is at or below the maximum Signatureless Dollar Value (SDV) (see below). Depending on how your terminal is configured, receipts may not be printed for signatureless transactions. If a receipt is printed, the statement NO SIGNATURE REQUIRED appears on the receipt.

**Note:** *Signatureless transactions for swiped purchases apply only when a customer uses a swipe-only card, not when the customer is instructed to swipe a chip card.*

## Maximum Signatureless Dollar Values (SDV)

To determine the maximum SDV for a card, print an EMV Parameters report (see page 43) and locate the **Contactless CVM Limit** parameter under the report's section for the card. An SDV of 999999 means there is no maximum limit.

## Receipt samples

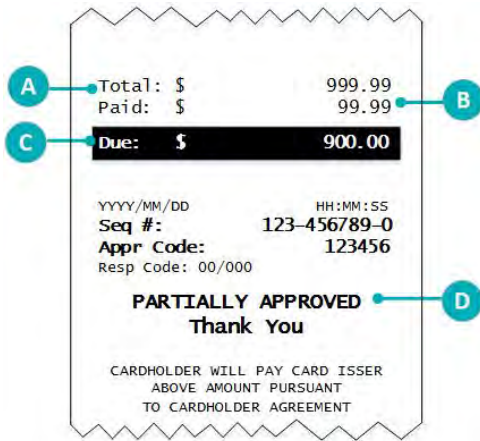
These sample receipts will help you to locate the sequence number (for Advices) or the authorization number (for refunds and corrections).

## Credit/Debit card Purchase receipt

LABEL	DESCRIPTION
A	Merchant name, address, city, and province. The Header Lines 1 & 6 are configurable on the terminal.
B	The 8-digit terminal ID used to process the transaction.
C	Transaction type. May also be Refund, Correction, Pre-auth, Pre-auth Completion, or Advice.
D	Masked card number used for the transaction.
E	Transaction total being charged to card.
F	Sequence number. See <a href="#">Useful codes</a> on page 39 for more information.
G	Six digit approval code. See <a href="#">Useful codes</a> on page 39 for more information.
H	Card verification. "Verified by PIN" is printed when a chip card is inserted. May be a signature line for certain credit card transactions.
I	The Merchant Footer 4 is configurable on the terminal.



## Partial Approval receipt sample



LABEL	DESCRIPTION
A	Total amount due in the transaction.
B	Total amount paid with the pre-paid credit card.
C	Amount still owed in the transaction.
D	Partial Approval confirmation message.

## Useful codes

- **Seq #:** The sequence number is found on all receipts. It is the first six of the last seven digits of the Seq # printed on the receipt (e.g., if the Seq # is 000-123456-0, then when processing a refund, key in 123456).
- **Orig Auth #:** This is the six-digit approval code (**Appr Code**) printed on the original receipt. It is used for Pre-auth Completions.




# Reports

## Masking on reports

To reduce the risk of fraudulent card use, masking and/or truncation is applied to card numbers printed on reports. The expiry date is not printed.


## Transaction Inquiry

Displays and prints the details of transactions in the terminal memory.

1. On the transactions menu, scroll down and select **Batch Review**.
2. If prompted, key in the manager password and press the green  key.
3. To retrieve transactions by:
  - Clerk ID, select **Clrk**.
  - Transaction amount, select **Amt**.
  - The last four digits of the card number, select **Acct**.
  - The six-digit sequence number, select **Seq#**.
4. Key in the required information and press the green  key.  
The transaction details appear on screen.
5. Select **Prev** or **Next** to scroll through the transactions and display the right one.
6. Choose one of the following:
  - To print the Transaction Inquiry report for the displayed transaction, select **Prnt**.
  - To void the displayed transaction, select **Corr**.
  - To return to the transactions menu, press the red  key twice.

## Merchant Sub-totals report



Prints the totals of all transaction types in the current batch on the Moneris host without closing the batch.

1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, scroll down and select **Merch Subtotal**.

The terminal prints the Merchant Sub-totals report and returns to the REPORTS menu.

## Pre-auth Transactions report




Prints a list of all Pre-authorizations in the terminal memory that have not been completed.

1. On the transactions menu, select **Pre Auth**.
2. On the Pre Auth menu, scroll down and select **Pre-Auth Rpt**.
3. If prompted, key in the manager password and press the green  key.  
The terminal prints the Pre-auth Transactions report and returns to the Pre Auth menu.
4. Press the red  key to return to the transactions menu.

## Tip report

Prints tip activity for the current batch in the terminal memory.


**Note:** Clerk IDs must be set up on the Moneris host and Tip processing must be enabled on the terminal before this report can be generated.

1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, scroll down and select **Tip Report**.
4. When the “Clrk Rpt Opt” prompt appears:
  - To print the report for one clerk, select **One**, key in the Clerk ID and press the green  key.OR
  - To print the report for all clerks, select **All**.
5. When the “Rpt Period” prompt appears:
  - To print the report for all tip activity in the batch, select **All**.OR
  - To print the report for a specific date, select **Date**, key in the date (in YYYYMMDD format) and press the green  key.

The terminal prints the Tip report and returns to the REPORTS menu.

## Stored Transactions report


Prints totals for the current batch in the terminal memory without closing the batch.

1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, select **Stored Tran**.

4. At the “Rpt Period” prompt, choose one of the following:

- To print all transactions, select **All**.


OR

- To print transactions from a specific date, select **Date**, then key in the desired date (in YYYYMMDD format) and press the green  key.

The terminal prints the Stored Transactions report and returns to the REPORTS menu.

## Deposit Totals report

Prints the totals of all transaction types in batches that have been closed on the Moneris host on the date this report is printed.




1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, select **Deposit Totals**.

The terminal prints the Deposit Totals report and returns to the REPORTS menu.

## Clerk Sub-totals report

Prints totals for all transactions in the current batch on the Moneris host sorted by Clerk ID.

**Important: Clerk IDs must be set up on the Moneris host before this report can be generated. For information on configuring Clerk IDs, refer to the “Adding Clerk IDs” topic in the *VX 520 Webhelp* available at [moneris.com/support-VX520](http://moneris.com/support-VX520).**

1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, select **Clerk Subtotal**.
4. At the “Clerk Id:” prompt, choose one of the following:
  - To print the Clerk Sub-totals report for *one* clerk, key in the Clerk ID and press the green  key.
  - To print the Clerk Sub-totals report for *all* clerks, press the \* (**asterisk**) key, then press the green  key.

5. When the “Add Another Clerk?” prompt appears:

- To select additional clerks, select **Yes**. Repeat step 3.

OR

- To finish adding clerks, select **No**.

6. When the “Clear Totals?” prompt appears:

- To clear the clerk’s totals, select **Yes**.

OR


- To keep the clerk’s totals in the terminal memory, select **No**.

The terminal prints the Clerk Sub-totals report and returns to the REPORTS menu.

## EMV Parameters report

Prints a list of EMV parameters and their values by EMV card record number.


**Note:** *This report includes the Contactless CVM Limit parameter used to determine the maximum Signatureless Dollar Value for a card.*

1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, scroll down and select **EMV Param Rpt**.


The terminal prints the EMV Parameters report and returns to the REPORTS menu.

## Batch History report

Prints a list of closed batches, including each batch’s total Purchases, Refunds, Corrections and net totals.

1. Press the **Reports** key (first purple key on the right).
2. If prompted, key in the manager password and press the green  key.
3. On the REPORTS menu, scroll down and select **Batch History**.

The “Rpt Period” prompt appears.

4. Choose one of the following:
  - To print the batch history for a specific date, select **Date**. Key in a settlement date (in MMDDYY format) and press the green  key.

OR



- To print the batch history for all dates, select **All**.

The terminal prints the Batch History report and returns to the REPORTS menu.

# Administrative transactions

## Logon


If the “Host Logon Required” prompt appears, you must log on before you can perform transactions on the terminal.

1. Press the green  key at the transactions menu to display the CONFIGURATION menu.
2. On the CONFIGURATION menu, scroll down and select **Host Logon**.
3. Key in the manager password and press the green  key.

The terminal communicates with the Moneris host, displays “Logon Success”, then returns to the transactions menu.

## Logoff




To ensure unauthorized transactions cannot be processed, log off your terminal at the end of each business day.

1. Press the green  key at the transactions menu to display the CONFIGURATION menu.
2. On the CONFIGURATION menu, scroll down and select **Host Logoff**.

The terminal communicates with the Moneris host, displays “Logoff Success”, and returns to the transactions menu.

## Re-initialization

If the “Init Required” prompt appears, you must re-initialize your terminal by 3:00 a.m. the next morning.

1. Press the green  key at the transactions menu to display the CONFIGURATION menu.
2. On the CONFIGURATION menu, scroll down and select **Initialize**.
3. If prompted, key in the manager password and press the green  key.
4. When the “Retain ID?” prompt appears:
  - To keep the existing merchant ID, select **Yes**.OR
  - To change the existing merchant ID, select **No**. When the “Merchant ID:” prompt appears with the existing merchant ID displayed, key in your new Moneris Merchant ID number and press the green  key.
5. When “Transmitting...” and “Receiving...” appear, please wait while the terminal communicates with the Moneris host.
6. When the initialization is finished, “Init Successful” appears and then the transactions menu appears.

**Note:** If the “Host Logon Required” prompt appears after the re-initialization is complete, refer to the [Logon instructions on page 44](#).


## Batch Reclaim

Only perform a Batch Reclaim if you are a System Close merchant and the terminal has displayed the message “Must Settle Soon”.

1. On the transactions menu, scroll down and select **Batch Reclaim**.

The “Batch Reclaim” screen appears.

2. Select **Yes** to start the Batch Reclaim process.

- If the message “Batch Reclaim Not Required” appears, your batch is not yet close to capacity. Press the green  key to return to the transactions menu.


The terminal performs the Batch Reclaim and returns to the transactions menu. At the end of your day, you are still required to perform your normal End-of-day procedures.

# End-of-day process

## Merchant close

If your merchant account is set up for Merchant Close settlement, you must process a Batch Close transaction in order to have the funds from your POS transactions deposited to your business account. Moneris recommends closing your batch at the end of each business day. Here's how:

### Step 1: Process a Batch Close transaction

1. On the transactions menu, scroll down and select **Batch Close**.
2. If prompted, key in the manager password and press the green  key.
3. At the "Close Type?" prompt, select **Sngl**.  
The terminal communicates with the Moneris host and the Batch Totals report prints.
4. At the "Prt Stored Trans?" prompt, select **Yes**.
5. At the "Rpt Period" prompt, select **All**.  
The Stored Transactions report prints.
6. When the "Close Batch?" prompt appears, select **Yes** to close the batch and have funds deposited to your account.

**Note:** *If you do not make a selection at the "Close Batch?" prompt within two minutes, the terminal beeps three times and returns to the transactions menu without closing the batch.*

The terminal prints the Batch Close report and returns to the transactions menu.

### Step 2: Confirmation

Confirm that the totals on the Batch Totals report match the totals on the Stored Transactions report. If they do not match, call Moneris Customer Care toll-free at **1-866-319-7450** the next business day for reconciliation assistance.

## System close

If your merchant account is set up for System Close settlement, Moneris automatically closes your batch for you at the end of each day. You must verify transaction totals on a daily basis. Here's how:

### Step 1: Print a Stored Transactions report

- See page 41.

### Step 2: Print a Merchant Sub-totals report

- See page 40.

**Note:** *The Merchant Sub-totals report must be printed before 11:00 p.m. local time.*



### Step 3: Confirmation


- Confirm that the totals on the Stored Transactions report (printed in step 1) match the totals on the Merchant Sub-totals report (printed in step 2). If they do not match, call Moneris Customer Care toll-free at [1-866-319-7450](tel:1-866-319-7450) within 30 days for reconciliation assistance.





## Troubleshooting


If an error message appears, first press the green  key or the red  key to clear the message then retry the transaction. If the error message reappears and is listed in the table below, follow the instructions in the table. If the problem is still not resolved, call Moneris Customer Care toll-free at **1-866-319-7450**.


### Error messages





Error message	Solution
<b>Adjust Not Allow</b>	You cannot perform a correction (void) on a contactless Purchase or Refund.
<b>APP EXPIRED</b>	The application on the contactless card has expired. Request another form of payment.
<b>Batch Full</b>	<p>The batch is full.</p> <ul style="list-style-type: none"> <li>▪ If you are a <b>System Close merchant</b>: <ul style="list-style-type: none"> <li>▪ Perform a Batch Reclaim now. See page 45.</li> </ul> </li> <li>▪ If you are a <b>Merchant Close merchant</b>: <ul style="list-style-type: none"> <li>▪ Perform your normal End-of-day process now, even though it is not your end of day. See page 46.</li> </ul> </li> </ul>
<b>CARD BLOCKED</b>	The contactless card was blocked. Request another form of payment.
<b>Card Fail Insert or Swipe</b>	There was an error reading the contactless card. Insert or swipe the same card or another card.
<b>Card Fail</b>	There was an error reading the contactless card. Insert or swipe the same card or another card.
<b>CARD NOT SUPPORTED</b> or <b>INVALID CARD</b>	Your merchant account with Moneris is not set up to accept the card type entered. Request another form of payment.
<b>CARD SWIPE ERROR</b> or <b>READ CARD ERR</b> or <b>ERR READ CARD NO.</b>	<p>There is a problem with the magnetic stripe on the card that was swiped.</p> <ol style="list-style-type: none"> <li>1. Swipe the card again, this time more slowly or quickly, or from the front of the terminal to the back.</li> <li>2. If the message reappears, request another form of payment.</li> </ol>
<b>Card Removed</b>	The chip card was removed before the end of the transaction. Refer to “TRANS CANCELLED OK to Continue” in this table for more information.

Error message	Solution
<b>Cd Not Supported</b>	<p>The type of contactless card tapped is not supported by the contactless reader. Request another form of payment.</p> <p>OR</p> <p>You performed a Balance Inquiry on a card that does not allow balance inquiries.</p> <ul style="list-style-type: none"> <li>▪ For <b>pre-paid credit cards</b>: <ul style="list-style-type: none"> <li>▪ The customer must contact the card issuer to determine the balance.</li> </ul> </li> <li>▪ For <b>all other cards</b>: <ul style="list-style-type: none"> <li>▪ Press the green  key to return to the transactions menu.</li> </ul> </li> </ul>
<b>Chip Malfunction</b> <b>Use Mag Stripe</b>	<p>There was an error reading the chip card.</p> <p>Remove the card and retry the transaction. If the message reappears, swipe the card.</p>
<b>CHIP CARD SWIPED</b>	<p>A chip-enabled card was swiped.</p> <p>Insert the card in the chip reader and resume the transaction.</p>
<b>Connection Failed</b>	<p>The Ethernet connection failed. If Dial Backup is configured, the terminal will switch to dial communications for this transaction.</p> <ol style="list-style-type: none"> <li>1. Check all the cables to ensure everything is plugged in correctly (see page 6).</li> <li>2. Check that the router and hub/switch (if any) are functioning and are correctly configured. Please refer to the <b>Moneris IP Readiness Checklist</b> available at <a href="https://moneris.com/checklist">moneris.com/checklist</a>.</li> <li>3. Confirm that the network is functioning. Contact your ISP (Internet service provider) for assistance.</li> </ol>
<b>Empty Batch</b>	<p>There are no transactions in the current open batch.</p>
<b>Exceeds Limit</b> <b>Insert or Swipe</b>	<p>The transaction amount is over the contactless card's maximum Contactless Dollar Value (CDV).</p> <p>Insert or swipe the same card or another card.</p>
<b>EXC REFUND LIMIT</b>	<p>The total value of Refunds performed today is greater than your daily refund limit.</p> <p>Call Moneris Customer Care toll-free at <b>1-866-319-7450</b> for a temporary increase. Please have the original purchase receipt available for reference.</p>
<b>EXPIRED CARD</b>	<p>The expiry date on the card has passed.</p> <p>Request another form of payment.</p>

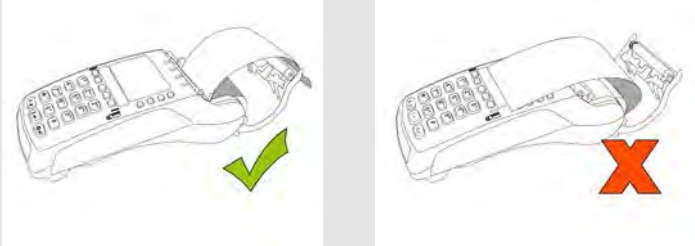
Error message	Solution
<b>Invalid Password</b>	<p>Press the red  key, then re-enter the manager password and press the green  key.</p> <p><b>Important: If the manager password is entered incorrectly five times in a row, the terminal will lock and will be unable to perform transactions. To unlock the terminal, contact Moneris Customer Care toll-free at 1-866-319-7450 and request a password reset.</b></p>
<b>INV# IS 7 CHAR MAX PRESS OK KEY</b>	<p>The maximum length of an invoice number for private label credit cards is seven characters.</p> <ol style="list-style-type: none"> <li>1. Press the green  key.</li> <li>2. Check the invoice number, then key in the correct number of characters and press the green  key.</li> </ol>
<b>LINE BUSY</b>	<ol style="list-style-type: none"> <li>1. Check if the phone line is shared with another piece of equipment (e.g., a fax machine).</li> <li>2. Check if a prefix (e.g., 9) is required to dial out.</li> </ol>
<b>Must Insert Card</b>	<p>A chip-enabled card was swiped. Insert the card in the chip reader and resume the transaction.</p>
<b>Must Settle Soon</b>	<p>Your batch is very nearly at capacity.</p> <ul style="list-style-type: none"> <li>▪ If you are a <b>System Close</b> merchant: <ul style="list-style-type: none"> <li>▪ Perform a Batch Reclaim now. See page 45.</li> </ul> </li> <li>▪ If you are a <b>Merchant Close</b> merchant: <ul style="list-style-type: none"> <li>▪ Perform your normal end-of-day process now, even though it is not your end of day. See page 46.</li> </ul> </li> </ul>
<b>No Line...</b>	<p>The terminal cannot detect a dial communications line.</p> <ol style="list-style-type: none"> <li>1. Check that all dial communication cables are connected to the Magic Box, the connection well on the underside of the terminal, and the wall jack correctly. If the cables are properly connected, check the phone line for a dial tone.</li> <li>2. Check that the phone line is an analog dial line. The terminal will not work on a digital phone line or on VoIP.</li> <li>3. Try the transaction again. If the message reappears, unplug and replug the power cable at the power source.</li> </ol>

Error message	Solution
<b>No Match</b>	<p>This error message is printed on the Batch Totals report beside terminal totals that do not match the host totals.</p> <ul style="list-style-type: none"> <li>▪ If you are a <b>Merchant Close</b> merchant: <ul style="list-style-type: none"> <li>▪ Close your batch normally (see page 46) and call Moneris Customer Care toll-free at <b>1-866-319-7450</b> the next business day for reconciliation assistance.</li> </ul> </li> <li>▪ If you are a <b>System Close</b> merchant: <ul style="list-style-type: none"> <li>▪ Contact Moneris Customer Care within 30 business days for reconciliation assistance.</li> </ul> </li> </ul>
<b>No Match</b> followed by <b>Record Not Found</b>	<p>The information you have used to find a transaction in memory cannot be found. Check the information and try again.</p>
<b>Not Accepted</b>	<p>You performed a Balance Inquiry on a card that does not allow balance inquiries.</p> <ul style="list-style-type: none"> <li>▪ <b>For pre-paid credit cards:</b> <ul style="list-style-type: none"> <li>▪ The customer must contact the card issuer to determine the balance.</li> </ul> </li> <li>▪ <b>For all other cards:</b> <ul style="list-style-type: none"> <li>▪ Press the green  key to return to the transactions menu.</li> </ul> </li> </ul>
<b>Not Completed</b>	<p>The transaction was not completed, most likely because of a communication problem. A “Not Completed” receipt is printed.</p> <ol style="list-style-type: none"> <li>1. Check the communication configuration based on your communication type (e.g., dial or Ethernet). Refer to <a href="#">Communications setup</a> on page 10 for more information on configuring communications.</li> <li>2. Begin a new transaction.</li> </ol>
<b>Out of Range</b>	<p>The Cashback amount requested exceeds the maximum cashback value set on the terminal.</p> <p>OR</p> <p>The total amount of the transaction, including the amount, tip, surcharge, and Cashback, exceeds \$999,999.99. Ask the cardholder to key in a lower amount when prompted.</p> <p>OR</p> <p>In Demo mode, ensure the amount of the transaction plus Cashback is \$1.00 or less, and the tip is \$1.00 or less.</p>

Error message	Solution
<b>Phone Num Flds Empty</b>	<p>The terminal has attempted to dial out but the phone number parameters are empty. If this message appears during a:</p> <ul style="list-style-type: none"> <li>▪ <b>Financial transaction:</b> <ul style="list-style-type: none"> <li>▪ Contact Moneris Customer Care toll-free at <b>1-866-319-7450</b>.</li> </ul> </li> <li>▪ <b>Batch Close transaction:</b> <ul style="list-style-type: none"> <li>▪ Perform a re-initialization (see page 44), then try the transaction again.</li> </ul> </li> </ul>
<b>PIN CANCELLED</b> or <b>PIN Cancelled</b>	<p>This message occurs:</p> <ul style="list-style-type: none"> <li>▪ when a customer removes their chip card at the “Enter PIN &amp; OK” prompt.</li> <li>▪ when a customer presses the red  key at the “Enter PIN &amp; OK” prompt.</li> </ul> <p>Refer to “TRANS CANCELLED OK to Continue” in this table for more information.</p>
<b>Present 1 Card</b>	<p>Two or more contactless cards were detected in the range of the contactless reader. Ask the customer to use one contactless card only.</p>
<b>PRINTER ERR</b>	<ol style="list-style-type: none"> <li>1. Open the printer.</li> <li>2. Check that there is a paper roll and that the roll is loaded properly (see page 7).</li> <li>3. Close the printer.</li> </ol>
<b>SETTLE FAILED</b>	<p>The connection with the Moneris host was lost during a Batch Close and the transaction was not completed.</p> <p>Try the Batch Close again. If the batch totals are \$0:</p> <ol style="list-style-type: none"> <li>1. Print a <b>Deposit Totals</b> report (see page 42).</li> <li>2. Print a <b>Stored Transactions</b> report (see page 41).</li> <li>3. Call Moneris Customer Care toll-free at <b>1-866-319-7450</b>.</li> </ol>
<b>SYSTEM PROBLEM</b> followed by <b>TCP INIT ERR:</b> <b>####</b> or <b>TCP RECV ERR:</b> <b>####</b> or <b>TCP SEND ERR:</b> <b>####</b>	<p>A communication error has occurred.</p> <p>Call Moneris Customer Care toll-free at <b>1-866-319-7450</b> and give the agent the four-digit number (####) that appears in the error.</p>

Error message	Solution
<b>Tap Not Accepted Insert or Swipe</b>	A contactless error occurred during the transaction. Insert or swipe the same card or another card.
<b>TCP Error #####</b>	There has been a communication error with the Moneris host, most likely due to firewall configuration. Check that the router and hub/switch (if any) are correctly configured. Please refer to the <b>Moneris IP Readiness Checklist</b> available at <a href="https://moneris.com/checklist">moneris.com/checklist</a> .
<b>TIP ERROR</b>	The customer has keyed in a tip amount or percentage that is greater than the standard percentage or a tip percentage that is not defined in the terminal.  <ol style="list-style-type: none"> <li>1. Press the green  key.</li> <li>2. Ask the customer to enter a smaller amount.</li> </ol>
<b>TRANS CANCELLED OK to Continue</b>	This message occurs: <ul style="list-style-type: none"> <li>▪ When a customer removes their chip card at the “Enter PIN &amp; OK” prompt (see the “Card Removed” message in this table for more information).</li> </ul> OR <ul style="list-style-type: none"> <li>▪ When a customer presses the red  key at the “Enter PIN &amp; OK” prompt.</li> </ul> Press the green  key on the terminal twice to print the customer and merchant copy of the cancellation receipt, and retry the transaction.
<b>TRANS NOT ALLOWED</b> or <b>TRANS NOT SUPPORTED</b>	You have attempted to perform a transaction that is either not configured on your terminal or not set up in your merchant account.
<b>Tran Not Allowed</b>	You performed a Balance Inquiry on a card that does not allow balance inquiries. <ul style="list-style-type: none"> <li>▪ <b>For pre-paid credit cards:</b> <ul style="list-style-type: none"> <li>▪ The customer must contact the card issuer to determine the balance.</li> </ul> </li> <li>▪ <b>For all other cards:</b> <ul style="list-style-type: none"> <li>▪ Press the green  key to return to the transactions menu.</li> </ul> </li> </ul>

## Equipment issues

Issue	Solution
Display screen on terminal is blank.	Check the connections on the Magic Box to ensure all cables are plugged in correctly (see page 6 for more information).
The receipt paper is coming out blank when printing transaction receipts or reports.	<p>The paper is loaded into the paper well incorrectly. Remove the roll and seat it into the paper well correctly. The paper should unroll back over the top of terminal, not over the display screen.</p> <div data-bbox="740 583 1430 827"></div>





# Merchant Support

At Moneris, help is always here for you 24/7.

## If you need assistance with your payment processing solution, we're here to help, 24/7.

We're only one click away.

- Visit [moneris.com/support-VX520](https://moneris.com/support-VX520) to:
  - watch the **VX 520 Setup and Installation** video
  - download additional copies of this guide and other resources
  - consult the **Moneris VX 520 WebHelp** for detailed information on all of the options available on your terminal and how to enable them
- Visit [shop.moneris.com](https://shop.moneris.com) to purchase point-of-sale supplies and receipt paper
- Visit [moneris.com/insights](https://moneris.com/insights) for business and payment news, trends, customer success stories, and quarterly reports & insights

### Need us on-site? We'll be there.

One call and a knowledgeable technician can be on the way. Count on minimal disruptions to your business as our Field Services provide assistance with your payment terminals.

### Can't find what you are looking for?

Call Moneris Customer Care (available 24/7) toll-free at **1-866-319-7450**. We'll be happy to help.

You can also send us a secure message 24/7 by logging in to Merchant Direct at [moneris.com/mymerchantdirect](https://moneris.com/mymerchantdirect).



---

## BE PAYMENT READY

MONERIS, MONERIS BE PAYMENT READY & Design and MERCHANT DIRECT are registered trade-marks of Moneris Solutions Corporation. Mastercard is a registered trademark, and the circles design is a trademark of Mastercard International Incorporated. INTERAC is a registered trade-mark of Interac Inc. DISCOVER is a registered trade-mark of Discover Financial Services. AMERICAN EXPRESS is a registered trade-mark of American Express Company. VISA is a trademark owned by Visa International Service Association and used under license. All other marks or registered trade-marks are the property of their respective owners.

© 2018 Moneris Solutions Corporation, 3300 Bloor Street West, Toronto, Ontario, M8X 2X2. All Rights Reserved. This document shall not wholly or in part, in any form or by any means, electronic, mechanical, including photocopying, be reproduced or transmitted without the authorized consent of Moneris Solutions Corporation. This document is for informational purposes only. Neither Moneris Solutions Corporation nor any of its affiliates shall be liable for any direct, indirect, incidental, consequential or punitive damages arising out of use of any of the information contained in this document. Neither Moneris Solutions Corporation or any of its affiliates nor any of our or their respective licensors, licensees, service providers or suppliers warrant or make any representation regarding the use or the results of the use of the information, content and materials contained in this document in terms of their correctness, accuracy, reliability or otherwise.

Your gift card processing is governed by your agreement for gift card services with Moneris Solutions Corporation. Your loyalty card processing is governed by your agreement for loyalty card services with Moneris Solutions Corporation. Your credit and/or debit card processing is governed by the terms and conditions of your agreement(s) for merchant credit/debit card processing services with Moneris Solutions Corporation. It is your responsibility to ensure that proper card processing procedures are followed at all times. Please refer to the **Moneris Merchant Operating Manual** (available at: [moneris.com/support](https://moneris.com/support)) and the terms and conditions of your applicable agreement(s) for credit/debit processing or other services with Moneris Solutions Corporation for details.