

## VX-670 Series APACS 40 User Guide



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## 1. Introduction

## VX-670 Terminal

This manual covers the Vx-670 mobile and portable terminal operating via Gprs or Wi Fi connectivity. Although the terminal can communicate in a variety of formats the software that it runs is designed in the same way, therefore all user interfaces will look the same

#### **Terminal Features**

The illustration below highlights the features of the terminal. The descriptions are detailed below to help you navigate your way around and there will be references to various buttons on this terminal throughout the manual. Please note that the **chip card** insertion slot can be found at the front of the terminal and the multi-directional **magnetic card reader** is located on the right hand side of the device.



## 2. Using Your Terminal

At this point you will need to refer to the Quick Installation Guide which will have been included with this manual and the terminal. This document will guide you through setting up the terminal. Once this has been successfully completed you will be ready to start using the machine.

## **Transaction Types**

The Vx terminals support Credit and Debit transactions. Your terminal software will be configured to support the following transaction types;

- 1. Sale Chip, PIN and Swiped
- 2. Refund Chip, PIN and Swiped
- 3. Customer Not Present (CNP)
- 4. Reversal
- 5. Referrals
- 6. Sale + Cash (optional)
- 7. Restaurant/TipPINg (optional)
- 8. Hotel Pre-Authorisation and Completion (optional)
- 9. E Top-Up (optional)

All transactions that are stated as optional will be configured upon your request, this can be done at the sign up phase or when you have received the terminal. Please contact your Merchant Services Helpline to request this.

## **Card Acceptance**

Your terminal will be configured with a default set of cards that it can process.

These are:-

## Visa, Mastercard, Maestro/Switch, Visa Delta, Visa Electron, Solo

**American Express** and **Diners Club Card** can also be accepted on this terminal, however these are not configured unless requested.



## 3. Training Mode

Before using the terminal for live transactions we advise that you take 5 minutes to familiarise yourself by processing some transactions in Training Mode. Please follow the instructions below to switch the terminal in/out of Training Mode;



From the idle screen (opposite) press the left hand purple Programmable Function key. There is a down arrow on the screen above.



Select the Supervisor Mode by pressing FO



Now key in the password 999999 and press Enter



Please select F1 for Training.

Training On Off

Please press F0 and the terminal will enter training mode. When you need to exit Training Mode repeat this process and select F1. Now return the terminal to the Sales screen by pressing the Cancel **EXE** button.

Now that Training Mode is switched on it is possible to conduct Sale and Refund transactions. The main screen will display Demo down the left hand side and all receipts will have TRAINING printed on them. Please complete the transaction described over page, you can use any card for practicing transactions in this mode.

## **Chip & PIN Training Transaction**



To start press F0 to select Sale



Please insert the chip card, chip end first facing up. Now key in the value of the transaction in pence. E.g.  $\pm 8.00 = 800$ . Once correct, press the green ENTER key  $\leftarrow$  to continue. If a mistake is made press the yellow back space key  $\leftarrow$  to delete the amount and try again.



The terminal now requires a pin to be entered. Any 4 digit PIN number can be entered. Now press Enter.



Select F0 to ensure the customer's copy is printed and then remove the card as requested. The terminal has now returned to the main screen and the transaction is complete.

## Receipt

C's	Shop	Company Name
York	Address	
Bake	Address	
Lo	Address	
10:44:4822/11/05	TXN 1234	Time, Date and Transaction No.
MID:540436500056789	TID:12345678	Merchant Id and Terminal Id.
TRA	Description to Identify Receipt.	
MAESTRO UK		Card Scheme.
1234 5687 9654 2558	ICC	Card Number.
Start: 12/04 Expiry: 12	Start and Expiry date of card.	
PAN Seq. No. 02		
AID: 1234567896542		
SALE £8.00		Transaction Type and amount.
PIN	/erified	How the card was processed.
Please debit my account wit		
APP	ROVED	Outcome of transaction.
AUTH C	ODE: 8888	Transaction response
1234567890ABCDEF	40	Diagnostic Code
Diag: 41		
XXXX		
V1.0.0.2		
Session: 4		

Above is an example of a receipt, in this instance a Training Transaction has just been completed. Throughout this manual there will be examples of various receipts representing the different types of transactions possible.

The descriptions attached to the right are displayed to help familiarise yourself with all the important information contained on a Sales Voucher and should be referred to whenever required.

## 4. Financial Transactions

This section describes all the different types of transactions it is possible to process.

## Sale Transaction – Swiped



## **Referred (Referral) Transactions**

A Referred Transaction is where the terminal has been unable to obtain Authorisation from the Host (bank) and is now requesting for an Authorisation Code to be obtained manually over the phone. This process applies to Swiped and Chip with Signature transactions.





Key in the Authorisation Code and press ENTER. The transaction is now stored in the terminal's memory. Select F0 to print the customer's copy.

## Keyed Transactions / Customer Not Present (CNP) Transactions





Press F0 to select SALE.

Key in the card number using the key pad on the terminal and press ENTER. The terminal will now request for the expiration date of the card. Please key this and press ENTER.



Maetsro

Customer Present Key in the amount and press ENTER.

The terminal now asks if the customer is present. Select F1 for Customer Not Present and F0 for Customer Present. The following procedure is now dependent on what option you have selected. If it was F0 Customer Present some of the following steps will be omitted.



0000000

The CSC numbers now need to be entered. This is a three digit number located on the back of the card on the right hand side of the signature strip. When complete press ENTER.



Postcode Nos

00000

You are now being requested to enter the numerical part of the customer's street address. E.g. 23 Baker Street you would key in 23 and press ENTER.

The Post Code numerics of the customer's address are now required. E.g. for a postcode of GU22 4NN you would key 224 and press ENTER.

The screen below displays the responses from the Host (bank). There are three possible responses: Matched, Not Matched or Not Checked. The host may still authorise the transaction even if one or more of the responses are negative. The decision to proceed with the transaction is up to you the Merchant. Please establish a policy for such events. See the Customer Not Present – AVS and CVV2 Acceptance Recommendations that follow. VeriFone also recommend that the AVS and CVV2 guidelines distributed by your Acquirer's Merchant Services Department is read and fully understood. CNP transactions due to their nature are higher in risk than Chip and PIN transactions.



Press any key to continue. The terminal will prompt if a customer's copy of the receipt is required. F0 for Yes, F1 for No. The transaction is now complete.

## **Customer Not Present Acceptance Recommendations**

Displayed	Comments	Actions
CSC - matched Postcode - matched Address - matched	All match	As long as you have been given an authorisation code, and you are satisfied that the transaction is genuine, unless there are other suspicious circumstances that concern you, you are likely to want to go ahead with the transaction. However as with all CNP transactions, payment is not guaranteed and you bear the risk if the transaction is disputed at a later date.
CSC – not checked Postcode - not checked Address - not checked	Data not checked	This could be because the card-issuing bank doesn't support either of the services, or their system is down. If this happens then you will have to make a decision based on information you have, as you do now. We would recommend you make further checks before going ahead with the sale.
CSC – not checked Postcode - matched Address - matched	Address match only	There is a possibility that this is a fraudulent transaction. However it could be that the cardholder has given you an incorrect CSC number by mistake. It could also be that a member of staff has noted down the number incorrectly. Therefore, before taking any further action, you may want to verify the CSC again with the cardholder.
CSC – not checked Postcode - matched Address - not checked	No data matches	There is a possibility that this is a fraudulent transaction. Further enquiries with the cardholder should be made. It could be that the member of staff has noted down the details incorrectly.
CSC – not checked Postcode - not matched Address - matched	No data matches	There is a possibility that this is a fraudulent transaction. Further enquiries with the cardholder should be made. It could be that the member of staff has noted down the details incorrectly.
CSC – not checked Postcode - not matched Address - not matched	No data matches	There is a possibility that this is a fraudulent transaction. Further enquiries with the cardholder should be made. It could be that the member of staff has noted down the details incorrectly.
CSC – matched Postcode - not checked Address - not checked	Security code match only	The address given must match the address recorded by the card-issuing bank, so in this case there is a possibility that the transaction is fraudulent. However, it could be possible that the cardholder has changed address without notifying the card issuing bank or the card issuer does not support AVS. Another possibility is that the member of staff may have noted the details incorrectly. Therefore you would probably want to verify the address again with the cardholder.
CSC – matched Postcode - not checked Address - not checked	Security code match only	The address given must match the address recorded by the card-issuing bank, so in this case there is a possibility that the transaction is fraudulent. However, it could be possible that the cardholder has changed address without notifying the card issuing bank or the card issuer does not support AVS. Another possibility is that the member of staff may have noted the details incorrectly. Therefore you would probably want to verify the address again with the cardholder.

## Sale with Cashback

You will need to be authorised to accept the cashback facility on your terminal. It is not a standard configuration on the terminal. Please remember Cashback is only available on Debit cards and it must be a Customer Present transaction.



To access the Cashback facility press the left hand purple function button until the option appears. If Cashback has been requested from the outset the Cashback button could be on the first screen.



Connecting

The transaction flow does not alter from a SALE. The card is processed and the amount is requested, after this point the terminal will request for the Cash amount to be entered. Enter the amount that the customer has requested as Cashback and press ENTER.

Authorisation will be obtained and the transaction is complete.

Please see the Sale + Cashback receipt that follows. This shows how the Sale amount then the Cash amount is displayed with a cumulative amount for the total.

Sale with Cashback Receipt

Merchant Name				
Address 1				
Address 2				
Address 3				
VAT number: 1234567	89			
VAT Rate: 17.50&				
HH:MM:SS				
DD/MM/YY				
MID: 123456789				
12345678				
MERCHANT COPY				
MASTERCARD				
1234 5687 9654 2558				
ICC				
Start: MM/YY				
Expiry: MM/YY				
PAN Seq. No. 02				
AID: 1234567896542				
SALE £22.50				
CASH BACK £10.00				
TOTAL £32.50				
PIN VERIFIED				
Please debit my account with total	shown			
APPROVED				
AUTH CODE: ABC120	)			
1234567890ABCDEF	40			

## **Refund Transaction Swiped**



Customer Not Present Refund transactions are also possible. Please refer to the Customer Not Present section on Page 12. You need to initiate the transaction by selecting Refund - F1 - after this step the transaction flow does not alter from what is already stated on Pages 12 and 13.

#### **Chip and PIN Transactions**

Transaction processing in the UK is predominantly Chip and PIN. Using this method of payment it is possible to utilise technology to provide major security enhancements helPINg in the fight against fraud. You the merchant should always endeavour to process a transaction via Chip and PIN whenever and wherever possible.

Due to the nature of the processing the Card has a much greater say in the processing and ultimately authorisation of the transaction, please be aware that it is not just the Host (bank) as before with Swiped and Keyed transactions that is controlling the process. The Chip on the customer's card holds vital information and is an integral part of all Chip and PIN transactions.

## **Chip and Pin Sale**





Tear off the receipt and select F0 to print the customer's copy. The card can now be removed from the terminal. The transaction is now complete.

## **ICC PIN Verified Sale Receipt**

Merchant Name Address 1 Address 2 Address 3 VAT number: 123456789 VAT Rate: 17.50& HH:MM:SSDD/MM/YY MID: 123456789 12345678 **MERCHANT COPY** MASTERCARD 1234 5687 9654 2558 ICC Start: MM/YYExpiry: MM/YY PAN Seq. No. 02 AID: 1234567896542 SALE £10.00 **PIN Verified** Please debit my account with total shown **APPROVED AUTH CODE: ABC120** 1234567890ABCDEF 40 Diag: 41 ХХ V1.0.0.2 Session: 4

## Refund



Press F1 to select Refund.

For all chip transactions the card is inserted into the device chip end first and facing upwards

0000000 Acct # 1234567890 Amount £0.00 



Refund

Signature Valid

Auth: 1234

00000

Now key in the value of the transaction and press the ENTER key If a mistake is made press the yellow back space key 🔶 to delete the amount and try again.

The terminal will now communicate with the Bank's Host system and obtain an Authorisation Code. Once complete a receipt will be printed.

Tear off the receipt and hand to the customer to sign. Compare the signature on the back of the card with the signature on the receipt. If you are satisfied it is correct, press the FO key and the transaction is complete. If you are not satisfied, press F1 and the transaction will be cancelled.

## **Incorrect PIN is Entered**



Press F0 to select Sale or F1 to select Refund.

For all chip transactions the card is inserted into the device chip end first and facing upwards.

Now key in the value of the transaction and press the ENTER key . If a mistake is made press the yellow back space key to delete the amount and try again.

Request the customer to enter their PIN. If the incorrect PIN is entered the terminal display will flash up Wrong PIN in the bottom left hand corner and request the PIN to be entered again.

If the customer keys in the wrong PIN twice the terminal will allow one last attempt and the screen will read **Last PIN Try**. Entering an incorrect PIN here will lock the card and the customer has to contact their card issuer. Enter a correct PIN and the transaction will continue as per the instructions for Chip and PIN Sales.

The terminal will not allow a PIN Encrypted card to be processed without a PIN being entered. If the customer cannot remember their PIN request another card on which they can or request an alternative means of payment. The terminal will not allow PIN cards to be swiped.

## Sale and Gratuity (Tips) – Restaurant Mode

The terminal can be configured upon request to accommodate a 'Restaurant Mode'. This enables the TipPINg facility on the terminal.



For all chip transactions the card is inserted into the device chip end first and facing upwards.

Now key in the value of the transaction and press the ENTER key where the press the yellow back space key to the press the yellow back space key to the press the yellow back space key to the press the delete the amount and try again.

The terminal can now be passed to the customer. Request that any key should be pressed when they are ready to continue.

The customer is asked if they wish to add a Gratuity. Selecting F0 – Yes - will take them to the next step, F1 - No - will take them to the point

4 Options are now available. Three will calculate a tip amount automatically of 5%, 10% or 15%. Please press F0, F1 or F2 respectively to select these amounts. Select F3 and the customer is then allowed to enter a tip for whatever amount they wish.

## This Step is only Applicable if the 'Other' option is chosen.



A tip of the customer's choosing can now be entered. Please note that the tip amount must be smaller than that of the Sale.

The terminal displays the Sale amount, the Tip amount and the Total amount and request for confirmation. Use F0 for Yes or F1 for No. If No is selected the terminal will return to the previous screen where the customer can choose their gratuity amount again.

Maestro Amount £11.00 Enter Pin Request the customer to key in their PIN and press ENTER. The terminal should now be returned to the merchant.



The terminal will now communicate with the Bank's Host system and obtain an Authorisation code.

Maestro	Yes
	No
rint Copy	
Auth Code	

Tear off the receipt and select F0 to print the customer's copy. The card can now be removed from the terminal. The transaction is now complete.

## X and Z Reports

X and Z reports are available as part of this terminal's software functionality. These reports are designed to enable you, the merchant to view transactions and help understand what data has been processed. Please bear in mind that these are Offline reports generated direct from the terminal's memory and in no way does the terminal communicate with the Host (Bank).

The X report shows the total number and value of transactions performed for each Acquirer since the last Z report. An X report does not reset the totals it is a running report which can be used as many times as necessary to detail the transactions processed through the terminal in any given shift.

The Z report will show the total number of transactions performed for each Acquirer since the last Z report and will reset the totals. This report is usually run once a day at the close of trading however, it can be used to determine other desired trading patterns if multiple shifts are run each day, or if a trading session were to last a period of days, weeks or months. However you choose to use it a cumulative total since the last Z will be shown.

Please note that if you have experienced problems with your terminal and a software re-load or re-configuration was necessary these totals can be affected.



Press F2 to select Reports.

Key in the Password of 123456 and press ENTER.

The terminal now displays the available reports. For the X report please select F2 and for the Z Report please select F3.



The selected report is now printed. Press the cancel to return to the default screen.

## Z Report

Totals Reset				
Card		CNT	Total	Net
Visa	DR	1	10.00	
	CR	0	0.00	
	Cash	0	0.00	10.00
Card		CNT	Total	Net
Mastercard	DR	2	20.00	
	CR	0	0.00	
	Cash	0	0.00	20.00
Card		CNT	Total	Net
Visa Delta	DR	1	10.00	
	CR	1	10.00	
	Cash	0	0.00	0.00
Card		CNT	Total	Net
Maestro	DR	2	20.00	
	CR	0	0.00	
	Cash	0	0.00	20.00
Card		CNT	Total	Net
Solo	DR	1	10.00	
	CR	0	0.00	
	Cash	0	0.00	10.00
Card		CNT	Total	Net
Electron	DR	2	20.00	
	CR	0	0.00	
	Cash	0	0.00	20.00
Card		CNT	Total	Net
Amex	DR	0	0.00	
	CR	0	0.00	
	Cash	0	0.00	0.00
		CNT	Total	Net
Gratuities		1	5.00	5.00
End of Report				

## X and Z Reports Explained

The following descriptions refer to the sample Z Report on the previous page.

Card Type. The left hand column details the Card Type e.g. Visa

**Debit.** DR = Debit. This is a Sale

**Credit.** CR = Credit this is a Refund

**Cash** = Cash advance Transaction. Only applicable in specific retail environment.

**CNT** = Amount of transactions processed. E.g. for Visa there are 1 for Mastercard there are 2.

**Total** = Lists the total for each of the three transaction types. E.g. for Visa it is £10 for Mastercard it is £20.

**Net** = Net amount processed. E.g. for Mastercard it is  $\pm 20$  as 2 Sales totalling that amount have been processed. Visa Delta its  $\pm 0$  as there have been two transactions 1 Sale at  $\pm 10$  and 1 Refund at  $\pm 10$ .

**Gratuities** = The number of Gratuities processed through the terminal and their cumulative total.

## **Reconciliation Report**

At the end of each trading day you need to perform a Reconciliation. This process is important and should be completed every day that the terminal is used. If you have not used the terminal on any one particular trading day you do not need to run this report. This procedure checks your terminal totals balance with the banks host system totals, the information is compared and the reconciliation report will highlight if all transactions have been agreed upon or if there are any Discrepancies. The terminal will also print out the totals of the days transactions. Please ensure that you have enough paper left required to complete this report before starting.





When have more than one Acquirer configured on the terminal e.g. LTSB and Amex the terminal offers you the option to reconcile to a particular one, if so select F0 or to reconcile to all Acquirers select F1.



If you have selected to reconcile one Acquirer the terminal now requests you select the desired one. This is done by using the two left hand programmable function keys below the Up and Down arrows on the screen. Press Enter when you have selected the required Acquirer.



The Reconciliation report is now complete. Press the Cancel button to return to the default screen.

Merchant name		28/01/04	23023333
Merchant Address			0024
MID: 123456789012345			
12:55:32			
RECON	CILIATION IS	SUER TOTAL	.S
VISA			
Current	DR	2	5.20
	CR	0	0.00
Previous	DR	0	0.00
	CR	0	0.00
MASTERCARD			
Current	DR	1	10.76
	CR	0	0.00
Previous	DR	0	0.00
	CR	0	0.00
MAESTRO			
Current	DR	0	0.00
	CR	1	7.00
Previous	DR	0	0.00
	CR	0	0.00
RE	CONCILIATIO	N TOTALS	
S: 5			Diag. Code 70
Current	DR	3	15.96
	CR	1	7.00
FROM 0003 TO 0006			
Previous	DR	0	0.00
	CR	0	0.00
FROM 0000 TO 0000			
	CANNOT CO	NFIRM	
	END OF RE	PORT	

#### **Reconciliation Report Explained**

The following descriptions refer to the Reconciliation report on the previous page.

**Report Header.** The header of the report will detail your merchant information, Merchant Number, Name and Address. On the same line as the Merchant ID is an 8 digit number, this is the terminal's TID and can be used as a means of identifying your terminal whenever you have a query with the bank or Terminal Support desk.

Date and Time. Below the header is the Date and Time the report was completed.

**Card Types.** The transactions are listed in card type. On this report Visa is first. There are two sections for each card type, Current and Previous. The Current section will show the transactions that have been completed in the last session. These are the transactions the Bank will see and will be Reconciling against. The Previous section will detail the transactions from the previous Reconciliation.

**Debits and Credits.** For each card type it states the amount of Debits (Sales) and Credits (Refunds) with their associated values. For Visa there are two sales totalling £5.20 for Mastercard there is one Sale at £10.76 and for Maestro there is one refund at £7.00.

**Reconciliation Totals.** Here you can see the cumulative total of Credits and Debits. The numbers 0003 and 0006 refer to the transaction numbers applicable to these transactions. These are printed on the receipt.

Also the code 'S: 5' and 'Diag. Code 70'. These maybe requested by the Bank if a query is raised.

**Online Responses.** At the end of the report you will see the message **'CANNOT CONFIRM'**. This is one of the four responses that will be printed on every reconciliation report.

- Totals Agree. The terminal and Host have reconciled and all totals are correct.
- Totals Disagree. There is a discrepancy between the totals the terminal has and the totals on the Host system. The Diag Code of 73 will be on the report to confirm this. It is now necessary to phone the relevant Reconciliation department and understand where the error has occurred. It is advisable that you have all receipts at hand.
- Totals Unconfirmed. The terminal was unable to communicate with the Host. Please try again. If failures continue contact terminal support.
- Cannot Confirm. The terminal cannot gain confirmation from the Host. It will be communicating with the system however it cannot obtain a correct response. The reason for failure will be shown on the screen while the terminal is attempting the Reconciliation. You will need to contact terminal support to rectify the issue.

#### **General Troubleshooting Guidelines**

The troubleshooting guidelines provided in the following section are included to assist the user. If the problem persists after you have followed the guidelines or if the problem does not appear to be covered by these guidelines, call the Helpdesk.

## Blank Display

When the terminal LCD screen does not show correct or clear readable information:

• Check the terminal batter level. Ensure it is not empty, if so please charge it.

### Printer Does Not Print

If the printer does not work properly:

- The internal thermal printer receives power directly from the terminal. The green poweron indicator light must be ON.
- Check to make sure the paper roll cover is properly latched.
- If the green power-on indicator is blinking or the light is red this is an indication there is a problem. Open the paper roll cover and install a new roll of printer paper.
- If the problem persists, call your Helpdesk.

## Printer Paper Jam

If paper jams inside the printer:

- Press the latch underneath the terminal to open the paper roll cover.
- Remove the damaged paper from the paper roll and clear the feed mechanism.
- Re-install the roll of printer paper, as described in Changing the Paper Roll.
- Check the paper loading instructions on the Installation guide.
- If the problem persists, contact the Helpdesk.

## Keypad Does Not Respond

If the keypad does not respond properly:

- Check the LCD screen. If it displays the wrong character or nothing at all when you press a key, reboot the terminal.
- If pressing a function key does not perform the expected action, refer to the usual transactions section of this Manual to ensure that you are entering the data for that application correctly.
- Has the keypad had any spillages recently, and are the keys sticking at all? If so please try cleaning the keypad with a damp cloth as this could help.
- If the problem persists, call your Helpdesk

#### Vx 670 GPRS Communication Problems

The Vx 670 Mobile terminal communicates over the GPRS network using the same networks as a mobile phone.

**Signal Gauge.** In the bottom left hand side of the terminal display there is a signal gauge which shows the strength of the signal. If this is on 1 or 2 bars it is possible that the terminal will have problems trying to transact. If possible move to an area where the signal is stronger.

**Transactions on the Move.** If you use the terminal while on the move it is possible that you can loose connection with the GPRS network and the transaction will have difficulties in completing as a result.

**Enclosed Spaces**. If you use the terminal in enclosed spaces such as basements, office complexes etc you may experience difficulty in obtaining a GPRS connection and processing transactions. The strength of the GPRS signal in such environments can be limited. Try to ascertain these problem areas and not use the terminal here.

#### Vx 670 Gprs Battery Information

The Lithium Ion Battery used to power the Vx-670 terminal is not sent out fully charged. Please charge this battery for 3 hours prior to use. Whenever the terminal is not in use it is advisable that the power lead is connected so the battery is re-charged whenever possible.

**Life**. With the battery fully charged the terminal can complete approx. 200 simultaneous transactions subject to network signal strength and condition of the battery pack. Note that if the terminal is in an idle state battery power is still required.

**Power Save.** If the terminal is not used for a certain period of time the software will put the terminal into a Power Save mode to conserve battery energy. The terminal can be re-activated by pressing the Enter key twice.

**Car Charger.** If you use the terminal in a car or it can be based in a car, Car Chargers are available. These can be purchased from VeriFone.

**Extra Battery.** If you find that the terminal is being used at Conferences, Shows etc where there is little or no access to a power source it is worth considering purchasing an extra battery.

## Vx-670 Wi-Fi

If you experience any Communication issues or have any Wi-Fi Network related issues you should direct your enquiries to the VeriFone partner providing this support. These details will have been made available during the installation of the Wi-Fi Router and/or Access Point. Alternatively please call the VeriFone support desk and your call will be directed accordingly.

If you are experiencing any terminal related or transactional problems please contact the relevant helpdesks.

**Diagnostic Codes** The numbers listed in the table below and their corresponding description help to explain why a transaction will have failed and what action to take.

Code	Description	Comments/Action
19	TXN failed due to power failure	
20	Connection lost with host computer before the end of the transaction	Call Helpdesk to ensure transaction processed/not processed correctly
21	No connection to host detected after dialling	Call Helpdesk for assistance if problem persists. Ensure phone line works correctly
30	Transaction failed after redialling	Attempt to process the transaction again, or call Helpdesk
31	Line busy	Ensure telephone line is working correctly. If problem persists call Helpdesk
40	No response from host computer	Call Helpdesk
41	Cannot connect to host computer	Call Helpdesk
42	No response from Card company	Call Helpdesk
44	Transaction terminated before completion	Call Helpdesk
45	Message cannot be sent	Check phone line. If problem persists call Helpdesk
46	Terminal has received an invalid message from host	Retry transaction. If problem persists call Helpdesk
49	Invalid message contents	Retry transaction. If problem persists call Helpdesk
53	Offline store full	Retry transaction. If problem persists call Helpdesk
70	Security error	lf problem persists call Helpdesk.
72	Retailer has indicated an invalid signature	
73	Totals out of balance	Generally no action required, terminal and host should rebalance totals after reconciliation. If problem persists call Helpdesk
76	Terminal has performed an online reconciliation	No action required.



# **Helpdesk Number**

Enter Merchant ID for future reference