S300 User Manual

Date: 20181024

Version: 2.10

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

THIS PAGE INTENTIONALLY LEFT BLANK

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

Preface

S300 User Manual

Version: 20181024_v2.10

Status: [ ] Draft [ ] Release [★] Modify

Technical Support

If you encounter a problem while installing, registering or operating this product, please make sure that you have read the documentation. If you cannot resolve the Issue, please contact us.

Your level of access to this Service is governed by the support plan arrangements made between PAX and your Organization. Please consult this support plan for further information about your entitlements, including the hours when telephone support is available to you.

Technical Support Contact Information:

(877) 859-0099

Terminal Support: support@pax.us

PAXSTORE and BroadPOS MarketPlace Support: paxstore.support@pax.us

PAX US: www.pax.us

Revision History

Date	Version	By	Description
20140912	V1.00	W. Kammerer	Original Release
20180228	V2.00	Tim L.	Reformat and update.
20181024	V2.10	Tim L	Update footers, preface and email addresses. Numerous other technical and non-technical updates.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

Table of Contents

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

This page intentionally left blank

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

1 Introduction

This user manual provides a description of the S300 semi-integrated terminal and transaction functions.

1.1 Purpose

This user manual describes transaction functions for the retail and restaurant markets. If you have a custom application, perform any modifications to your application in the BroadPOS MarketPlace MarketPlace in PAXSTORE, or manually modify terminal settings, some of the options and screens as described in the manual may be different.

1.2 Supported Devices

PAX S300 semi-integrated payment terminal.

1.3 Intended Audience

This manual is intended for use by the following three groups:

- Point of Sale clerks who use an ECR, but may interact with the terminal on a daily basis.
- Software engineers who develop and maintain the payment application designs for the US payment card industry
- Independent Sales Organizations who sell terminals and conduct end user terminal training.

1.4 Abbreviations

Name	Description
AID	Application Identifier
AVS	Address Verification System.
CAPK	Certification Authority Public Key
CID	Card Identification Number
CVC	Card Verification Code
CVV	Card Verification Value
EBT	Electronic Benefit Transfer
ECR	Electronic Cash Register
EMV	Europay Mastercard Visa
HALO	High Amount Lock Out - maximum amount limit on sales, returns, and cash back
KMS	Key Management System
PAN	Primary Account Number
PDK	PAX Platform Development Kit
PIN	Personal Identification Number – 4 to 16- digit confidential codes used by cardholders to identify themselves as the proper users of a credit or debit card to the Host computer.
POS	Point of Sale
RKI	Remote Key Injection
SDK	Software Development Kit
TDES	Triple Date Encryption Standard
TM	Terminal Management

TMS	Terminal Management System

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

2 PAX S300 Terminal Overview

The S300 is a multilane transaction processing and communication terminal used in conjunction with a retail or restaurant point of sale (POS) and Electronic Cash Register (ECR) system.

2.1 General Safety Information

Do not use the terminal if it is visibly damaged and regularly inspect the terminal for signs of tampering. Pax recommends checking the terminal on a regular basis for the following signs of tampering:

- Keypad and covers are firmly in place and not damaged.
- No extra or modified terminal ports.
- No loose wires attached to or hanging from the terminal.
- No modifications to the card readers or any other parts of the terminal.

2.1.1 FCC Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the body of this equipment is a label that contains among other information a product identifier. If requested, this number must be provided to the telephone company.

2.1.2 Physical Safety Information

- Do not attempt to take the terminal apart.
- Do not crush or burn the terminal.
- Do not apply power or operate the terminal outside the range of 32°F (0°C) to 122°F (50°C).
- Do not store the terminal outside the range of -4°F (-20°C) to 158°F (70°C).
- Do not expose the terminal to moisture, store, or operate in a high-humidity environment (10% to 93% relative humidity, non-condensing).
- Do not use the terminal in a hazardous environment. (Chemical plant, gas station, etc.)
- Keep the terminal out of reach from children and away from animals.

2.1.3 RF Exposure Information

This device meets the US government's requirement for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

2.2 Key Definitions

The following table provides a brief description of the keys on the S300 keypad.

Name	Description
Number Keys	0-9 Number Keys Input any numeric value or press twice to input alphabetic characters.
Alpha	Press this to switch between alpha and numeric key entry.
Enter	Complete and submit the current entry.
Cancel	Cancels the current transaction or backs out one menu level.
Clear	Deletes the character to the left of the cursor.
Function	Press this button and the Number 1 key at the same time to access terminal functions.

2.2.1 Screen and Keypad Layout

The following figure shows an S300 terminal screen and keypad.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

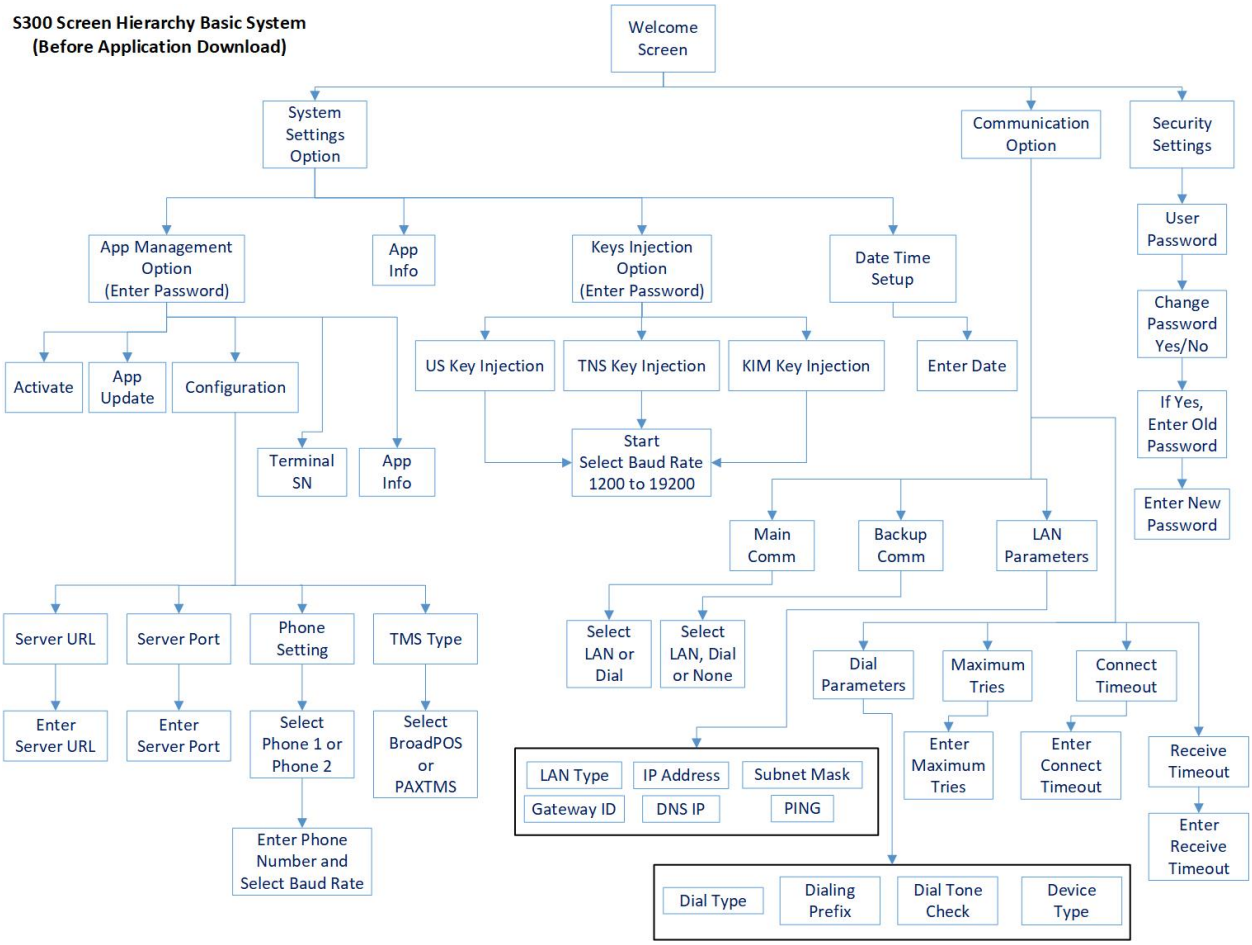
2.3 Basic System Screen Hierarchy (Before Downloading an Application)

This section describes the Main Menu screen and all subsequent options at power up running the on-board, basic system before the terminal downloads and runs any applications.

The following diagram shows the S300 basic system screen and option hierarchy and the following sections highlight each screen and option. See Section 3 for information on loading an application, Section 4 for information on card reading, Section 5 for information on manual settings after downloading an application, Section 6 for information on how to perform transactions for retail environment, and Section 7 on how to perform transactions for the restaurant environment.

NOTE

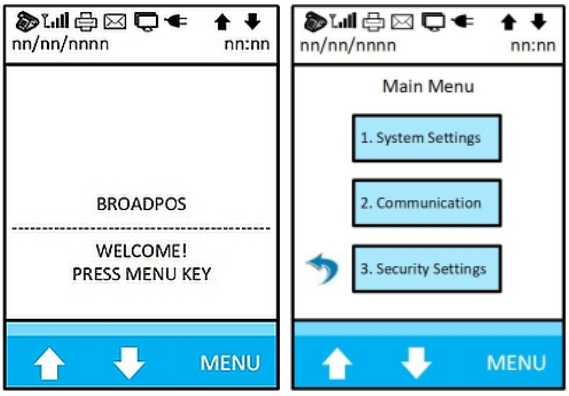
When you load an application, many of these screens and options will change.



2.4 Welcome and Main Menu Screen

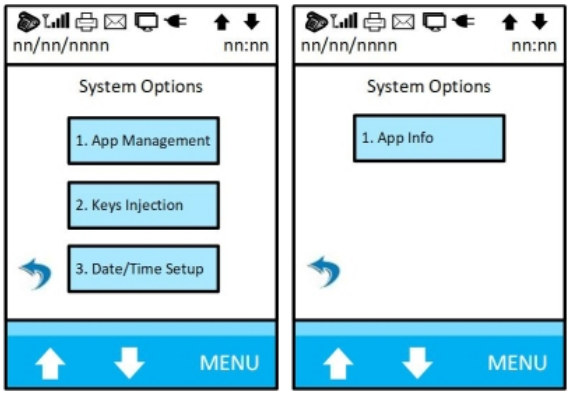
After the unit is powered on, it performs a self test, checks for a LAN connection, tries to configure itself online and then displays the welcome screen.

Select the Menu option on the Welcome screen and the Main Menu screen appears. The Main Menu screen displays three options and is the starting point for screen navigation.



2.5 System Options Screen (System Settings)

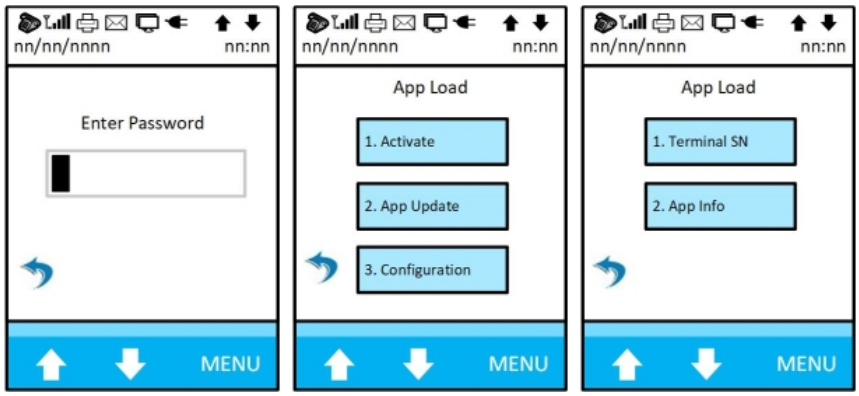
System Settings App Management, Keys Injection, Date/Time Setup, App Info



2.5.1 App Management

App Management Input the password and press the Enter key on the pinpad.

App Management Activate, App Update, Configuration, Terminal SN, App Info



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

2.5.2 Activate

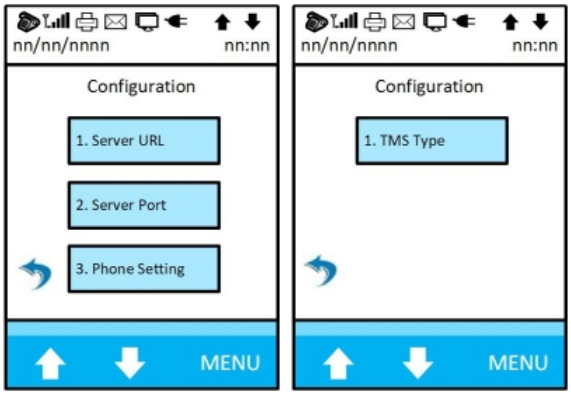
Activate — Online (The terminal attempts to activate online.) If activation fails, an error screen displays. If successful, an Activated screen displays.

2.5.3 App Update

App Update — App Attempts to update. If the application cannot update, the terminal displays an error screen and returns to the App Load screen. If successful, it again returns to the App Load Screen.

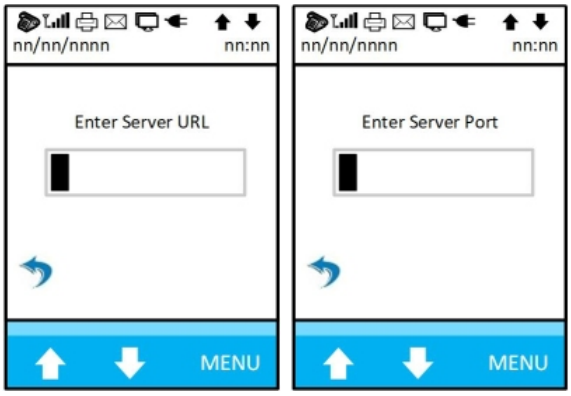
2.5.4 Configuration

Configuration — Server URL, Server Port, Phone Setting, TMS Type



2.5.4.1 Server URL and Server Port

Server URL	Input the server URL.
Server Port	Input the server port.

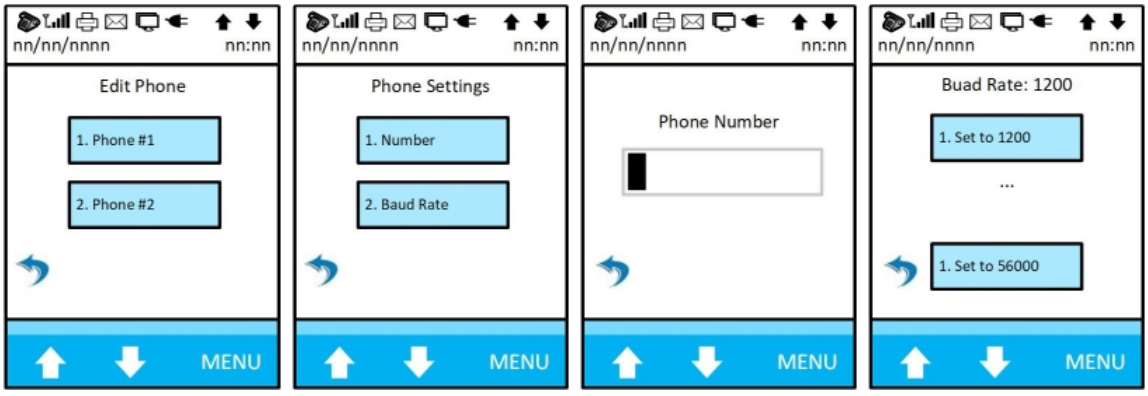


2.5.4.2 Phone Settings

Phone Setting	Phone #1 or Phone #2	Number, Baud Rate
Number	Phone Number (Input the phone number)	
Baud Rate	Select a Baud Rate. The current baud rate display at the top of the screen. Scroll through and select a baud rate from 1200 through 56000.	

NOTE

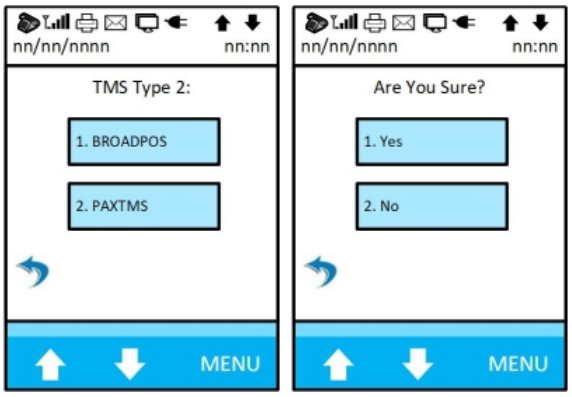
The available settings for the Phone #2 option on the Edit Phone screen are the same as Phone #1.



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

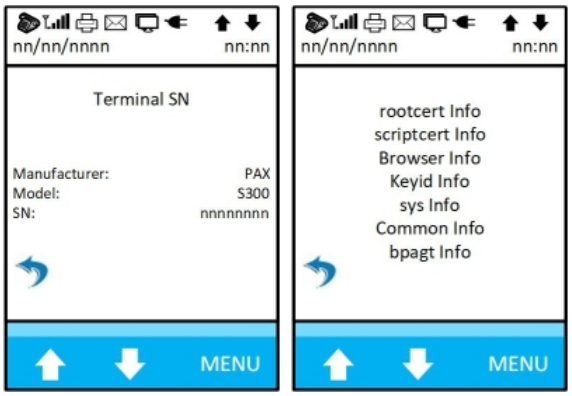
2.5.4.3 TMS Type

TMS Type	BroadPOS, PAXTMS
BroadPOS MarketPlace	App Load (See the App Load section as described in Section 2.5.1 App Management.
PAXTMS	Are You Sure?, (Yes or No)



2.5.5 Terminal SN and App Info

Terminal SN	Displays the terminal manufacturer, model, and serial number.
App Info	The screen displays rootcert info, scriptcert info, browser info, keyld info, sys info, common info, and bpagt info.



NOTE

The App Info option is accessible from more than one screen.

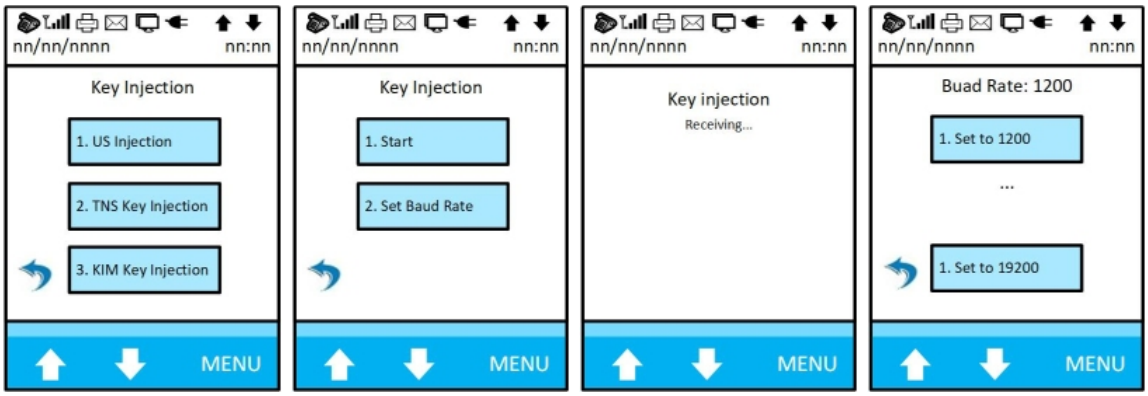
2.6 Keys Injection

Keys Injection US Injection, TNS Key Injection, KIM Key Injection

NOTE
All three injection choices will display the same two options, Start and Set Baud Rate.

Start Begins the Injection process.

Set Baud Rate Select a Baud Rate. The current baud rate display at the top of the screen. Scroll through and select a baud rate from 1200 through 19200.



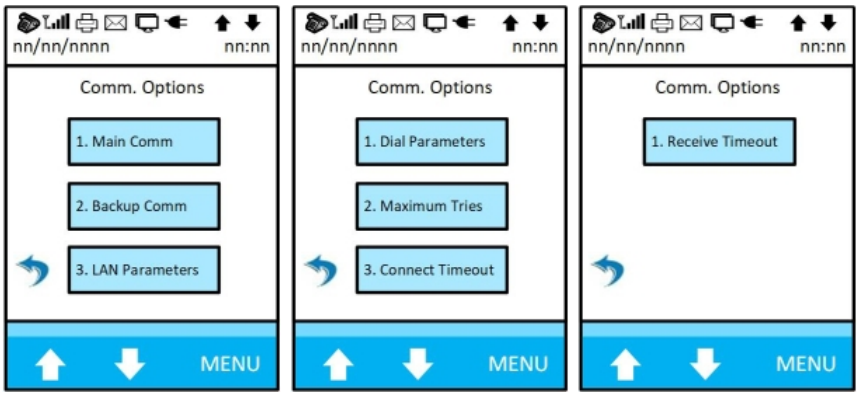
2.7 Date Time Setup

Date/Time Input the correct date.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

2.8 Communication

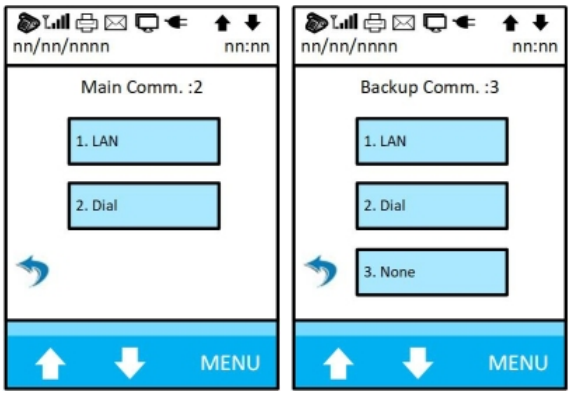
Communication Main Comm, Backup Comm, LAN Parameters, Dial Parameters, Maximum Tires, Connect Timeout, Receive Timeout



2.8.1 Main Comm and Backup Comm

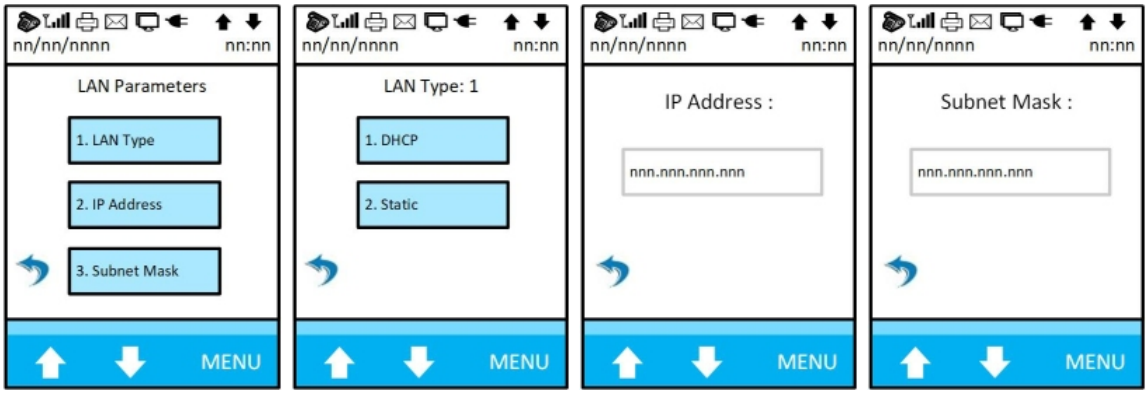
Main Comm LAN Dial

Backup Comm LAN, Dial, None

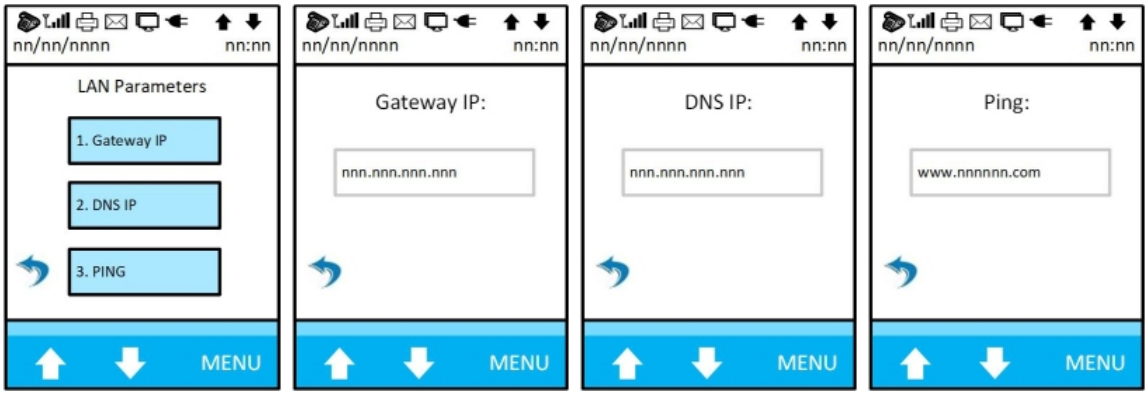


2.8.2 LAN Parameters

LAN Parameters	LAN Type, IP Address, Subnet Mask
LAN Type	DHCP, Static
DHCP and/or Static	Input IP address

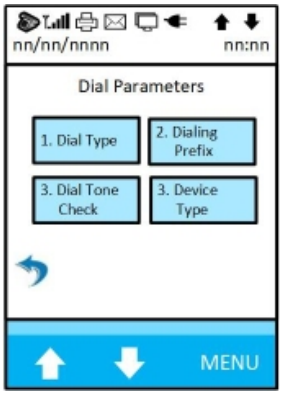


LAN Parameters	Gateway IP, DNS IP, PING
Gateway	IP Input the appropriate Gateway IP address.
DNS IP	Input the appropriate DNS IP address.
PING	Input a known good URL that the terminal can ping, such as www.pax.us.



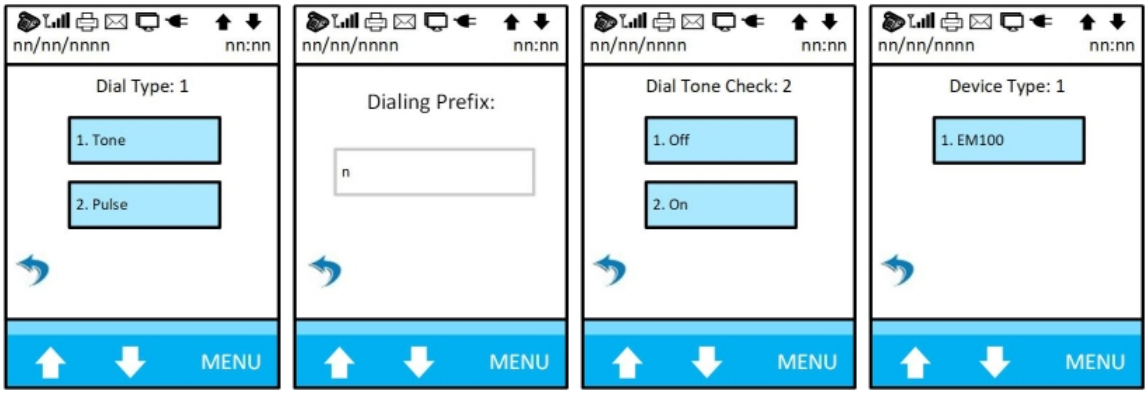
2.8.3 Dial Parameters

Dial Parameters	Dial Type, Dialing Prefix, Dial Tone Check



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

Dial Type	Tone, Pulse (Tone or pulse dialing method.)
Dialing Prefix	Input dialing prefix. (For example, you need to dial an 8 to gain an outside line.)
Dial Tone Check	Off, On (Listens for a good dial tone before dialing.)
Device Type	EM100

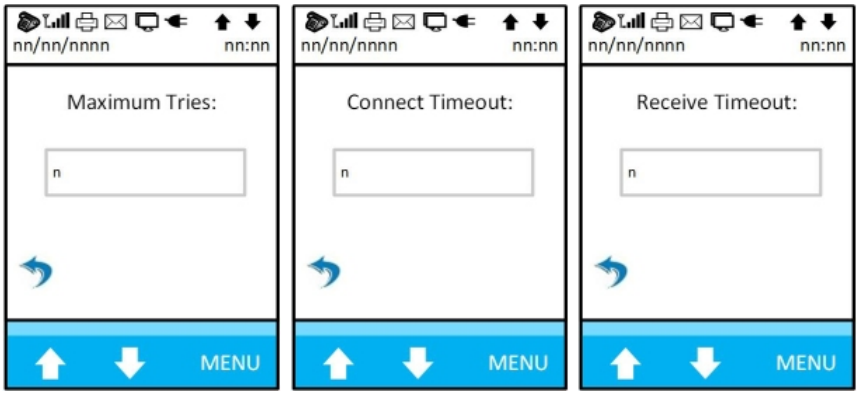


2.8.4 Maximum Tries, Connect and Receive Timeout

The connect timeout interval is the amount of time the terminal spends trying to connect to the host. Because most host systems have a back-up URL with a connect timeout period set to 30 seconds. This means it takes 60 seconds before the terminal stops trying to send out the request. At this point, the terminal displays a connect error.

The receive timeout interval is the amount of time it takes from when the terminal connects to the host and sent the request, until the terminal gives up on receiving a response from the host. At this point, the terminal shows a receive error. In the case of a receive error, the terminal has to send an auto-reversal in case the host approved the transaction but the terminal did not wait long enough to receive the approval.

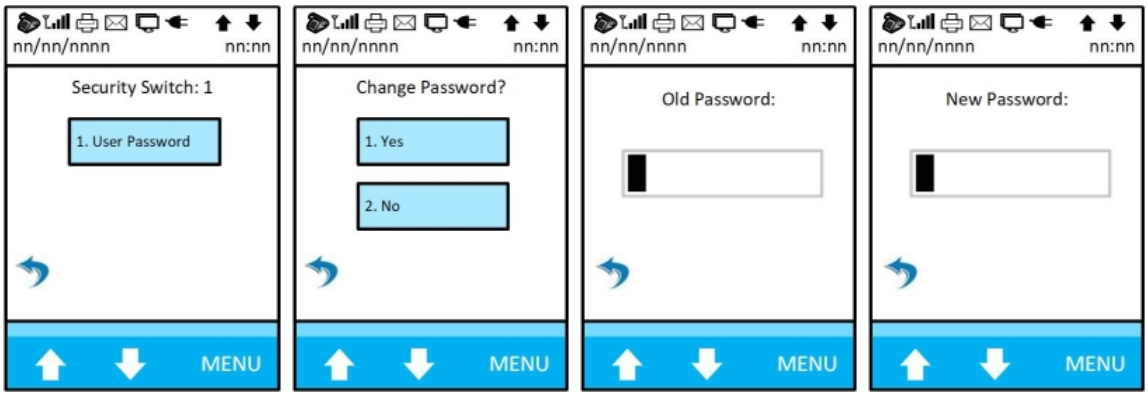
Maximum Tries	Input the maximum number of tries the terminal attempts to communicate.
Connect Timeout	Input a maximum connection timeout interval.
Receive Timeout	Input the maximum receive timeout interval.



2.9 Security Settings

If a password was not configured in BroadPOS MarketPlace MarketPlace, the terminal password defaults to either the current date, tomorrow's date, or yesterday's date in MMDDYYYY format.

Security Settings	User Password
User Password	Change Password? (Yes or No)
No	Returns to User Password option.
Yes	Input the old case sensitive password. When prompted, input the new case sensitive password.

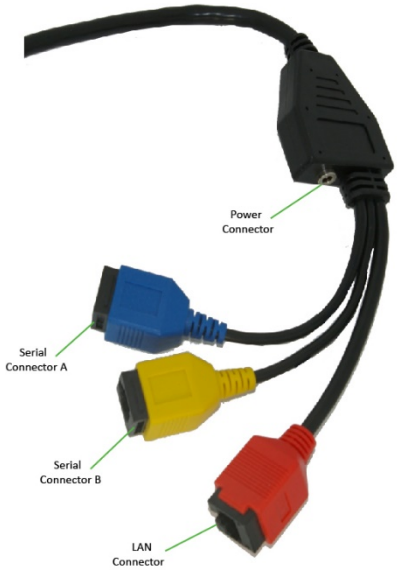


Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

3 Loading an Application and Accessing Manual Settings

This section describes where to review the download instructions and download an application to the terminal for the first time.

1. Ensure you use a known good LAN cable and a functioning internet connection. Plug one end of the LAN cable into your network and the other end of the LAN cable into the terminal's HUB cable connector marked LAN.
2. Ensure that the AC Adapter is plugged in to a known good AC outlet. Plug the other end of the AC Adapter cable into the terminal's HUB power cable connection.



3.1 Loading an Application

As already stated, this manual is built around BroadPOS MarketPlace MarketPlace applications built for the following two environments:

- Retail
- Restaurant

Custom applications or modifications made in BroadPOS MarketPlace MarketPlace will impact the screens and options as displayed in this manual.

Quite often, the only steps you need to take to download an application are to ensure that the terminal is connected to the network and that power is supplied to the terminal.

For details about how to load an application and configure in the BroadPOS MarketPlace in PAXSTORE, go to www.paxfaqs.wordpress.com and search for "BroadPOS User Manual". From there, see Section 6: Connecting Your Terminal to BroadPOS. If you have issues or questions that you cannot resolve after reviewing the online documentation, email PAX support at support@pax.us.

3.2 Accessing Menu Options After Downloading an Application

If you need to perform any administrative activities to the terminal after downloading an application you may need to access the menu options.

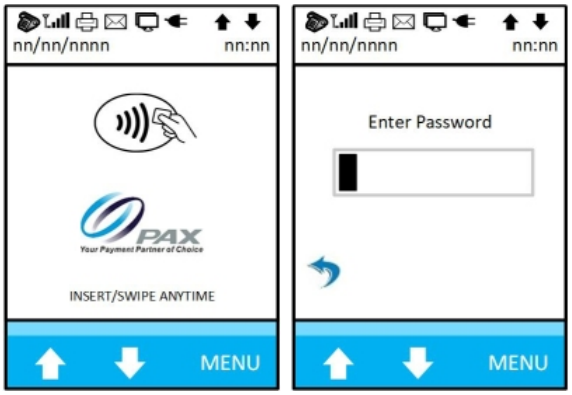
NOTE
To avoid potential issues, changes to the terminal should be managed through the application in BroadPOS MarketPlace, not in the terminal.

3.3 Idle Screen

When the terminal is powered on and after performing transactions, the Idle screen displays. The idle screen can be customized and may look different than what is shown.

NOTE
If a password was not configured in BroadPOS MarketPlace, the terminal password defaults to either the current date, tomorrow's date, or yesterday's date in MMDDYYYY format.

3. From the Idle Screen, press and hold the Function button and press the number 1 key on the keypad until the Enter Password screen displays.



4. Input the case sensitive password.
5. Navigate through the options and makes changes as needed.
6. See the screen and option hierarchy in Section 2.3 Basic System Screen Hierarchy (Before Downloading an Application) and/or Section 6 and Section 7 for more information regarding possible menus and options.

NOTE
Numerous options require that you input the password before changing any parameters.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

3.4 Status Indicators

The status indicators located at the top of the terminal screen provide a visual indication of various terminal activities. The icons change color from clear to blue when that function is active.

The following table describes each indicator.

Indicator	Function	Description
	Communication in process	Terminal is communicating with the payment processor.
	Wi-Fi connectivity	Wi-Fi connection in use. (This terminal does not support Wi-Fi).
	Print active?	Active printer detected.
	Card input	Briefly activates when a card is successfully swiped. Stays active while a chip card is inserted.
	Connectivity status?	Terminal is connected to a LAN.
	Power status	Active while the terminal is powered from either the external source or internal battery.
	Scroll up available	Indicates additional content available above the screen currently viewed.
	Scroll down available	Indicates additional content available below the screen currently viewed.

4 Card Reading

The S300 can handle magnetic stripe card, chip card, and contactless card transactions.

4.1 Magnetic Stripe Card

Often referred to as a swipe transaction, the terminal can read the card with either a bottom to top or top to bottom swipe. For best results and consistent transaction processing, the card's magnetic stripe should be facing the terminal and the operator should use steady top to bottom or bottom to top movement throughout the swipe. An improper swipe may cause an "invalid account #" error.

4.2 Chip Card

Often referred to as a chip and dip transaction, The card should be face up with the chip end of the card firmly inserted horizontally into the terminal. The terminal will prompt three times for a card insert. If the terminal cannot read the chip after the third attempt, the terminal prompts for a card swipe.

4.3 Contactless Card

Often referred to as an NFC or tap transaction, the card should be positioned and firmly held within an inch (2.5 mm) of the contactless area on the terminal until the transaction is processed. The transaction amount must be set below the contactless transaction limit (often $100) in BroadPOS MarketPlace. If the transaction amount is above the contactless limit, the terminal will display a tap error.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

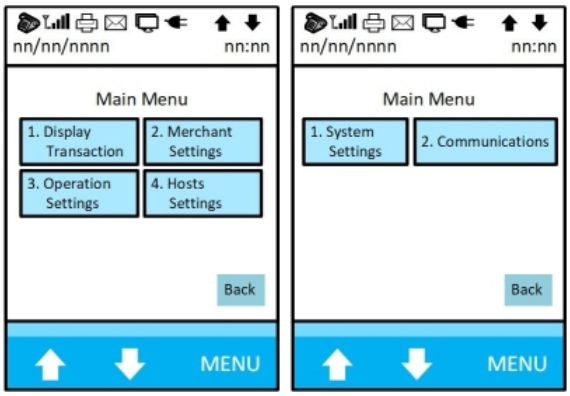
5 Manual Settings

This section describes terminal options that can be set manually. However, PAX recommends that changes to terminal options be made by your administrator in BroadPOS MarketPlace and downloaded to the terminal through the application. Any changes made manually will be over written by a BroadPOS MarketPlace update or download.

5.1 Main Menu Options

Access the menu options as shown in Section 3.2 Accessing Menu Options After Downloading an Application. Input the password and the Main Menu displays a total of six options. Use the arrows to navigate through the options.

Display Transactions	Use the Display Transaction options to review all or find specific transactions.
Merchant Settings	Use the Merchant Parameters options to Set Up Authorizations, Security Settings, Merchant Fees Credit Surcharges, Batch Times and Additional Prompts.
Operation Setting	Use the Operation Settings options for Buzzer Setup, Operation Mode, Screen Backlight, HALO Setup, Peripherals and Language Setting.
Host Settings	Use the Hosts Settings for Hosts Parameters, Hosts Phones, Hosts URL Parameters, Autodial Setup, Host Register, Batch Close, and EMV Param Download.
System Settings	Use the System Options to set Date/Time, Batch Number, Working Mode, Pre-Dial Call, Database, Keys Injection, App Management, TDES Keys Injection, and POS Register.
Communication	Use the Communication Options to set parameters for Main Communication, Backup Communications, Maximum Tries, Connect Timeout, Receive Timeout, Ping Timeout, DMS Timeout, Dial Parameters, LAN Parameters, and ECR Communication Type.



5.2 Display Transaction (Review and Find)

Select the Display Transaction option and two options display:

Review Review all of the transactions by transaction type.

Select the Review option, input the password, and the following screen displays with a total of six options. These options display the total number and dollar amount for each transaction type. Use the arrows to navigate through all six options. Selecting an option provides a transaction list for that option.

Find Find a specific transaction using the last four digits of the transaction ID.

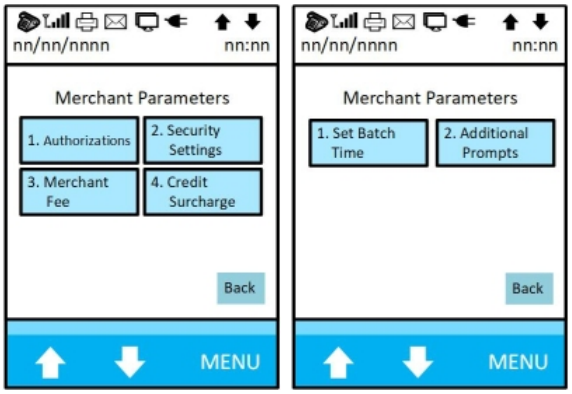
Select the Find option and input the password. When prompted, input the last four digits of the card to find transaction(s).

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

5.3 Merchant Settings

The Merchant Settings menu contains a total of six functions:

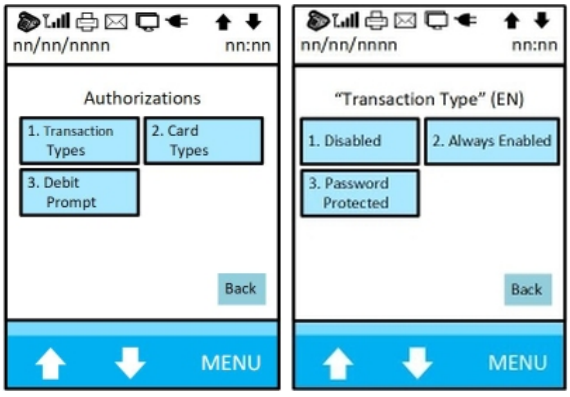
Authorizations	Trans Types, Card Types, Debit Prompt
Security Settings	User Password, Secure Card, Card Manual Entry
Merchant Fee	Adjust Merchant Fee
Credit Surcharge	Surcharge Mode, Flat Fee, Percentage, Surcharge Name, Surcharge Confirm
Set Batch Time	Turn off or configure the daily batch time.
Additional Prompts	Turn the following prompts off or on as needed; Cashback Prompt, Tax Prompt, Order Number Prompt, Ticket Prompt, Host Ref Prompt, Debit Account, Gift CVD2, Gift Tender Type, Gift Sale Mode.



5.3.1 Authorizations

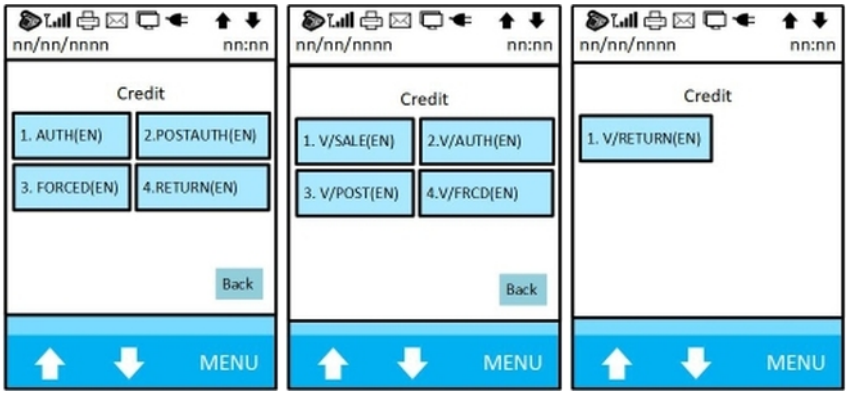
Transaction Types	Credit, Debit, EBT, Gift, Loyalty, Cash,
Card Types	Visa, Mastercard, AMEX, Diners, Discover, JCB, enRoute, Extended
Debit Prompt	Enable or Disable

Every transaction type has three options: Disabled, Always Enabled and Password Protected.

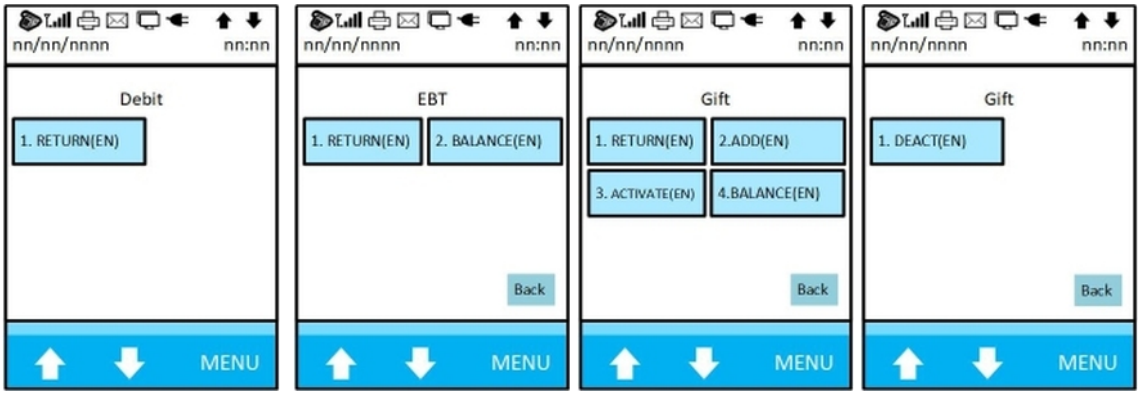


5.3.1.1 Transaction Types

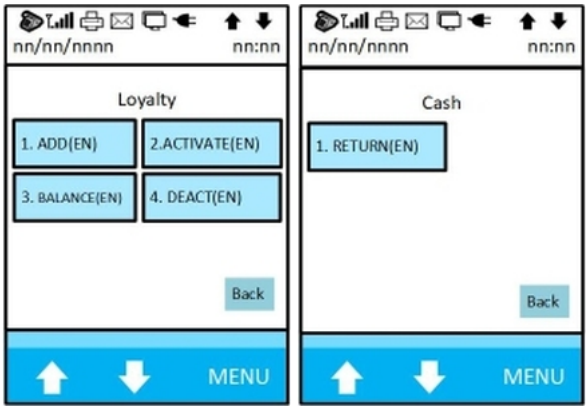
Credit	Auth (En), PostAuth (En), Forced (En), Return (En), V/Sale (En), V/Auth (En), V/Post (En), V/FRCD (En), V/Rtrn (En)



Debit	Return (En)
EBT	Return (En), Balance (En)
Gift	Return (En), Add (En), Activate (En), Balance (En), Deact (En)



Loyalty	Add (En), Activate (En), Balance (En), Deact (En)
Cash	Return (En)

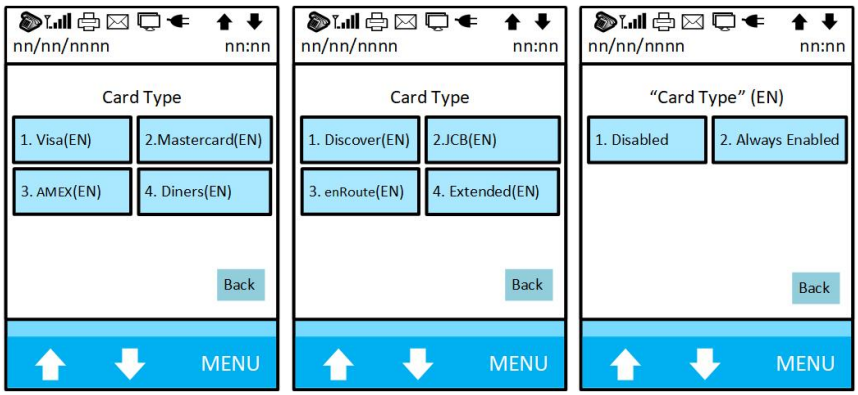


Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

5.3.1.2 Card Types

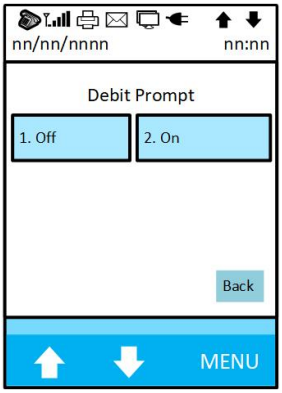
Card Types Visa, Mastercard, AMEX, Diners, Discover, JCB, enRoute, Extended

Every card type has two options: disable or always enabled.



5.3.1.3 Debit Prompt

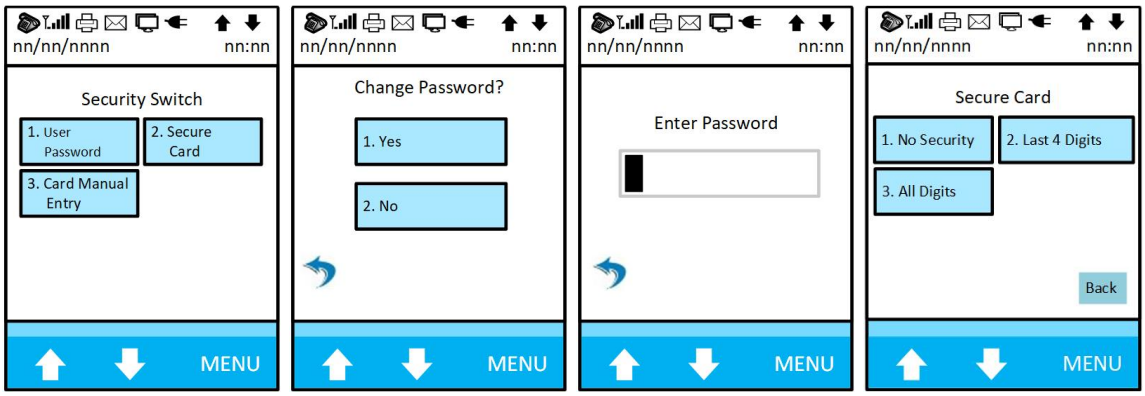
Debit Prompt Off or On



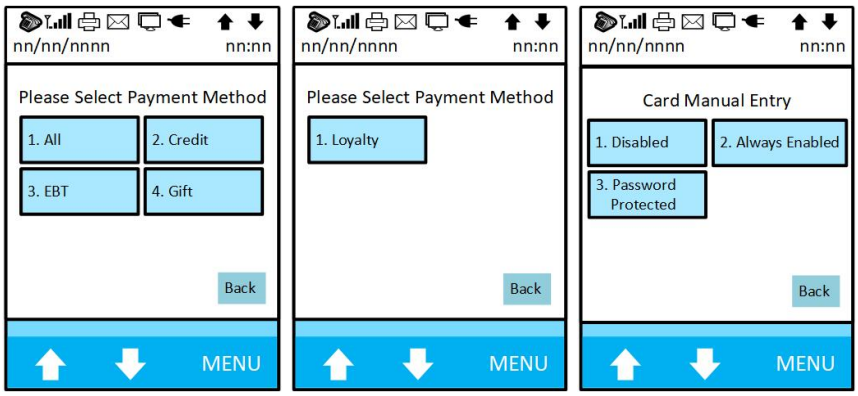
5.3.2 Security Settings

User Password Change PW Yes or No

Secure Card No Security, Last 4 Digit, All Digits

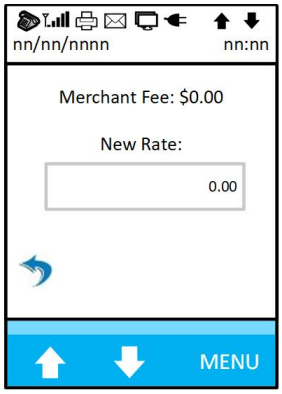


Card Manual Entry	All, Credit, EBT, Gift, Loyalty, (Disabled, Always Enabled, Password Protected)



5.3.3 Merchant Fee

The Merchant fee options allows inputting a merchant fee to be added to every transaction. The upper most line above the entry field displays the current rate. Input a new rate in the entry field as required.

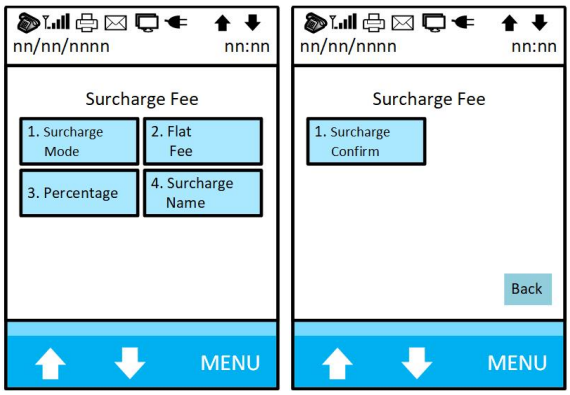


5.3.4 Credit Surcharge

Allows disabling or enabling and configuring various surcharge modes, fees, and options.

Surcharge Mode	Off, Flat Fee, In Percentage, Highest
Flat Fee	Set Fee $0.00
Percentage	Set Percentage
Surcharge Name	Input surcharge title
Surcharge Confirm	Enable or disable Surcharge Confirm

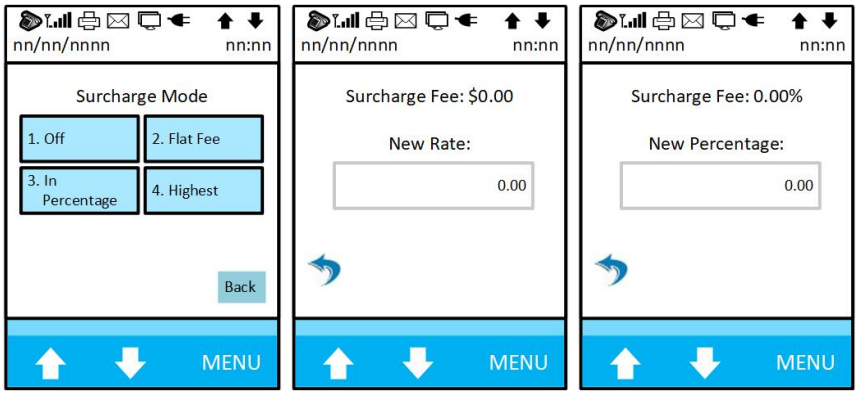
Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us



5.3.4.1 Surcharge Mode, Flat Fee and Percentage

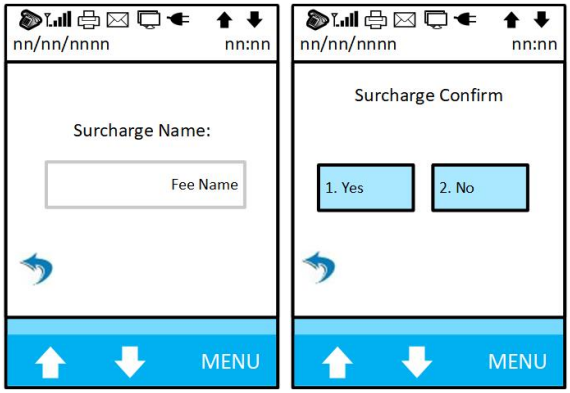
Surcharge Mode Off, Flat Fee, In Percentage, Highest

Input surcharge fee and input percentage.



5.3.4.2 Surcharge Name and Confirmation Message

Input a surcharge name and enable or disable surcharge confirmation message.

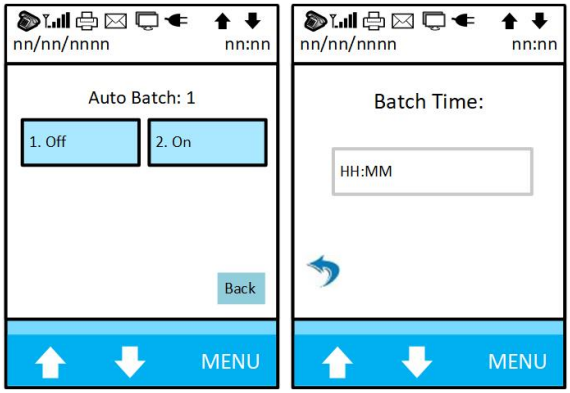


5.3.5 Set Auto Batch Time

The Auto Batch option allows you to Disable or Enable Auto Batch and set the batch time. When configuring Auto Batch, there are numerous elements to consider. Batch options and functionality vary by processor and application. For example, an Auto Batch may only clear the database in the terminal and a batch request message is NOT sent to the host.

Do not confuse Auto Batch with Auto Dial. An Auto Dial sends a batch request message to the host. Some retail applications do not need to send a request message, so the terminal only clears the database. Some restaurant applications can send the tips in the batch.

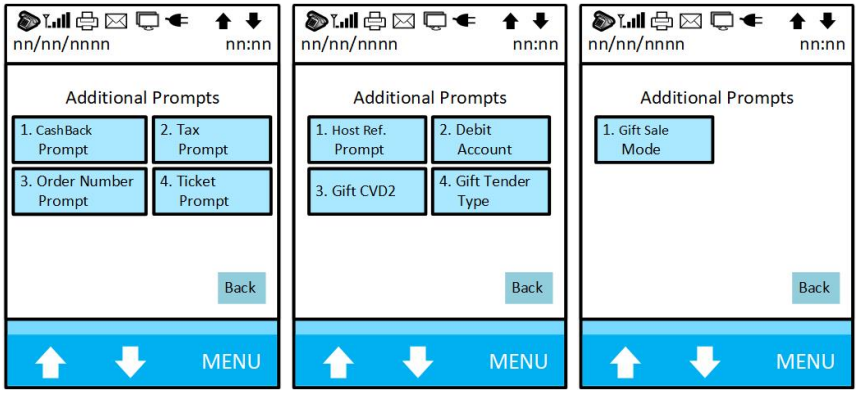
A processor can send a batch request (a single request that sends the total of the batch) but this is rare. Some applications can also send all of the transactions in a batch. Contact your host processor for details about your particular batch configuration.



5.3.6 Additional Prompts

The Additional Prompts options, after inputting the password, allows you to enable and configure a variety of terminal prompts for customers.

CashBack Prompt	Turn Off or On
Tax Prompt	Turn Off or On
Order Number Prompt	Turn Off or On
Ticket Prompt	Turn Off or On
Host Ref Prompt	Credit, Debit, EBT, Gift, Cash
Debit Account	Turn Off or On
Gift CVD2	Turn Off or On
Gift Tender Type	Turn Off or On
Gift Sale Mode	Turn Off or On

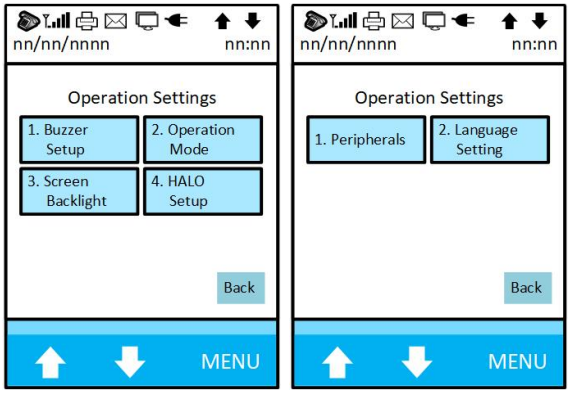


Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

5.4 Operation Settings

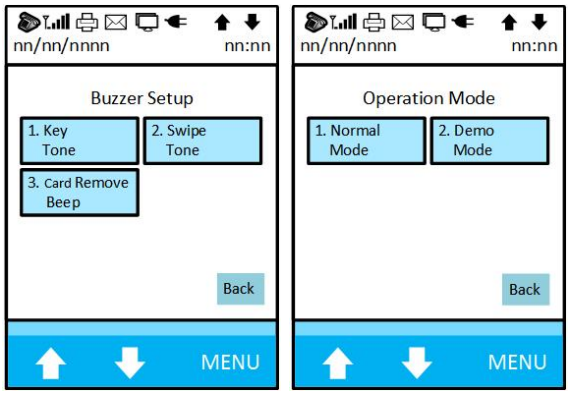
The Operation settings provides a total of six options that allow you to disable or enable and configure a variety of terminal options.

Buzzer Setup	Disable or enable and configure the Key Tone, Swipe Tone, and Card Remove Beep.
Operation Mode	Set the terminal to Normal or Demo modes.
Screen Backlight	Enable, Disable, or set screen backlight to a 60 second timer.
HALO Setup	Disable or Enable and set the HALO amount.
Peripherals	Enable or disable the Contactless Card Reader.
Language Setting	Set the language to English or Simplified Chinese.



5.4.1 Buzzer Setup and Operation Mode

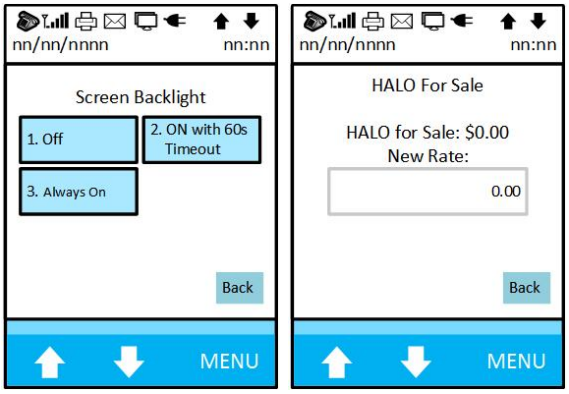
Key Tone	Enable or disable the key tone beep.	
Swipe Tone	Enable or disable the swipe tone beep.	
Card Remove Beep	Allows you to disable, enable (one beep) or enable a continuous beep for card removal.	
Operation Mode	Normal	Transactions are processed.
Operation Mode	Demo	Transactions are not processed.



5.4.2 Screen Backlight and HALO Setup

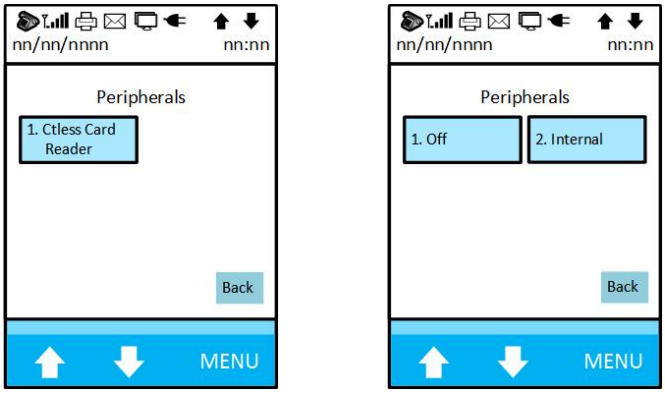
Allows you to disable, enable, or set a 60 second timer for the screen backlight.

Halo allows you to disable set HALO for sales, returns, or cash back. When you enable or disable HALO, the system steps through each option in the following order: Sales, Returns, and Cash Back.



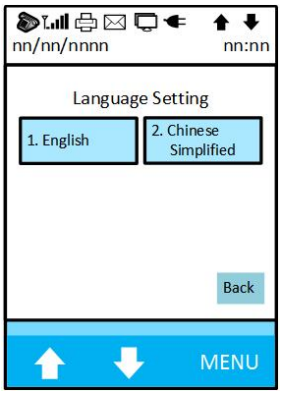
5.4.3 Peripherals

Allows you to enable or disable the terminal's Contactless Card Reader.



5.4.4 Language Setting

Allows you to set the terminal language to English or simplified Chinese.

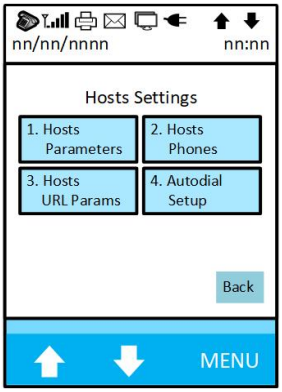


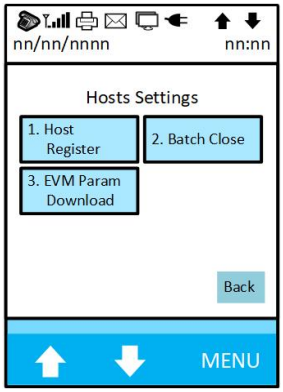
Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

5.5 Host Settings

The Host Settings options allows you to configure a wide range of internet host settings. Select the Host Settings option, input the host credentials and the Host Settings screen displays. The credentials can vary from a simple password to numerous entry fields. Use the arrow keys to navigate through all the options.

Host Parameters	Set/change host account credentials. Do not use the user name and password used earlier. The host account credentials are host specific.
Hosts Phones	Set phone number and baud rate for host Auth and Batch phones.
Hosts URL Params	Set the URLs for Auth and Hosts servers.
Autodial Setup	This option is not set telephone parameters. This option sets the autobatch start and end time intervals. For example, if the start time is 4 AM and the end time is 5 AM with an interval of 5, the terminal attempts to batch close at 4 AM and if it fails, it attempts again every 5 minutes until it reaches the end time (5 AM).
Batch Close	Close out a batch.





NOTE

Some, but not all applications can support a dual message format. That is, a debit sale does not always have to be performed as a swipe only transaction but can be ran as an EMV debit (tap or dip) transaction.

5.5.1 Host Parameters

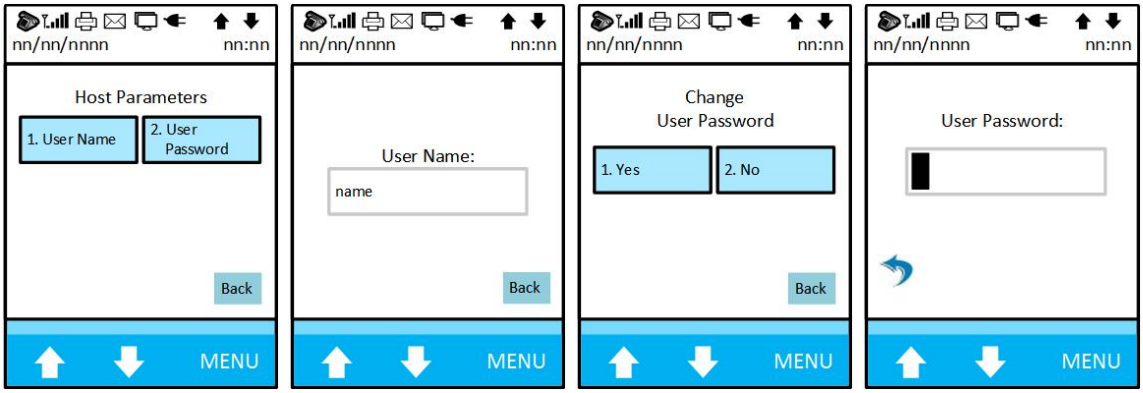
Allows you to input or change the host user name and input the user password.

NOTE

This is NOT the same user name and password used for terminal level settings. The credentials requested in the transaction application are processor specific and vary from processor to processor.
Numerous transaction options require that you input these credentials before changing any transaction parameters.

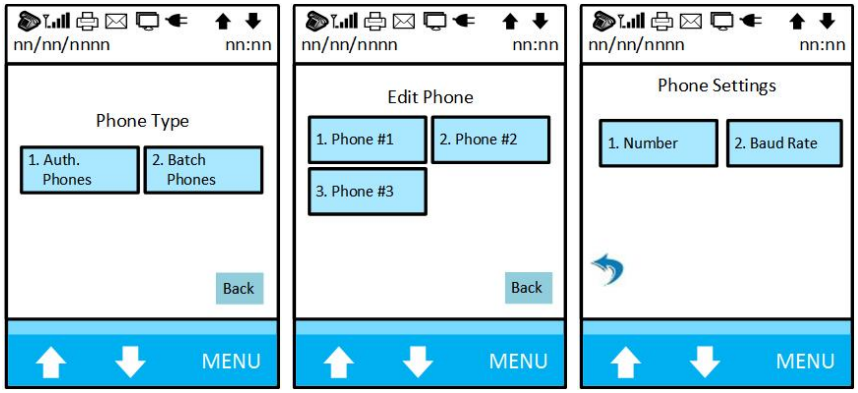
NOTE

These parameters cannot be changed if there is an open batch in the terminal. You must close the batch before setting any host parameters.

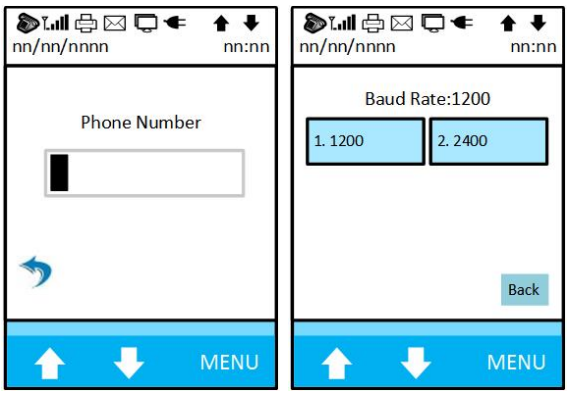


5.5.2 Hosts Phones

Auth Phones	Phone 1	Set Number	Select Baud Rate
	Phone 2	Set Number	Select Baud Rate
	Phone 3	Set Number	Select Baud Rate
Batch Phones	Phone 1	Set Number	Select Baud Rate
	Phone 2	Set Number	Select Baud Rate
	Phone 3	Set Number	Select Baud Rate

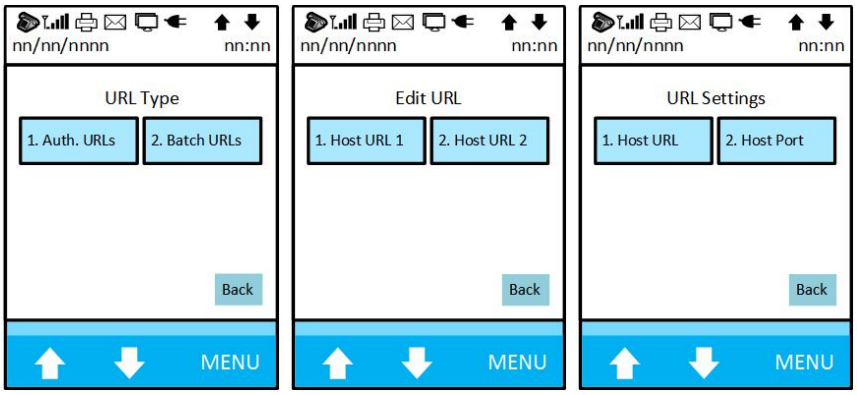


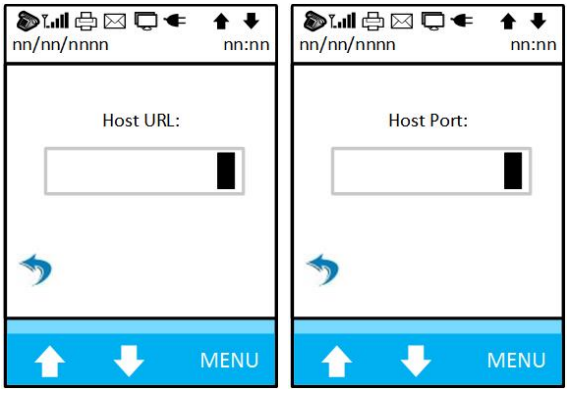
Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us



5.5.3 Hosts URL Params

Auth URLs	Host URL 1 or Host URL 2	Host URL	Host Port
Batch URLs	Host URL 1 or Host URL 2	Host URL	Host Port

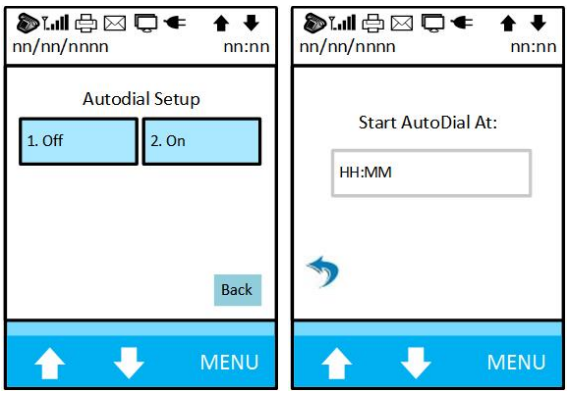




5.5.4 Autodial Setup

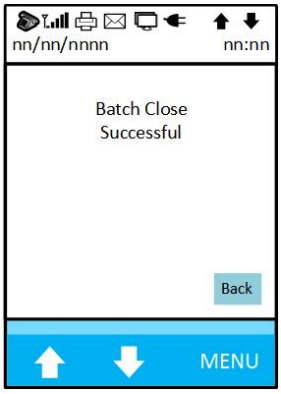
Autodial Setup	Off	On	Set autodial start time.

Do not confuse Auto Batch with Auto Dial. An Auto Dial sends a batch request message to the host. Some retail applications do not need to send a request message, so the terminal only clears the database.



5.5.5 Batch Close

Close out a batch. A batch may be closed automatically or manually. This varies by processor and application.

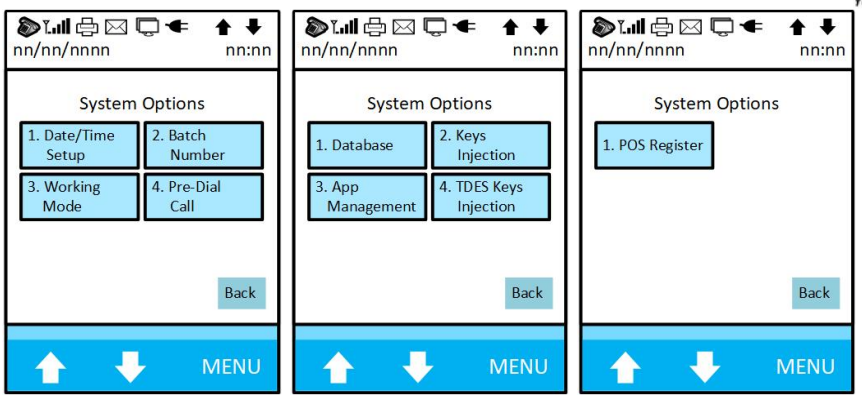


5.6 System Setting

The Systems Settings options provides a total of nine options to configure various system parameters.

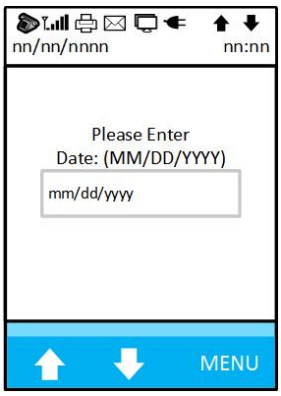
Date/Time Setup	Input the date.
Batch Number	Increment the batch number by one.
Working Mode	Set tip options, fraud control parameters and MOTO
Pre-Dial Call	Disable or Enable and configure pre-dial parameters for the various payment types (All, Credit, Debit, EBT, Gift, Loyalty).
Database	Allows you to clear the database, reversals, and/or transactions.
Key Injection	Select the key injection method.
App Management	Activate, update, and configure application parameters as well as view the terminal serial number and the application version information.
TDES Keys Injection	Select a key length of 8, 16 or 24 characters.
POS Register	Registers the terminal with the local point of sale.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us



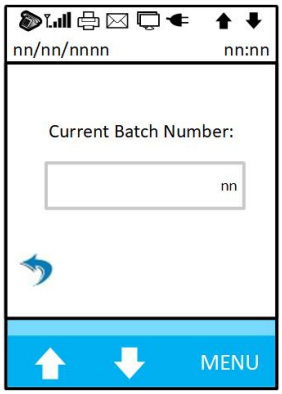
5.6.1 Date Time Setup

Input month, day, and year.



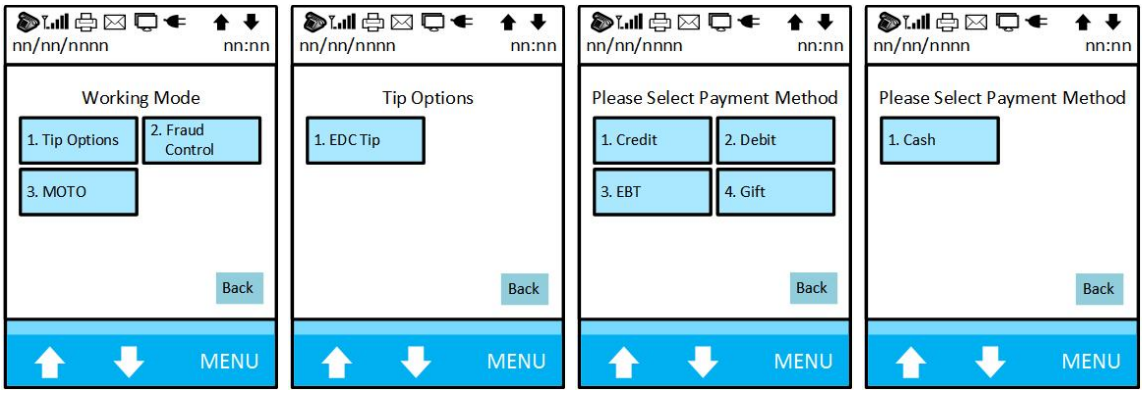
5.6.2 Batch Number

Allows a merchant to manually advance the batch number but only AFTER the host has closed the batch from their side after a terminal batch close failure AND the terminal closes the batch again. For example, if a batch does not properly close out on the terminal side, and the merchant runs the batch again, the processor may flag the batch as a duplicate. If the host closes out the batch, the merchant can then close the batch and manually increment the batch number and then run the batch again. When the current batch number displays, input a new batch number (increment by 1) and press the Enter button on the keypad two times to save the change.



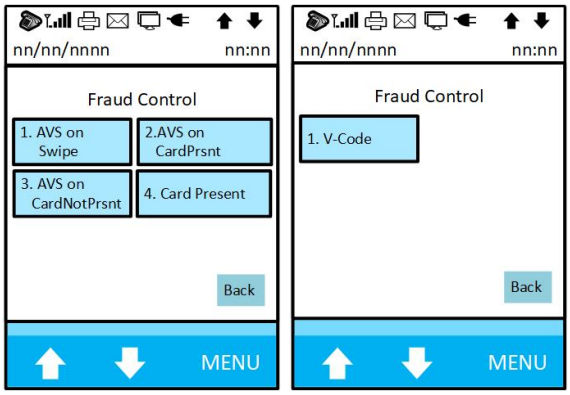
5.6.3 Working Mode

Tip Options	EDC Tip	Credit Debit, EBT, Gift, Cash
Fraud Control	AVS on Swipe, AVS on CardPrsnt, AVS on CardNotPrsnt, Card Present, V-Code	
MOTO	Mail Order Telephone Order	

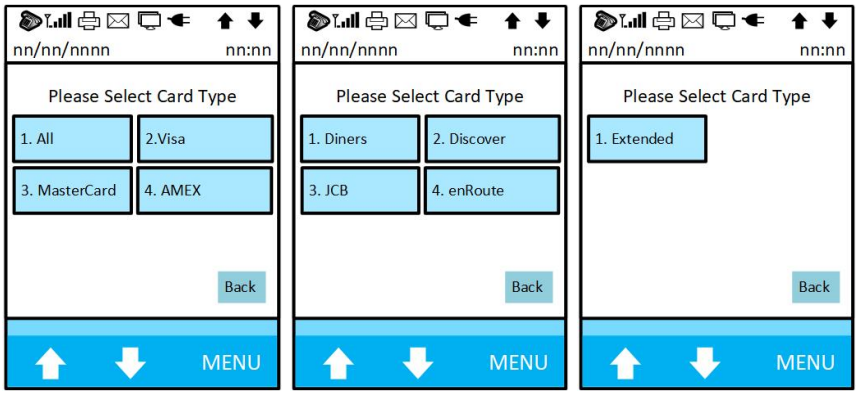


5.6.3.1 Fraud Control

Fraud Control	AVS on Swipe, AVS on CardPrsnt, AVS on CardNotPrsnt, Card Present, V-Code.



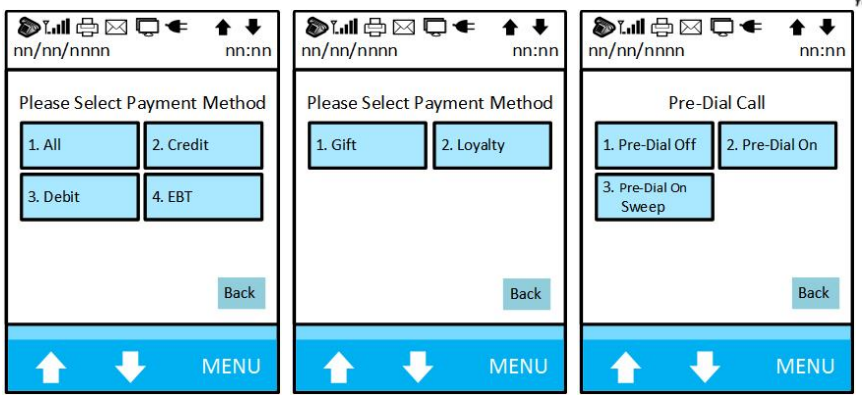
All five fraud control parameters have the following nine options.



5.6.4 Pre-Dial Call

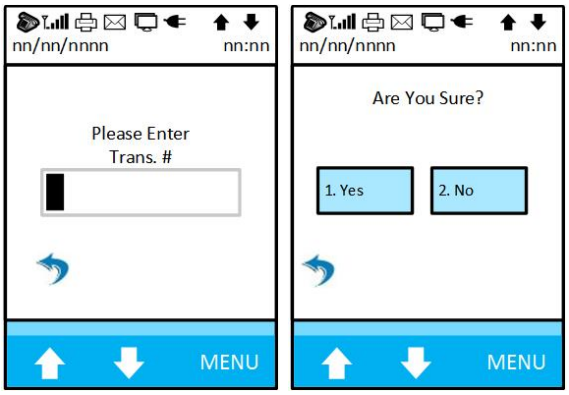
Pre-Dial Call	All, Credit, Debit, EBT, Gift, Loyalty		
Pre-Dial Options	Predial Off	Predial On	Predial On Swipe

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us



5.6.5 Database

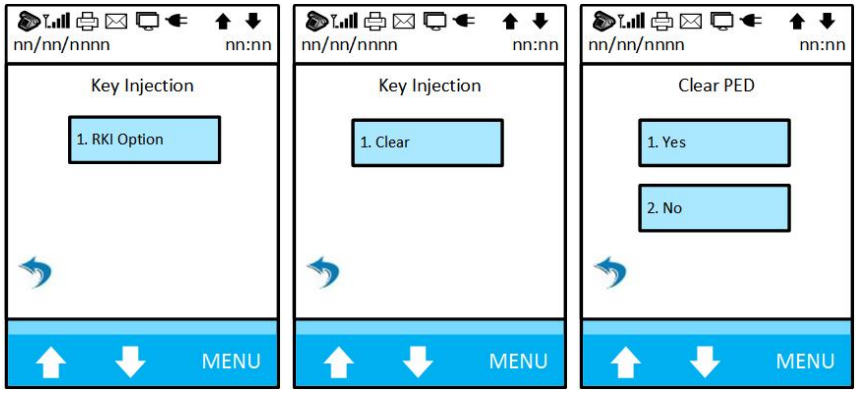
Database	Clear Reversal, Clear Trans	
Database	Clear Database	Yes, No



5.6.6 Keys Injection

US Key Injection	Start, Set Baud Rate, Status, Clear (Yes, No)
TMS Key Injection	Start, Set Baud Rate, Status
KIM Key Injection	Start, Set Baud Rate, Status
RKI Option	Download, Status

Except for the RKI Option, see Section 2.6, Keys Injection, to review the Key Injection screens.



5.6.7 App Management

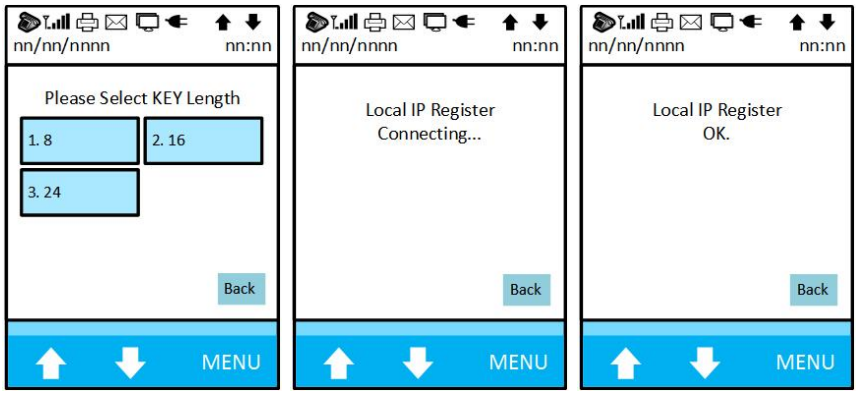
Activate	Activates the terminal online. (Assuming the terminal is connected to a known good internet connection.	
App Update	Updates the application already loaded on the terminal.	
Configuration	Server URL, Server Port, Phone Setting	Phone 1, Phone 2
TMS Type	BroadPOS, PAXTMS	
Terminal SN	Displays SN	
App Info	Rootcert info	

See Section 2.5.1, App Management to review the App Management screens.

5.6.8 TDES Keys Injection and POS Register

The TDES Keys Injection sets the injection key character length to 8, 16, or 24 characters.

The POS Register option registers the terminal with POS register.

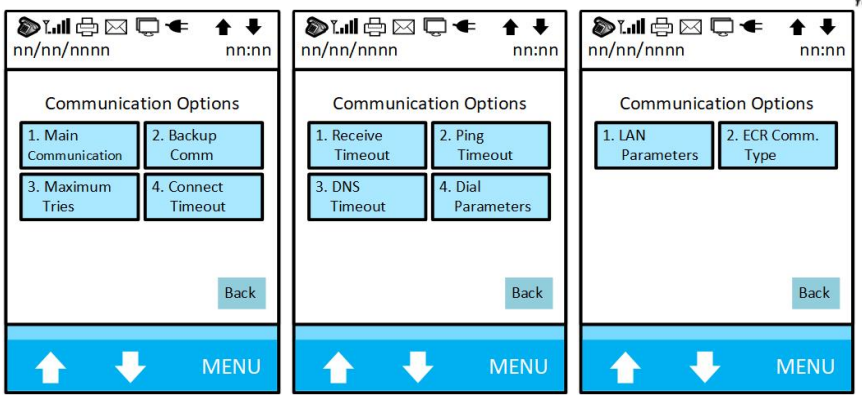


5.7 Communication

The Communication options provide a total of ten options to configure numerous communications options.

Main Communication	See Section 2.8.1 Main Comm, for information about these screens.
Backup Comm	See Section 2.8.1, Main Comm for information about these screens.
Maximum Tires	See Section , for information about these screens.
Connect Timeout	See Section , for information about these screens.
Receive Timeout	See Section 2.8.4, Maximum Tries, Connect and Receive Timeout for information about these screens.
Ping Timeout	Set the ping timeout.
DNS Timeout	Set the DNS timeout.
Dial Parameters	See Section 2.8.3 Dial Parameters, for information about these screens.
LAN Parameters	See Section 2.8.2 LAN Parameters, for information about these screens.
ECR Comm. Type	Choose the type of communications between the S300 and the Electronic Cash Register.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us



5.7.1 Main Communication

See Section 2.8.1 Main Comm, for information about these screens.

5.7.2 Back Up Comm.

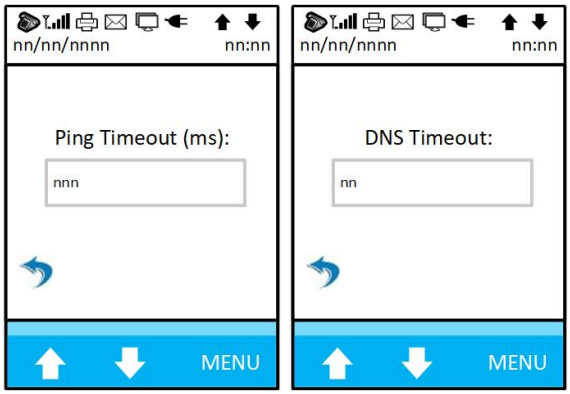
See Section 2.9.1 Main Comm for information about these screens.

5.7.3 Maximum Tries, Connect and Receive Timeout

Section 2.8.4, Maximum Tries, Connect and Receive Timeout for information about these screens.

5.7.4 Ping and DNS Timeout

Main Comm	Ping Timeout	Input time in milliseconds.
Main Comm	DNS Timeout	Input time in seconds.



5.7.5 Dial Parameters

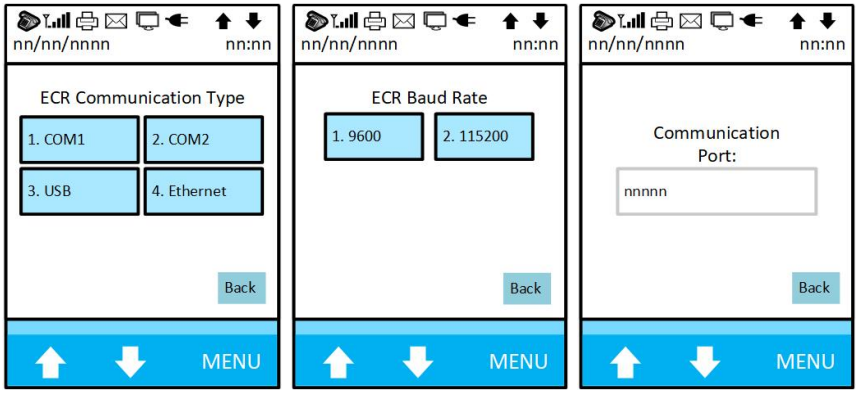
See Section 2.8.3 Dial Parameters, for information about these screens.

5.7.6 LAN Parameters

See Section 2.8.2 LAN Parameters, for information about these screens.

5.7.7 ECR Comm. Type

Main Comm	ECR Comm Type	COM1, COM2, USB, Ethernet
COM1 and COM2	ECR Baud Rate	Select Buad Rate (9600 or 115200)
USB	No settings for this option.	
Ethernet	TCP/IP, HTTP Get, SSL/TSLS, HTTPS Get	



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

6 Retail Environment Transactions

This section describes the tasks required for processing transactions in the retail environment with the S300 terminal. As already stated, the screens and options described in this manual may be different than your application.

See Section 7 Restaurant Environment Transactions for information on processing transactions in the restaurant environment.

The S300 terminal automatically performs a Health Report (Activate, Update, Download, etc) when it first boots up (powered on) and at 24 hours intervals while running. Though the default interval is 24 hours, the Health Report interval is configurable.

NOTE

Before beginning any transaction, ensure that the terminal is at the Idle Screen.

NOTE

After initiating many of the transactions described in this section, the merchant may be prompted to input a password to continue with the transaction. Be sure to have this password available.

NOTE

While processing transactions, the terminal may display or request more information including, but not limited to the Transaction Type, Amount, Customer Number, Tax Amount, Account Exp. date, CVV information, AVS information, and Clerk/Server ID. This information may also be input through the ECR and varies by application.

6.1 Retail Transaction Overview

A retail financial transaction is an agreement that takes place between a buyer and a seller to exchange an asset (legal tender) for payment. This involves a change in financial status for two or more businesses or individuals. When performing transactions, the following list highlights the types of legal tender used for transactions.

NOTE
Transaction types vary by host and what applications and options are certified.

This section describes each transaction type for the following types of tender.

Credit	The ability for someone to obtain goods or services before payment, based on trust that the payment will be made on a later date.
Debit	An amount of money removed from an account for the payment of goods or services.
Electronic Benefit Transfer (EBT) (SNAP or Cash)	An Electronic Benefits Transfer using a credit type card as a substitute for cash to buy qualified food items from participating stores and a way to access cash from a predetermined card balance funded by a qualified government program.
Gift and Loyalty	A prepaid value card that is issued by a retailer or bank to be used as an alternative to cash for purchases within a particular store or business.

Transaction types will vary depending on what the host supports and what we certified.

6.2 Gift and Loyalty Card Overview

A gift or loyalty card is a prepaid value money card issued by a retailer or a bank that can be used as an alternative to cash or paper gift certificates for purchases in a particular store or related businesses.

There are two types of gift or loyalty cards:

Open loop cards	These cards look like a credit card and are accepted nearly everywhere.
Closed loop cards	These cards only work at one store, or with one particular brand.

Gift and loyalty card transactions can typically be swiped just like a credit card, but some are scanned like a UPC or manually processed.

NOTE
Because Gift and Loyalty card transactions are performed much the same way as Credit or Debit Card transactions, they are not described separately in this manual.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

6.3 Commercial Card Overview

Commercial cards function in much the same way as a credit card. The primary exceptions are the terminal will provide a visual indication that the card is a commercial card (often a “CC” on the terminal screen) and the terminal may prompt for a customer code and a tax rate amount.

NOTE
Because commercial transactions are performed much the same way as credit card transactions, they are not covered separately in this manual.

6.4 Retail Credit Card Transaction Types

This section details the following transaction types for the retail credit card environment.

Retail Credit Transaction Types		
Auth	Sale	ReportLost
ForceAuth	Return	Reenter
Post Auth	Void	
VoidAuth	VoidSale	
VoidPostAuth	VoidReturn	
VoidForceAuth		

This manual highlights those cases where the options may differ based on certain tender types, such as credit, debit, etc. and certain transaction types, such as sale, return, void, gift, etc.

NOTE
For every transaction, the ECR sends the transaction message, including the EDC type, transaction type and transaction amount to the terminal and the terminal is initialized.

NOTE
Most retail transactions do not allow for a tip amount on the receipt. However, there are exceptions, such as hair salons, nail parlors, etc. In those cases, the system can print a tip line on the receipt and the terminal may prompt for an operator or server ID. These applications are multi-merchant applications and contains an "MM" in the name of the app on BroadPOS MarketPlace.

NOTE
Printing a receipt (or other items printed on the receipt) are a function of the ECR, not the S300 terminal.

6.5 Credit Card Transactions

This section details retail credit card transaction types.

6.5.1 Credit Auth

An Auth transaction (card authorization, pre-authorization, or preauth) verifies an electronic transaction initiated with the credit card and holds that amount as unavailable until the merchant clears the transaction (settlement) or the transaction hold expires. The Auth transaction does NOT charge the credit card but reserves the requested amount and places a hold on the card holder's open-to-buy.

To charge the card after an Auth transaction, perform a POSTAUTH transaction as shown in Section 6.5.3. To cancel an Auth transaction, perform a VoidAuth transaction.

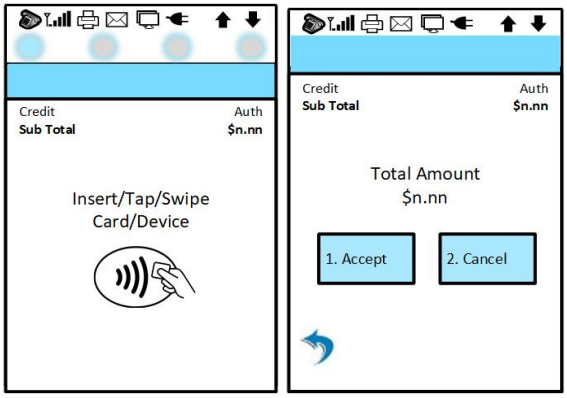
6.5.1.1 Credit Auth (Over the Phone)

1. The merchant initiates the transaction using the ECR and requests the credit card information from the card holder. When manually inputting the card number and expiration date, the terminal may prompt for Address Verification System (AVS) and or CVV settings.

2. The card holder provides card number, name on card, expiration date, CVV number and possibly AVS information to the merchant and merchant inputs that information into the terminal.
3. The merchant processes the preauth and if approved, provides the preauth code to the card holder.

6.5.1.2 Credit Auth (At the Terminal)

1. The merchant initiates transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device and is asked to Accept or Cancel the PreAuth transaction.



3. If the card holder cancels, the terminal returns to the idle screen.
4. If the card holder accepts the transaction, the system prompts for a signature.
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

6.5.2 Credit ForceAuth

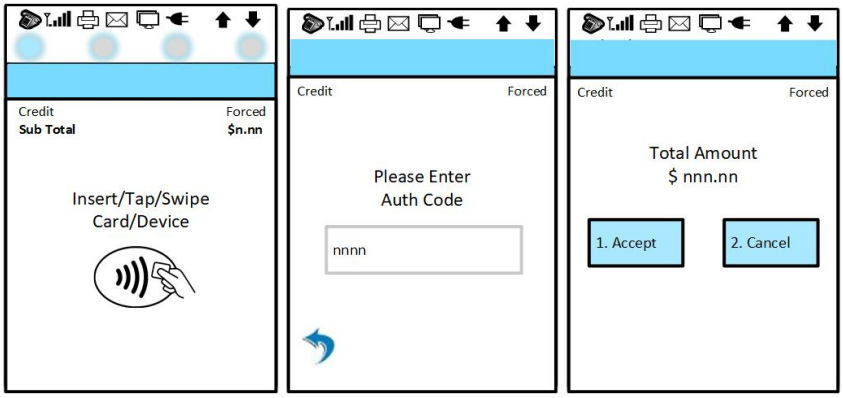
When an authorization has previously been obtained via an auth transaction or through voice authorization, a forceauth can be performed to complete the transaction and receive payment. Before running the forceauth transaction, the merchant must contact their host provider and obtain an authorization number for the transaction. Also, if the merchant tries to batch out and there is a transaction that has been authorized but did not have a postauth ran on it, that transaction can be forced as well.

NOTE

The forceauth transaction is almost always offline approved.

1. The merchant initiates the credit forceauth transaction using the ECR.
2. The merchant contacts their host for an authorization number for that transaction.
3. Card holder inserts, taps, or swipes card or device and the merchant is prompted to input the authorization number.

The card holder is prompted to Accept or Cancel the Return.



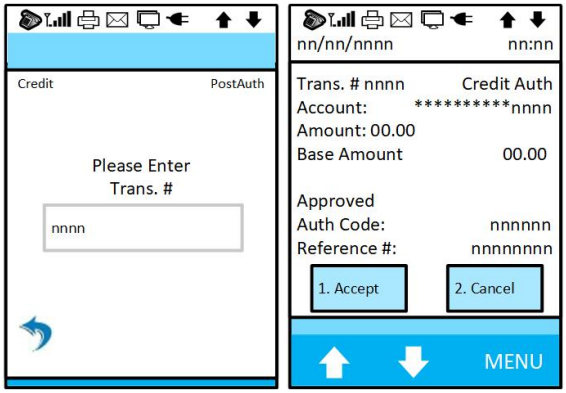
4. The card holder accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

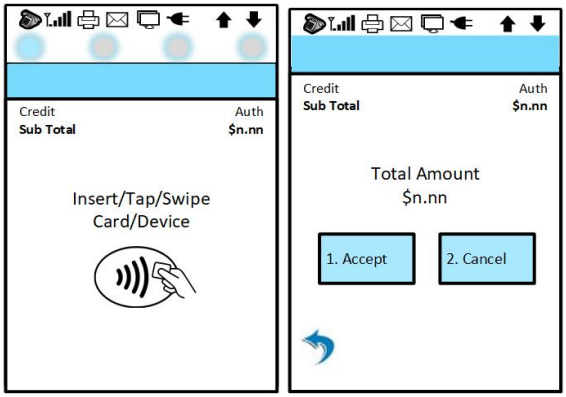
6.5.3 Credit PostAuth

If a preauthorization was already obtained via an Auth, the merchant must perform a PostAuth transaction to capture and complete the transaction and receive payment.

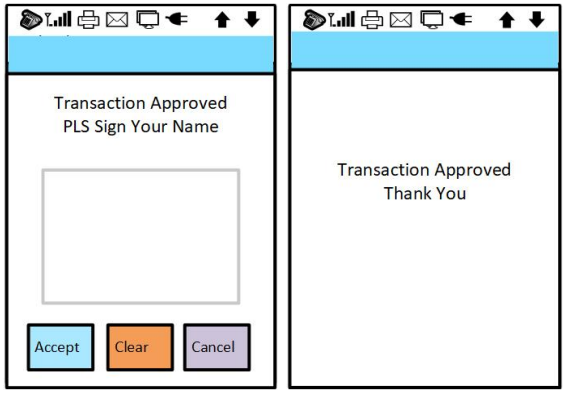
1. The merchant initiates the PostAuth transaction using the ECR. The merchant is prompted to input the transaction number.
2. Card holder is shown the transaction details and is prompted to accept or reject the charge.



3. The card holder inserts, taps, or swipes card or device and is asked to Accept or Cancel.



4. The card holder accepts the transaction and the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)
5. The card holder signs in the signature area and has the option to Accept, Clear (clear signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

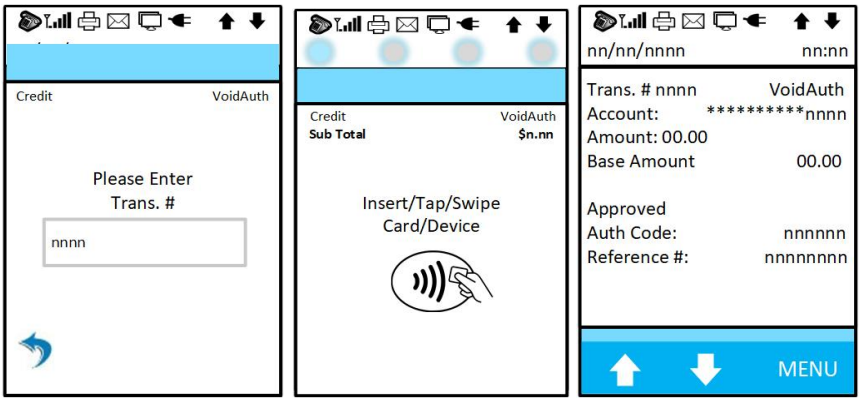
6.5.4 Credit VoidAuth

If an authorization was performed and needs to be cancelled, the merchant can void the authorization. A voidauth transaction is only available on a previously authorized transaction. After voiding an auth transaction, the funds associated with that transaction are returned to the card holder and cancel the entire open amount. The VoidAuth can only be initiated if the authorization is still pending.

NOTE

This transaction functionality varies by host processor. If the host requires track data, then the terminal will only prompt for a swipe. If the host requires PAN and expiration date, then the terminal will only prompt for the transaction number.

1. The merchant initiates the VoidAuth transaction using the ECR.
2. Merchant is asked to input the transaction number.
3. Card holder inserts, taps, or swipes card or device.
4. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



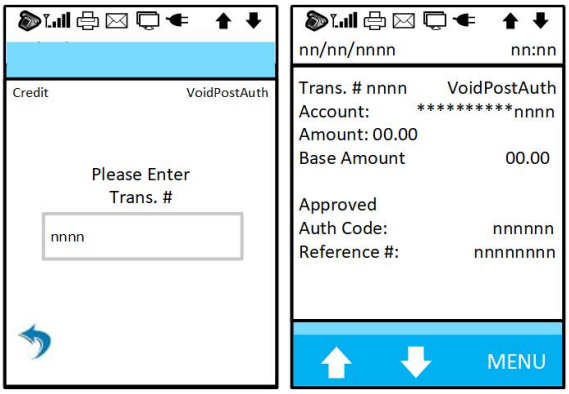
Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

6.5.5 Credit VoidPostAuth

A VoidPostAuth can only be ran on a PostAuth if that particular PostAuth transaction is still in the current open batch. A VoidPostAuth deletes the PostAuth.

1. The merchant initiates the VoidPostAuth transaction using the ECR.
2. Merchant is asked to input the transaction number.
3. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



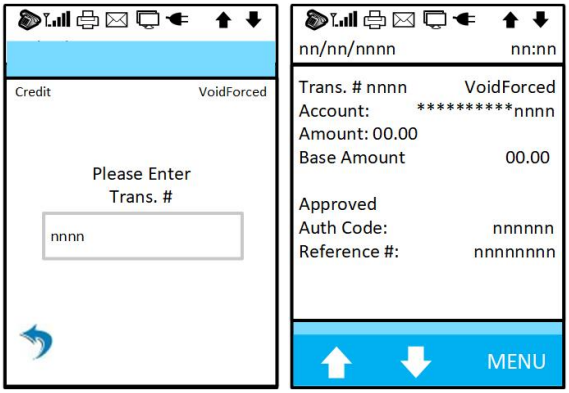
4. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

6.5.6 Credit VoidForceAuth

A VoidForceAuth transaction is performed on a VoidAuth transaction only if that transaction is still in the current open batch. A VoidForceAuth deletes the Force Auth.

NOTE
Remember, the forceauth transaction is almost always offline approved.

1. The merchant initiates the VoidForceAuth transaction using the ECR.
2. Merchant is asked to input the transaction number.
3. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

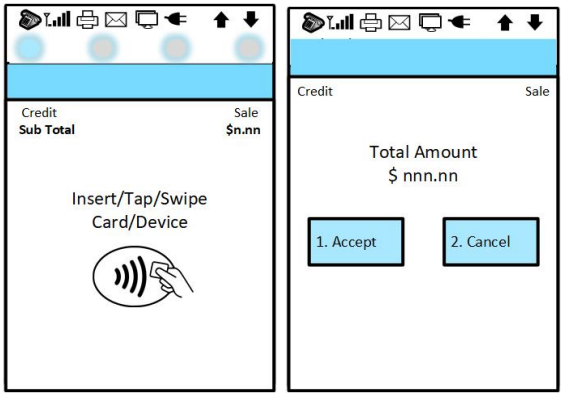
4. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

6.5.7 Credit Sale

A credit sale is an authorization that captures for settlement. Card holders can perform a credit card sale by dipping, swiping or tapping their card or device at the terminal or the merchant can start the transaction with the ECR by manually starting a credit sale transaction. The merchant can also initiate the transaction at the ECR and manually input the card number and card expiration date.

The Credit Sale for restaurant is different, see the Restaurant Credit Sale transaction section for details.

1. The merchant initiates the credit sale transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device and is asked to Accept or Cancel the Sale. The Terminal may also prompt for Cash Back and/or PIN number. Customer will input a cash back amount, press enter, and input their PIN and Accept or Cancel the sale.



3. The card holder accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)

4. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

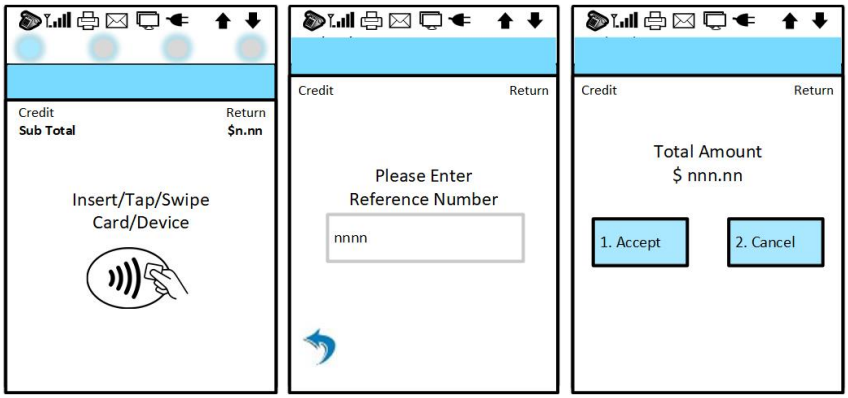
6.5.8 Credit Return

This section describes a credit return. A credit return is a refund to the card holder. A return issues credit to the customer's credit card. If the transaction has not already been settled, the merchant should perform a void transaction.

1. The merchant initiates the credit return transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device.

NOTE
Depending on the host, some merchants may be prompted to input a reference number.

3. The card holder is prompted to Accept or Cancel the Return.



4. The card holder accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

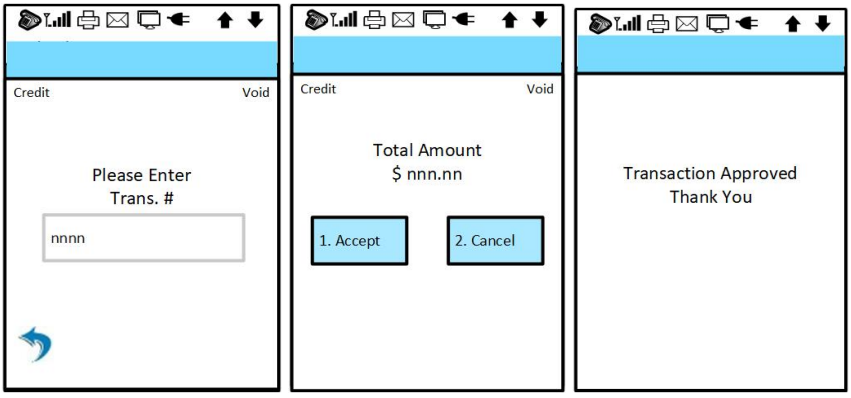
6.5.9 Credit Void

Performing a Void transaction completely nullifies a previously authorized and approved Sale transaction that has NOT been settled. However, if the Sale transaction has been settled, the merchant must perform a Return. A Void does not remove the hold on the customer's card and the dollar amount of the transaction is not accessible by the card holder for several days as determined by the bank.

NOTE

It varies by host, but in most cases, this transaction is processed like an offline transaction, so card information is not required.

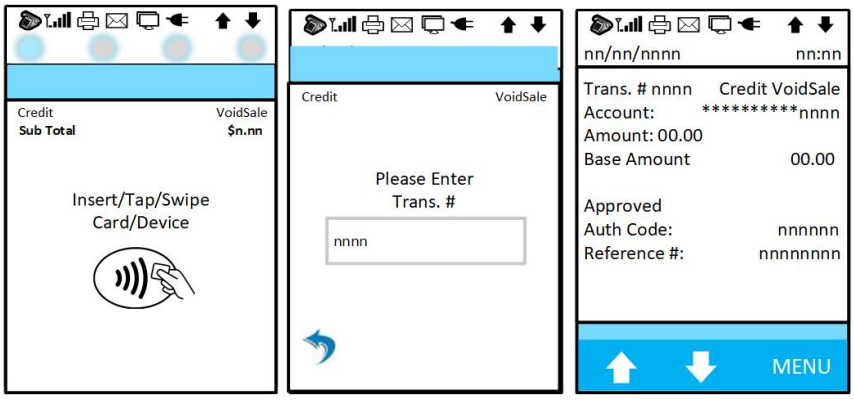
1. The merchant initiates the Void transaction using the ECR.
2. The merchant is asked to input the transaction number.
3. Card holder (and merchant) review the total amount and accept or cancel the transaction. The system approves the Void transaction and returns to the idle screen. (If the card holder cancels, the terminal also returns to the idle screen.)



6.5.10 Credit VoidSale

Performing a VoidSale transaction nullifies a previously authorized and approved Sale transaction that has NOT been settled. However, if the Sale transaction has been settled, the merchant must perform a Return. A VoidSale does not remove the hold on the customer's card and the dollar amount of the transaction is not accessible by the card holder for several days as determined by the bank. The transaction is processed online so the card information must be collected.

4. The merchant initiates the VoidSale transaction using the ECR.
5. Card holder inserts, taps, or swipes card or device.
6. Merchant is asked to input the transaction number.
7. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



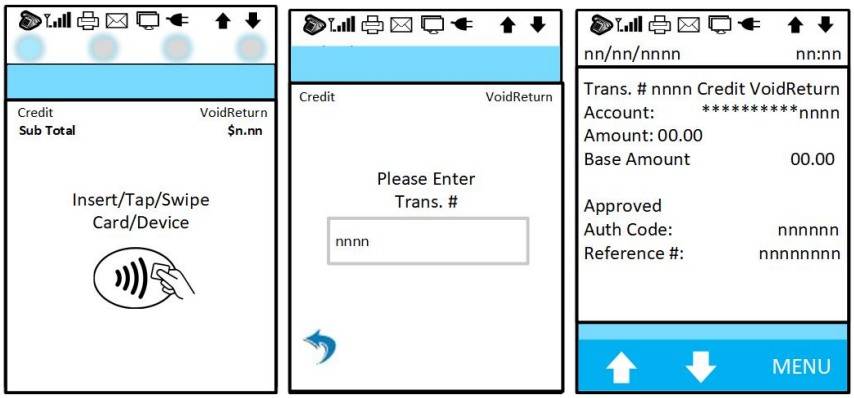
8. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

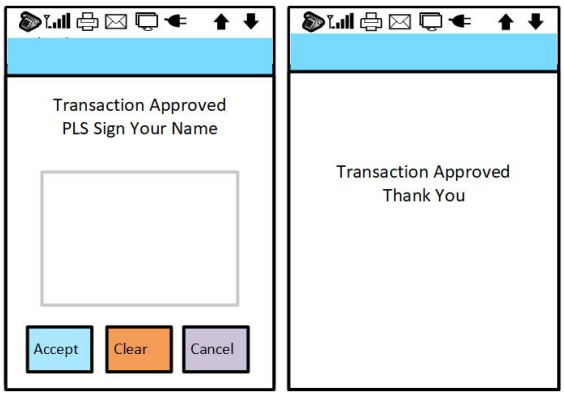
6.5.11 Credit VoidReturn

A Return transaction processed in error can only be voided if the Return has not yet been batched out. A VoidReturn nullifies a Return that was previously performed in the same batch.

1. The merchant initiates the VoidReturn transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device.
3. Merchant is asked to input the transaction number.
4. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.



6.6 Debit Card Transactions

This section details the Debit Sale and Debit Return transactions types for the retail debit card environment.

6.6.1 Debit Sale

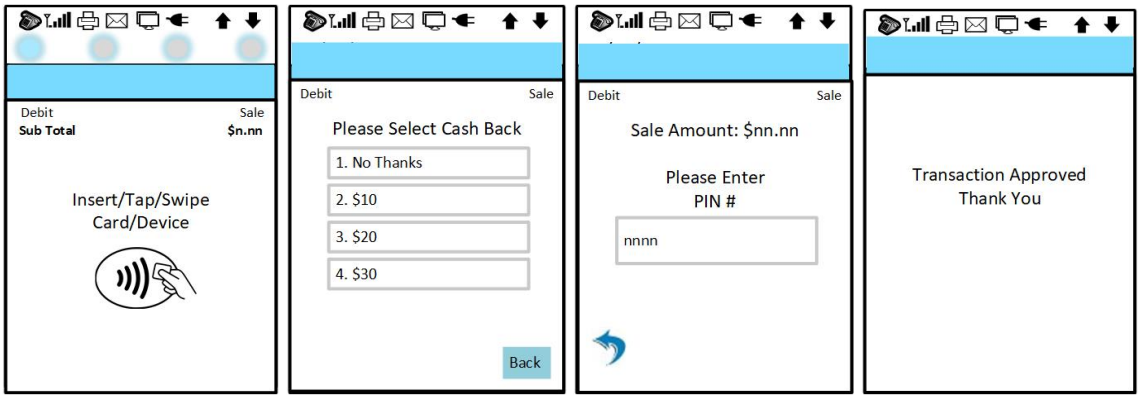
All debit sales are processed online. Some applications support pinless debit sales, but the limit must be set in BroadPOS MarketPlace. For example, if the limit is set to $50, then all transactions above the $50 limit will prompt for a pin and all the transactions below the $50 limit will prompt for a signature.

NOTE
The terminal will only prompt for an online PIN if the terminal is key injected. The terminal cannot prompt for an offline PIN without injection because the card is needed to verify the offline PIN.

To complete a debit card sale, the card holder must swipe the card through the terminal. The merchant cannot manually input a debit card transaction. This section describes the online PIN transaction.

1. The merchant initiates the debit sale transaction (with subtotal) using the ECR. The Customer may also initiate the transaction with a card swipe and then a dollar amount can be entered. This example assumes that the merchant initiated the sale.

1. The card holder swipes the card and is shown the total sale amount (subtotal plus cash back) and prompted for their PIN number. The card holder selects a cash back amount.
2. Customer inputs their PIN and presses the Enter button on the terminal pinpad.
3. The system completes the transaction.



Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

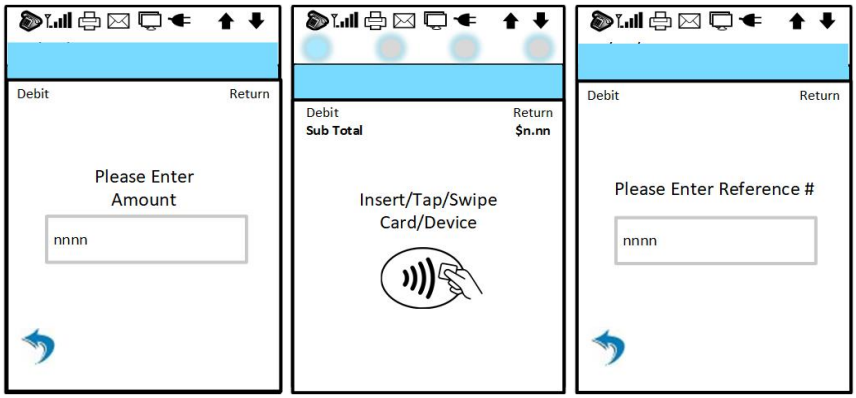
6.6.2 Debit Return

A debit sale cannot be voided, it must be returned. A debit return issues revenue from the merchant's bank account to the customer's bank account of origin immediately.

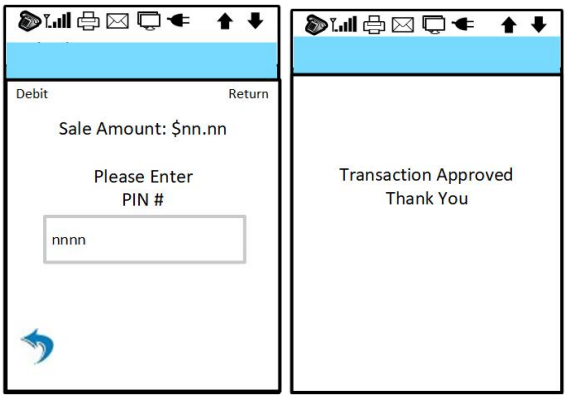
1. The merchant initiates the debit return transaction using the ECR.

NOTE
The terminal may prompt for a dollar amount only if a dollar amount was not sent from the ECR (sent as $0.00).

2. Card holder is prompted to swipe their card. (Card is swiped.)
3. Merchant is prompted to input a reference number. (Inputs reference number.)



4. Card holder is prompted to input their PIN. (Inputs their PIN.)
5. The system completes the transaction.



6.7 Electronic Benefits Transfer (EBT) Transactions

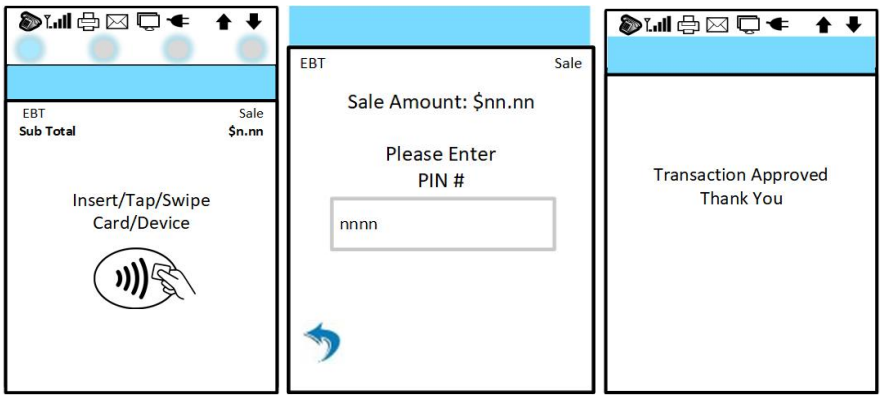
This section describes Sale, Return and Balance Inquiry EBT transactions for food and cash benefit transactions. An EBT transaction authorizes the EBT card holder to use their government provided benefits to purchase qualified food items at participating grocers or make use of the cash benefits feature. An EBT transaction can be swiped or input manually.

An EBT voucher transaction (offline) is used when the food stamp transaction cannot be electronically processed and must be performed manually. The merchant must obtain voice approval for voucher transactions. This section does not detail voucher transactions.

6.7.1 EBT Sale

An EBT sale transaction allows the EBT card holder to purchase qualified food items authorized by the USDA's Supplemental Nutrition Assistance Program (SNAP) program. Cash benefits may be used to purchase qualified items at a participating retailer, obtain cash-back or make a cash withdrawal from the EBT account balance from a participating ATM. This section only describes an EBT sale transaction.

1. The merchant initiates the EBT sale transaction using the ECR. The Customer may also initiate the transaction with a card swipe. This example assumes that the merchant initiated the sale.
2. The terminal prompts the card holder to swipe their card and then input their PIN. (Card holder swipes card and inputs PIN.)
3. The system completes the transaction.

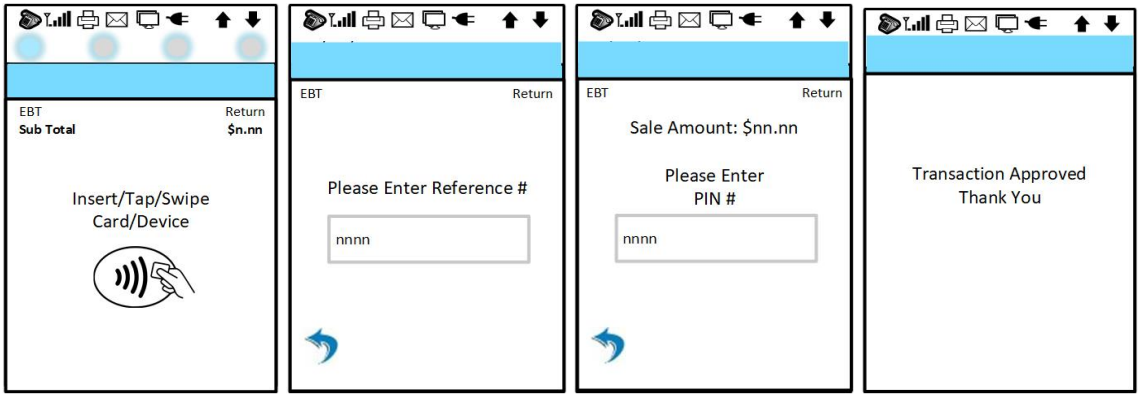


Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

6.7.2 EBT Return

An EBT Return is only used against an EBT sale transaction. An EBT Return refunds the sale amount back to the customer's EBT card balance.

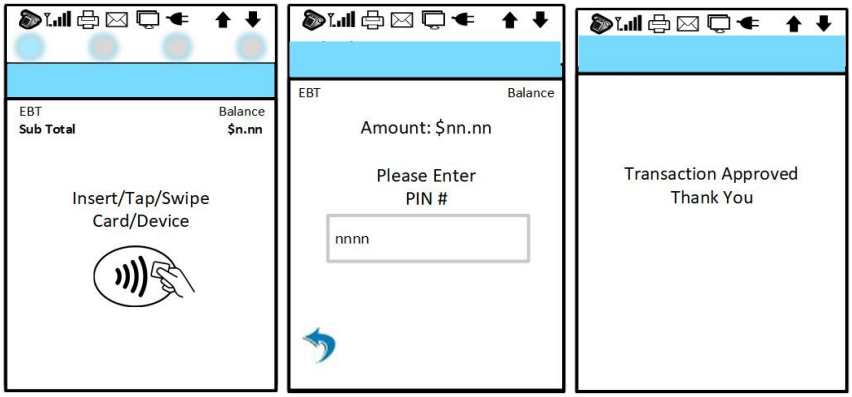
1. The merchant initiates the EBT return transaction using the ECR.
2. Card holder is prompted to swipe their card. (Card is swiped.)
3. Merchant is prompted to input a reference number. (Inputs reference number.)
4. Card holder is prompted to input their PIN. (Inputs their PIN.)
5. The system completes the transaction.



6.7.3 EBT Balance Inquiry

An EBT balance inquiry transaction requests the EBT card balance.

1. The merchant initiates the EBT balance transaction using the ECR.
2. Card holder is prompted to swipe their card. (Card is swiped.)
3. Balance is displayed and the card holder is prompted to input their PIN. (Inputs their PIN.)
4. The system completes the transaction.



7 Restaurant Environment Transactions

This section describes the tasks required for processing transactions in the restaurant environment with the S300 terminal. As already stated, the screens and options described in this manual may be different than your application.

NOTE
Transaction types vary by host and what applications and options are certified.

See Section 6 Retail Environment Transactions for information on processing transactions in the retail environment.

The S300 terminal automatically performs a Health Report (Activate, Update, Download, etc) when it first boots up (powered on) and at 24 hours intervals while running.

NOTE
Before beginning any transaction, ensure that the terminal is at the Idle Screen.

NOTE
While processing transactions, the terminal may display or request more information including, but not limited to the Transaction Type, Amount, Customer Number, Tax Amount, Account Exp. date, CVV information, AVS information, Clerk/Server ID, Table Number, or Number of Guests. This information may also be input through the ECR and varies by application.

NOTE
Printing a receipt, printing a tip line, server name, table number, etc. on the receipt is a function of the ECR, not the S300 terminal.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

7.1 Restaurant Transaction Overview

A restaurant financial transaction is an agreement that takes place between a customer and a merchant to exchange an asset (legal tender) for payment. When performing transactions, the following list highlights the types of legal tender used for transactions.

This section describes each transaction type for the following types of tender.

Credit	The ability for someone to obtain goods or services before payment, based on trust that the payment will be made on a later date.
Debit	An amount of money removed from an account for the payment of goods or services.

7.2 Gift and Loyalty Card Overview

A gift or loyalty card is a prepaid value money card issued by a retailer or a bank that can be used as an alternative to cash or paper gift certificates for purchases in a particular store or related businesses.

There are two types of gift or loyalty cards:

Open loop cards	These cards look like a credit card and are accepted nearly everywhere.
Closed loop cards	These cards only work at one store, or with one particular brand.

Gift and loyalty card transactions can typically be swiped just like a credit card, but some are scanned like a UPC or manually processed.

NOTE

Because Gift and Loyalty card transactions are performed much the same way as Credit or Debit Card transactions, they are not described separately in this manual.

7.3 Commercial Card Overview

Commercial cards function in much the same way as a credit card. The primary exceptions are the terminal will provide a visual indication that the card is a commercial card (often a “CC” on the terminal screen) and the terminal may prompt for a customer code and a tax rate amount.

NOTE

Because commercial transactions are performed much the same way as credit card transactions, they are not covered separately in this manual.

7.4 Restaurant Credit Card Transaction Types

This section details the following transaction types for the restaurant credit card environment.

Restaurant Credit Transaction Types		
Auth	Sale	ReportLost
ForceAuth	Return	Reenter
Post Auth	Void	
VoidAuth	VoidSale	
VoidPostAuth	VoidReturn	
VoidForceAuth		

This manual highlights those cases where the options may differ based on certain tender types, such as credit, debit, etc. and certain transaction types, such as sale, return, void, etc.

NOTE
For every transaction, the ECR sends the transaction message, including the EDC type, transaction type and transaction amount to the terminal and the terminal is initialized.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

7.5 Credit Card Transactions

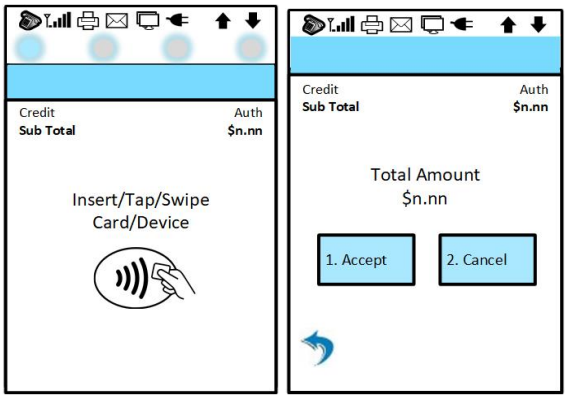
This section details restaurant credit card transaction types.

7.5.1 Credit Auth

An Auth transaction (card authorization, pre-authorization, or preauth) verifies an electronic transaction initiated with the credit card and holds that amount as unavailable until the restaurant clears the transaction (settlement) or the transaction hold expires. The Auth transaction does NOT charge the credit card but reserves the requested amount and places a hold on the card holder's open-to-buy.

To charge the card after an Auth transaction, perform a POSTAUTH transaction as shown in Section 6.5.3. To cancel an Auth transaction, perform a VoidAuth transaction.

1. The restaurant initiates transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device and is asked to Accept or Cancel the PreAuth transaction.

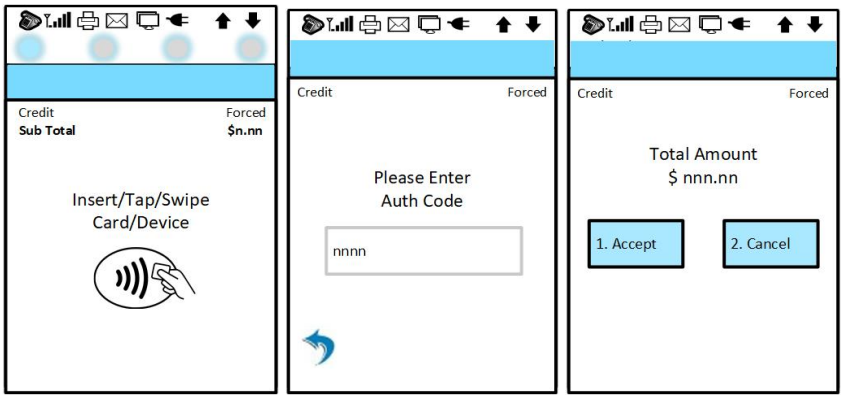


3. If the card holder cancels, the terminal returns to the idle screen.
4. If the card holder accepts the transaction, the system prompts for a signature.
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

7.5.2 Credit ForceAuth

When an authorization has previously been obtained via an auth transaction or through voice authorization, a forceauth can be performed to complete the transaction and receive payment. Before running the forceauth transaction, the restaurant must contact their host provider and obtain an authorization number for the transaction. Also, if the restaurant tries to batch out and there is a transaction that has been authorized but did not have a postauth ran on it, that transaction can be forced as well.

1. The restaurant initiates the credit forceauth transaction using the ECR.
2. The restaurant contacts their host for an authorization number for that transaction.
3. Card holder inserts, taps, or swipes card or device and the restaurant is prompted to input the authorization number. The card holder is prompted to Accept or Cancel the Return.



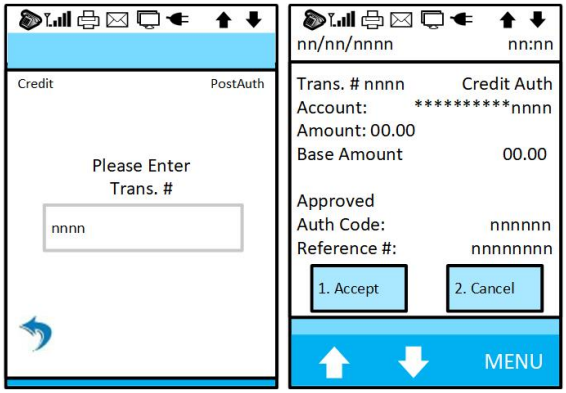
4. The card holder accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

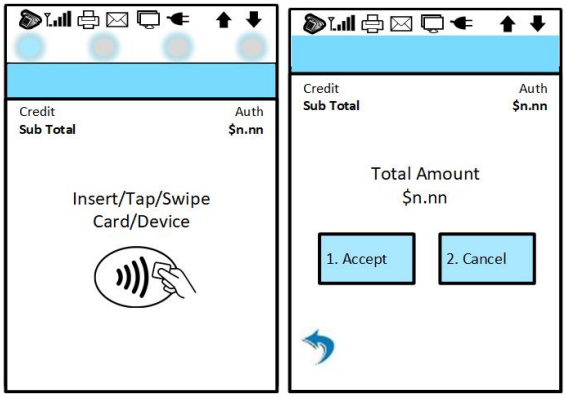
7.5.3 Credit PostAuth

If a preauthorization was already obtained via an Auth, the restaurant must perform a PostAuth transaction to capture and complete the transaction and receive payment.

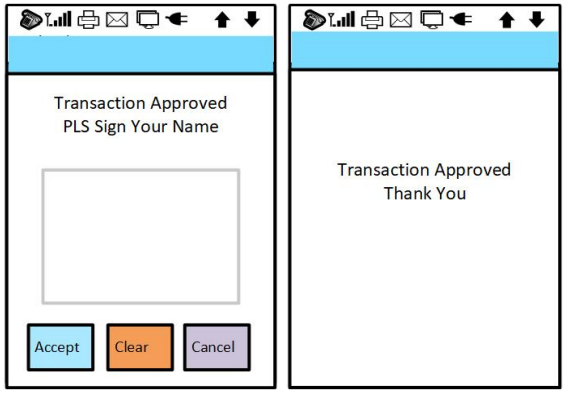
1. The restaurant initiates the PostAuth transaction using the ECR. The restaurant is prompted to input the transaction number.
2. Card holder is shown the transaction details and is prompted to accept or reject the charge.



3. The card holder inserts, taps, or swipes card or device and is asked to Accept or Cancel.



4. The card holder accepts the transaction and the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)
5. The card holder signs in the signature area and has the option to Accept, Clear (clear signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

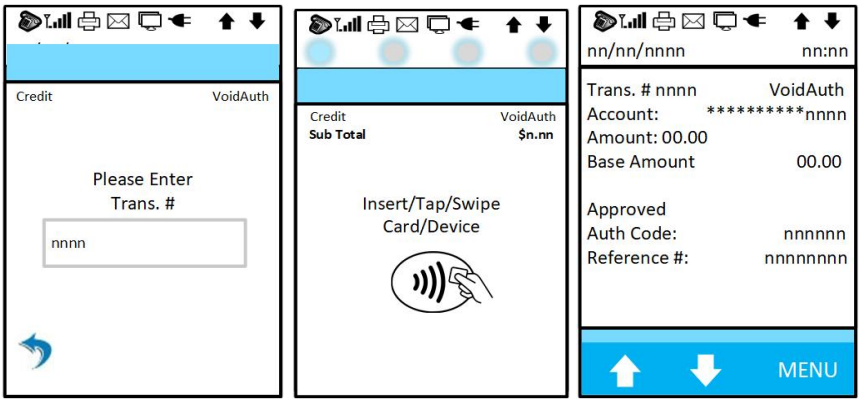


Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

7.5.4 Credit VoidAuth

If an authorization was performed and needs to be cancelled, the restaurant can void the authorization. A voidauth transaction is only available on a previously authorized transaction. After voiding an auth transaction, the funds associated with that transaction are returned to the card holder and cancels the entire open amount. The VoidAuth can only be initiated if the authorization is still pending.

1. The restaurant initiates the VoidAuth transaction using the ECR.
2. Restaurant is prompted to input the transaction number.
3. Card holder inserts, taps, or swipes card or device.
4. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



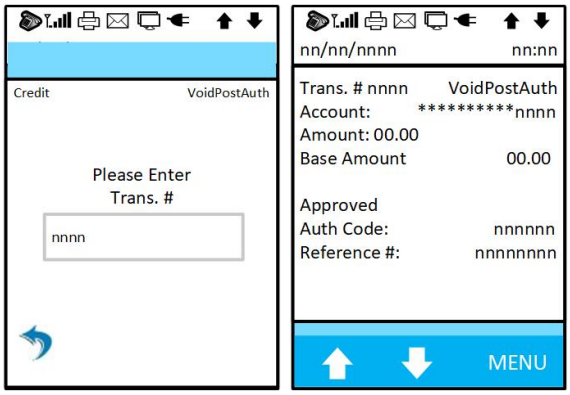
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

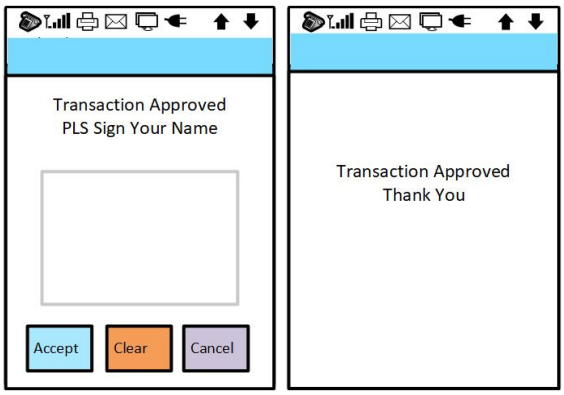
7.5.5 Credit VoidPostAuth

A VoidPostAuth can only be ran on a PostAuth if that particular PostAuth transaction is still in the current open batch. A VoidPostAuth deletes the PostAuth.

1. The restaurant initiates the VoidPostAuth transaction using the ECR.
2. Restaurant is asked to input the transaction number.
3. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



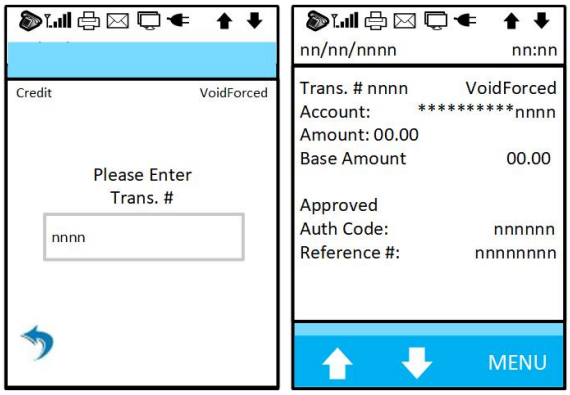
4. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.



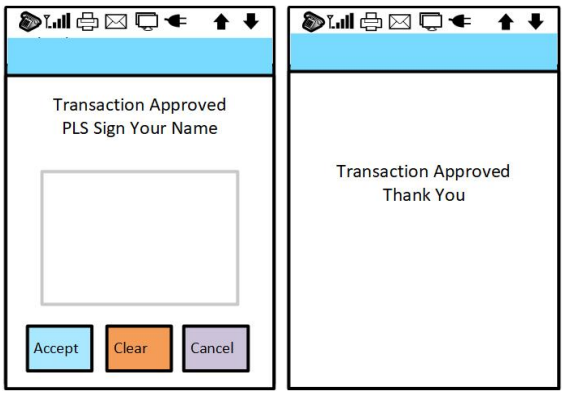
7.5.6 Credit VoidForceAuth

A VoidForceAuth transaction is performed on a VoidAuth transaction only if that transaction is still in the current open batch. A VoidForceAuth deletes the ForceAuth.

1. The restaurant initiates the VoidForceAuth transaction using the ECR.
2. Restaurant is asked to input the transaction number.
3. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



4. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.



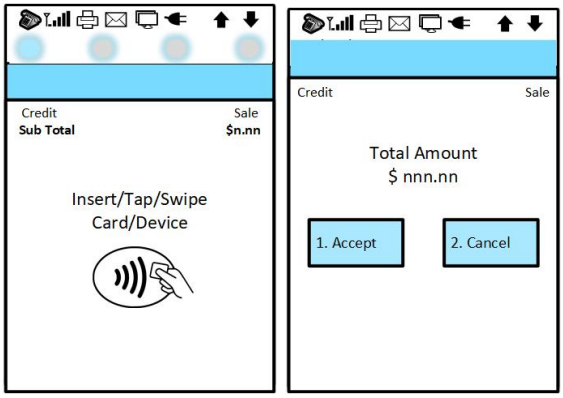
Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

7.5.7 Credit Sale

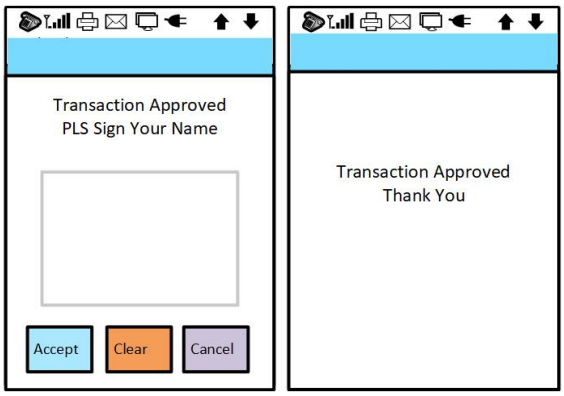
The Credit Sale for restaurant is different than retails and depends on if the host supports adjust or not. For example, some processors do NOT support adjust. So when running a credit sale from the terminal, CreditAuth request is actually sent to the host and the tip is then added offline later. During a batch, the completion with the tip amount is included and sent.

Card holders can perform a credit card sale by dipping, swiping or tapping their card or device at the terminal or the restaurant can start the transaction with the ECR by manually starting a credit sale transaction. The restaurant can also initiate the transaction at the ECR and manually input the card number and card expiration date.

1. The restaurant initiates the credit sale transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device and is asked to Accept or Cancel the Sale. The terminal may also prompt for Cash Back and/or PIN number. Customer will input a cash back amount, press enter, and input their PIN and Accept or Cancel the sale.



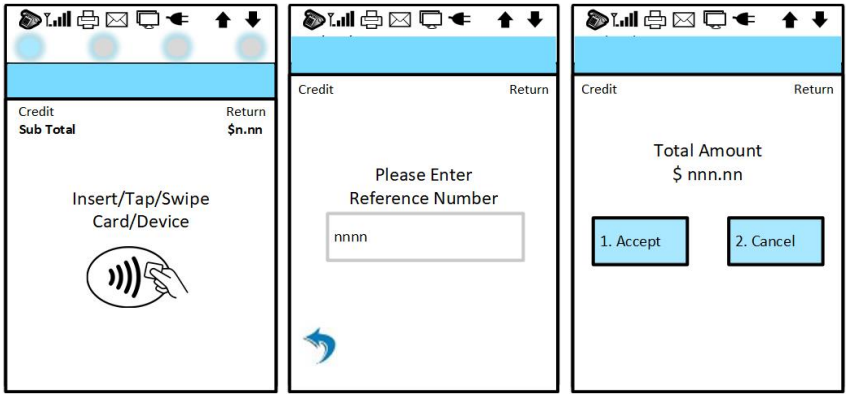
3. The card holder accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)
4. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.



7.5.8 Credit Return

This section describes a credit return. A credit return is a refund to the card holder. A return issues credit to the customer's credit card. If the transaction has not already been settled, the restaurant should perform a void transaction.

1. The restaurant initiates the credit return transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device and the merchant is prompted to input a reference number.
3. The card holder is prompted to Accept or Cancel the Return.



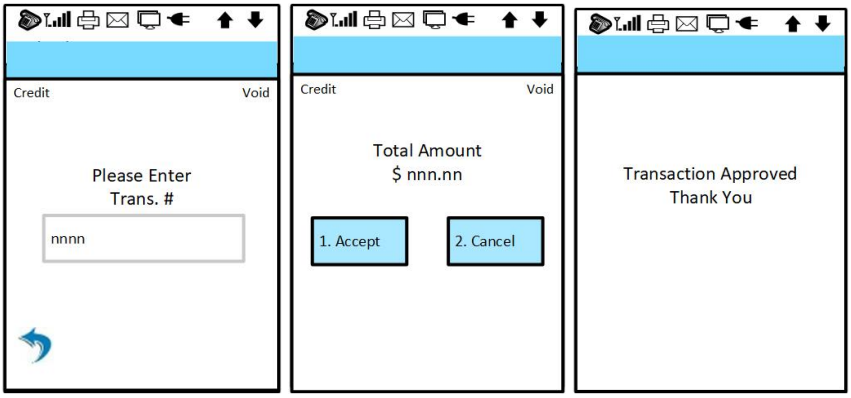
4. The card holder accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

7.5.9 Credit Void

Performing a Void transaction completely nullifies a previously authorized and approved Sale transaction that has NOT been settled. However, if the Sale transaction has been settled, the restaurant must perform a Return. A Void does not remove the hold on the customer's card and the dollar amount of the transaction is not accessible by the card holder for several days as determined by the bank. The transaction is processed like an offline transaction so card information is not required.

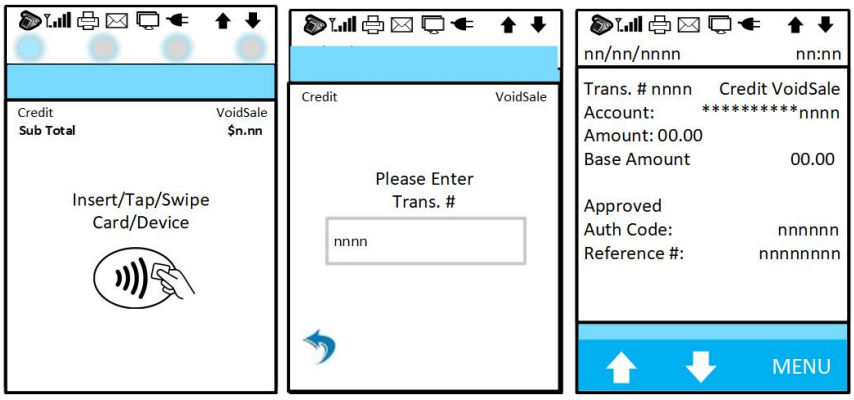
1. The restaurant initiates the Void transaction using the ECR.
2. The restaurant is asked to input the transaction number.
3. Card holder (and merchant) review the total amount and accept or cancel the transaction. The system approves the Void transaction and returns to the idle screen. (If the card holder cancels, the terminal also returns to the idle screen.)



7.5.10 Credit VoidSale

Performing a VoidSale transaction nullifies a previously authorized and approved Sale transaction that has NOT been settled. However, if the Sale transaction has been settled, the restaurant must perform a Return. A VoidSale does not remove the hold on the customer's card and the dollar amount of the transaction is not accessible by the card holder for several days as determined by the bank. The transaction is processed online so the card information must be collected.

1. The restaurant initiates the VoidSale transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device.
3. Restaurant is asked to input the transaction number.
4. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



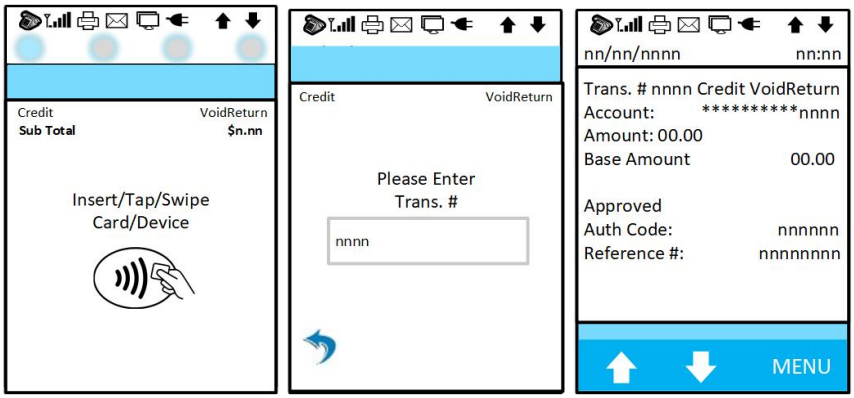
5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

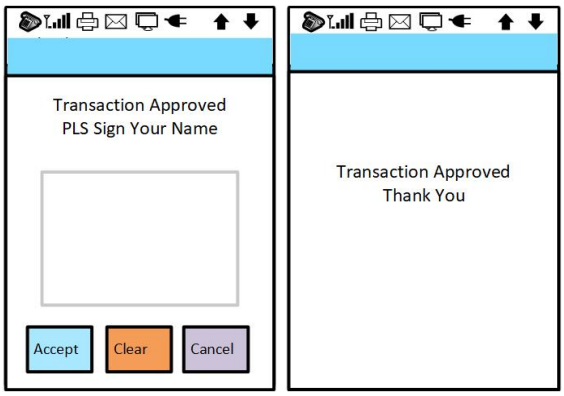
7.5.11 Credit VoidReturn

A Return transaction processed in error can only be voided if the Return has not yet been batched out. A VoidReturn nullifies a Return that was previously performed in the same batch.

1. The restaurant initiates the VoidReturn transaction using the ECR.
2. Card holder inserts, taps, or swipes card or device.
3. Restaurant is asked to input the transaction number.
4. Card holder reviews the transaction details and accepts the transaction, the system prompts for a signature. (If the card holder cancels, the terminal returns to the idle screen.)



5. The card holder signs in the signature area and has the option to Accept, Clear (clears signature field), or Cancel the signature prompt. In this case, the card holder signs and presses Accept.



7.6 Debit Card Transactions

This section details the Debit Sale and Debit Return transactions types for the restaurant debit card environment.

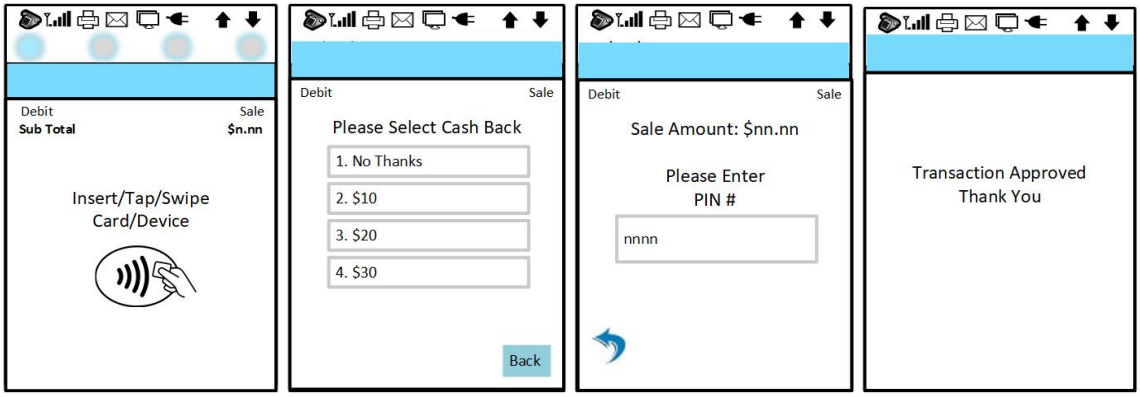
7.6.1 Debit Sale

All debit sales are processed online. Some applications support pinless debit sales, but the limit must be set in BroadPOS MarketPlace. For example, if the limit is set to $50, then all transactions above the $50 limit will prompt for a pin and all the transactions below the $50 limit will prompt for a signature.

NOTE
The terminal will only prompt for an online PIN if the terminal is key injected. The terminal cannot prompt for an offline PIN without injection because the card is needed to verify the offline PIN.

To complete a debit card sale, the card holder must swipe the card through the terminal. The restaurant cannot manually input a debit card transaction. This section describes the online PIN transaction.

6. The restaurant initiates the debit sale transaction (with subtotal) using the ECR. The Customer may also initiate the transaction with a card swipe and then a dollar amount can be entered. This example assumes that the restaurant initiated the sale.
7. The card holder swipes the card and is shown the total sale amount (subtotal plus cash back) and prompted for their PIN number. The card holder selects a cash back amount.
8. Customer inputs their PIN and presses the Enter button on the terminal pinpad.
9. The system completes the transaction.

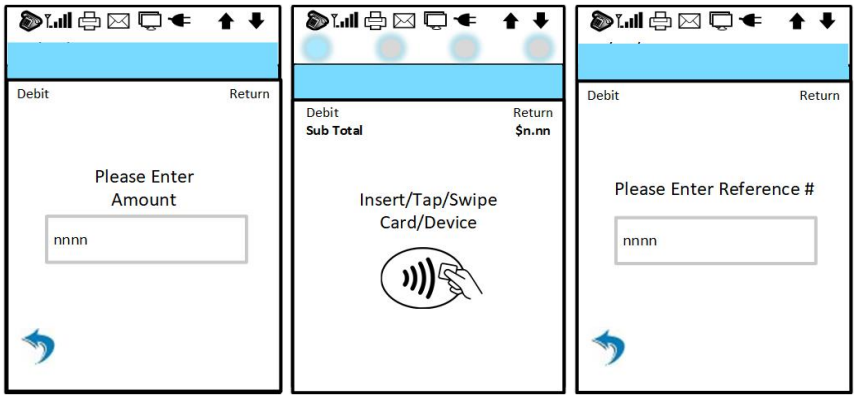


Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us

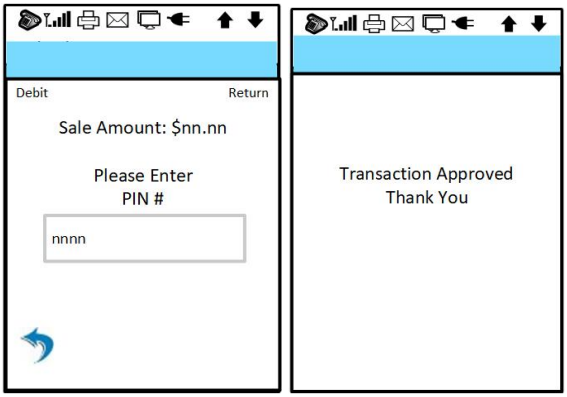
7.6.2 Debit Return

A debit sale cannot be voided, it must be returned. A debit return immediately issues revenue from the restaurant's bank account to the customer's bank account of origin.

1. The restaurant initiates the debit return transaction using the ECR and the restaurant is prompted to input a dollar amount.
2. Card holder is prompted to swipe their card. (Card is swiped.)
3. Restaurant is prompted to input a reference number. (Inputs reference number.)



4. Card holder is prompted to input their PIN. (Inputs their PIN.)
5. The system completes the transaction.



Appendix A. Troubleshooting

This section briefly describes how to troubleshoot issues that may arise during normal operation of the S300 Terminal.

A.1 General Troubleshooting

Review the following sections for possible issues and causes before requesting service for the terminal. A few simple checks may solve the specific problem and restore proper operation. If you are unable to resolve the issue after reviewing the list and performing the tasks, contact your technical support help desk.

A.1.1 Serial Number Location

The serial number is located on a white label on the bottom of the terminal. The serial number is located under the bar code. The serial number begins with S/N followed by 8 digits.

Example: S/N:xxxxxxxx

NOTE
There is another label on the back of the terminal that has a barcode. This is the LAN MAC ID. You can ignore this label.

A.1.2 User Password Forgotten or Lost

If the user has forgotten or lost their password, reload the parameters to the terminal.

A.1.3 Terminal Appears Locked Up

If the terminal appears to be locked up and pressing the enter key has no effect, the terminal needs to be reset.

To reset the terminal, perform the following tasks.

1. Remove (unplug) the power supply from the terminal.
1. Wait two minutes.
2. Plug the terminal back in to its power supply.
3. The terminal is now reset.

NOTE
If the terminal does not reset, contact your technical support help desk.

Non Android Support: support@pax.us
Android and PAXSTORE Support:
paxstore.support@pax.us
(877) 859-0099
www.pax.us