Comtrex POS/2100

FreedomPay Integration

FREEDOMPAY

Version 1.19 March 19, 2024

comtrex
part of the Zonal Group

Release History

Date	Version	POS/2100 Version	Printcheck Version	Software Changes/Modifications
11 Dec 2022	1.1	1.0.3.1003	1.2.114.0	1. Initial Release. Pay at counter (P@C) only. Incomplete draft. Supplied to begin alpha testing.
20 Dec 2022	1.2	1.0.3.1003	1.2.114.0	1. Add flow chart. Complete POS Operation section. Add section on log files.
21 Dec 2022	1.3	1.0.3.1003	1.2.114.0	1. Remove references to prior implementations with other third party pay at counter vendors.
24 Jan 2023	1.4	1.0.3.1004	1.2.114.0	1. Incorporate new flow diagram on page 4.
26 Jan 2023	1.5	1.0.3.1004	1.2.114.0	1. Change flow diagram on page 4 to represent P@C only. Paste new P@T into draft section.
14 Mar 2023	1.6	1.0.3.1005	1.2.114.0	1. Initial draft of section on P@T.
29 Mar 2023	1.7	1.0.3.1006	1.2.115.0	1. Document optional receipt printing. 2. Implement changes provided by U.K. 3. Document printing of header and trailer on Move/5000 receipt.
29 Mar 2023	1.8	1.0.3.1006	1.2.116.0	1. Small change to set Print Voucher for P@T. Leave unchecked.
30 Mar 2023	1.9	1.0.3.1006	1.2.116.0	1. Correct statement on printing of a voucher for P@C. Print Voucher flag must be set on the Finalize Media linked to “OTHER” in programming for POS System Options – Credit Card Options on tab Credit Card Types.
3 Apr 2023	1.10	1.0.3.1006	1.2.116.0	1. Reference Comtrex Teams on pages 2 and 3. 2. Update diagrams on pages 4 and 18 to modify URL. 3. Add note on pages 2 and 13 indicating examples are U.S. and show $, however approval is currently for U.K. and will show £. 4. Add link on page 16 to FreedomPay logs for P@C. 5. Add information for FreedomPay Tech Support on page 2.
7 Apr 2023	1.11	1.0.3.1006	1.2.116.0	1. Make the change shown in version 1.9 on page 13 under Voucher Print. 2. Additional wording on page 9 under Terminal Print Options pertaining to Voucher Print. 3. Add section on page 11 on Button Type EMV VOUCHER PRINT. 4. Add section on page 11 on Closed Check screen EMV VOUCHER PRINT. 5. Add wording on page 14 under Voucher Print referring to the ability to print/reprint an EMV Voucher after the sale.
10 Apr 2023	1.12	1.0.3.1006	1.2.116.0	1. Always print a Voucher for a void/refund transaction, either initiated from the Closed Check screen or a Sales Desktop, regardless of the setting of Print Voucher on the Finalize Media.

17 Apr 2023	1.13	1.0.3.1006	1.2.119.0	1. Document print prompt on Move/5000.
2 May 2023	1.14	1.0.3.1008	1.2.121.0	1. Add complete section on refund/void transaction process for bill paid on Move/5000. 2. Add button type SEND FP VOID in POS Programming section.
4 May 2023	1.15	1.0.3.1009	1.2.122.0	1. Document ability to refund/void a transaction paid on Move/5000 from the Closed Check screen.
31 Jul 2023	1.16	1.0.3.1010	1.2.123.0	1. Add documentation for Credit Card Not Present Button. 2. Change two screenshots to show button. 3. Add documentation for Payment Process – Card Not Present.
01 Aug 2023	1.17	1.0.3.1011	1.2.124.0	1. New screenshot to document proper display from Freeway Commerce Connect when Lane/3000 is awaiting card number entry. 2. Software modification to remove signature prompt after CNP authorization.
29 Jan 2024	1.18	1.0.3.1015	1.2.124.0	1. Update documentation to reflect U.S. applicability.
19 Mar 2024	1.19	1.03.1016	1.2.124.0	1. Add documentation related to pre-auth for U.S. for P@C applications.

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Comtrex FreedomPay Integration

Purpose of Document

The pay at counter integration with FreedomPay is very similar to the integration with other pay at counter implementations. There are two totally independent integrations, one for pay at counter (P@C) and another for pay at table (P@T). The release of this document covers both the P@C and P@T integrations.

This document is intended to assist Comtrex programming and training personnel. It is not intended for end user release. This document does not cover the installation or configuration of any FreedomPay software or of software related to payment terminals or the network configuration of the site. It covers the configuration, programming and operation of the Comtrex POS2100 terminals. For detailed information on configuring FreedomPay, the Ingenico Lane/3000 terminal and the Ingenico Move/5000 terminal, refer to the pdf file "FCC Quick Start Guide v2.0" from FreedomPay. Comtrex personnel should also refer to 'Teams > Comtrex Installations > General (channel) > Files (tab) > Browse to Software\FreedomPay\How To - FreedomPay.pdf' for a step by step guide to the installation process.

Should Comtrex personnel require assistance from FreedomPay, Tech support can be contacted via the contact information below:

888-495-2446 (US)
+44-203-0148966 (UK)
Email: techsupport@freedompay.com

When contacting FreedomPay Tech support, make sure that you are including the following:

- Any FreedomPay logs obtained from the FCC middleware in use
- If regarding a transaction, some identifying information for the transaction in question
    - MerchantReferenceCode
    - InvoiceNumber
    - RequestID

NOTE: UK installations will show £ symbol instead of the $ symbol shown in several screenshots in this document.

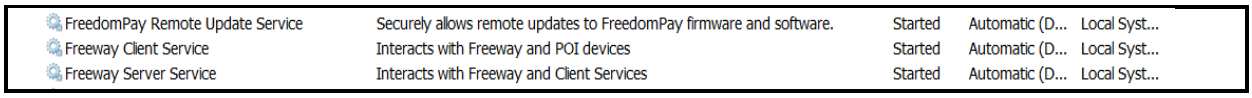
FreedomPay – Counter Service (P@C)

Overview

This integration is similar in operation to other existing pay at counter implementations, in that there is a payment terminal, in this case an Ingenico Lane/3000 and a one-to-one relationship exists between the POS terminal and the payment terminal using a direct USB connection. There is, however, no direct communication between the Ingenico Lane/3000 terminal and the POS terminal. The POS software, using parameters stored in the database, interacts with a service installed on a server, in this case a service residing on the POS server.

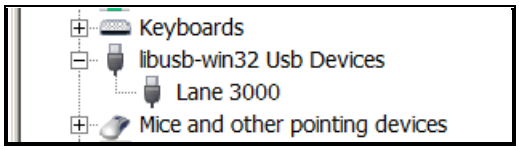
There are three (3) pertinent FreedomPay services which will need to be installed at each location. Again, it is beyond the scope of this document to detail the installation. For detailed information on configuring FreedomPay and the Move/5000 terminal, refer to the pdf file “FCC Quick Start Guide v2.0” from FreedomPay. Comtrex personnel should also refer to ‘Teams > Comtrex Installations > General (channel) > Files (tab) > Browse to Software\FreedomPay\How To - FreedomPay.pdf’ for a step by step guide to the installation process.

The following is a screenshot of the services installed related to FreedomPay P@C.



The Freeway Server Service is only installed on the POS server. There is no Comtrex service associated with FreedomPay P@C. The POS2100 software directly interacts with the FreedomPay Freeway Server Service software.

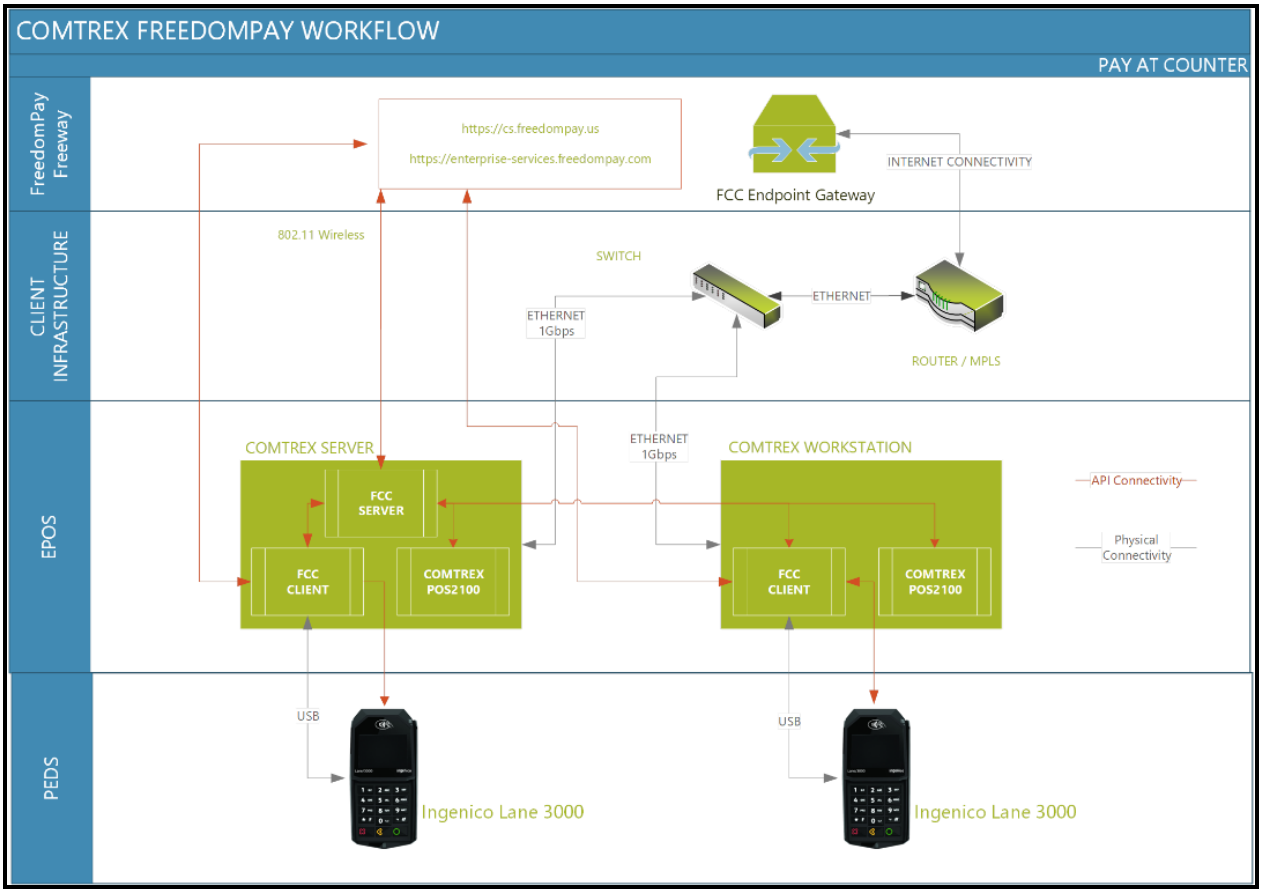
The payment terminal, the Ingenico Lane/3000, has a USB connection and will show in Control Panel under Devices and Printers. If the software is installed properly, you should see the Lane/3000 as shown below under Device Manager.



Connections/Information Flow

Terminals are interconnected with a standard local area network. An Internet connection is required. The Lane/3000 terminals are attached to each POS WorkStation via a USB connection.

The diagram below, along with the communication narrative, explains the process.



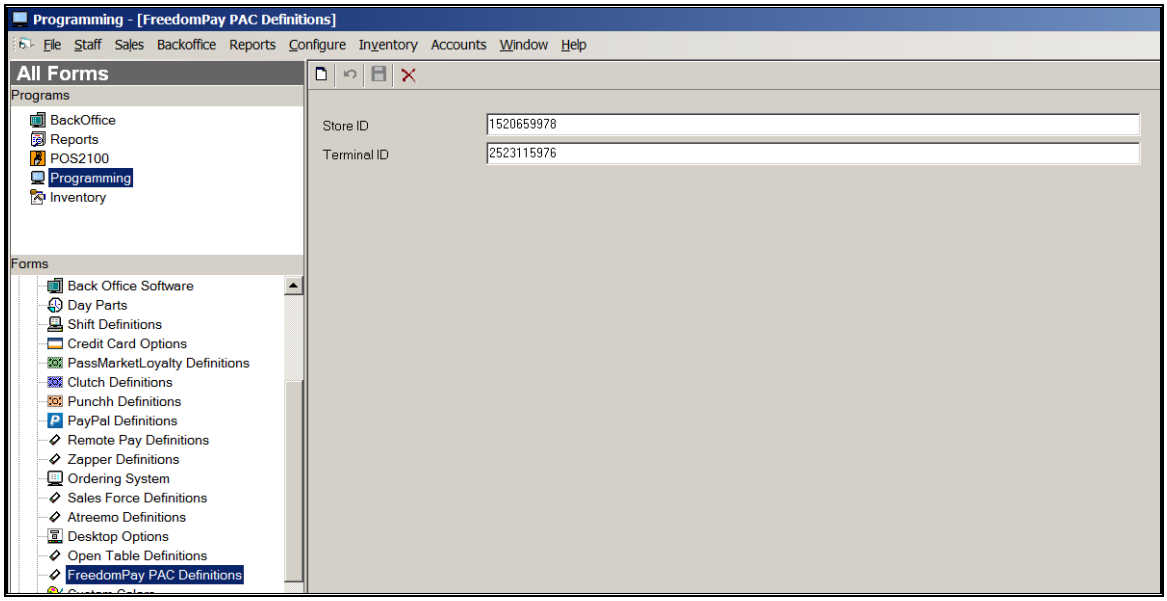
Pay at Counter Information Flow Narrative

- When payment is entered on the POS terminal, the POS2100 software sends an HTTP request to the FCC Server software residing on the POS server, either a PC or a Workstation Server. Part of the request data will contain the terminal name so that the local FCC Server software knows with which local FCC Client it should interact.
- The local FCC Server software will use the supplied terminal name to communicate to the local FCC Client software resident on the POS terminal to which a Lane/3000 terminal is attached.
- The local FCC Client software communicates to the attached Lane/3000 terminal and prompts the customer for card data and leads the customer through the process. In addition, the local FCC Client software provides a popup window in the lower right-hand corner of the POS terminal display to inform the POS Operator of the progress on the Lane/3000.
- When sufficient information has been entered, the local FCC Client software communicates directly to the FreedomPay cloud, shown above as Freeway.

- Freeway relays the information to the payment processor, receives a response and returns the decision to the local FCC Client.
- The local FCC Client software forwards the information to the local FCC Server.
- The local FCC Server responds to the POS2100 software with the decision.

BackOffice Programming

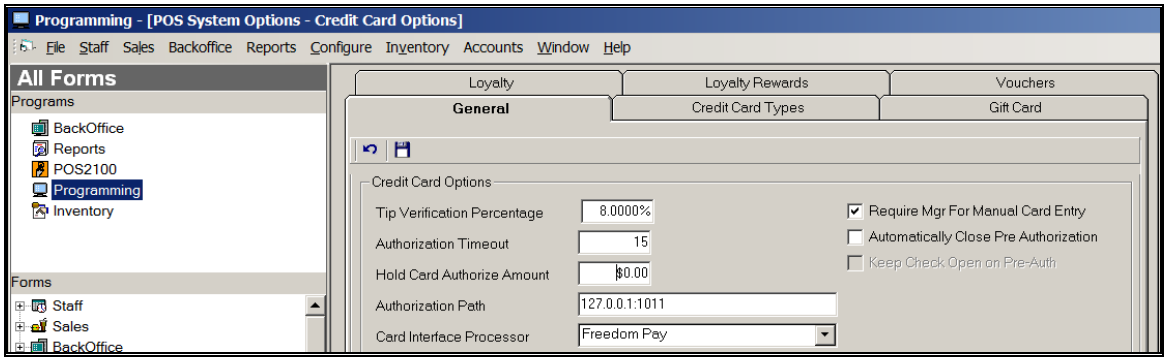
POS System Options – FreedomPay P@C Definitions



A new selection has been added under POS System Options for P@C with FreedomPay. These are the only entries relating to P@C operation.

POS System Options – Credit Card Options – General

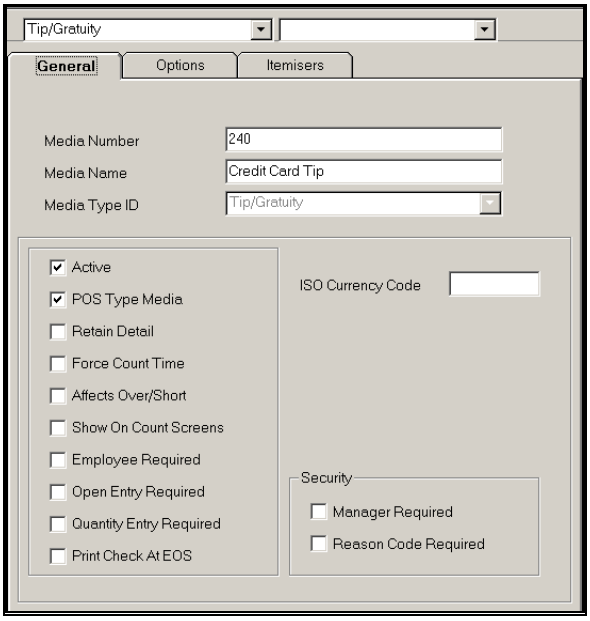
These sections should be programmed in the sequence documented herein.

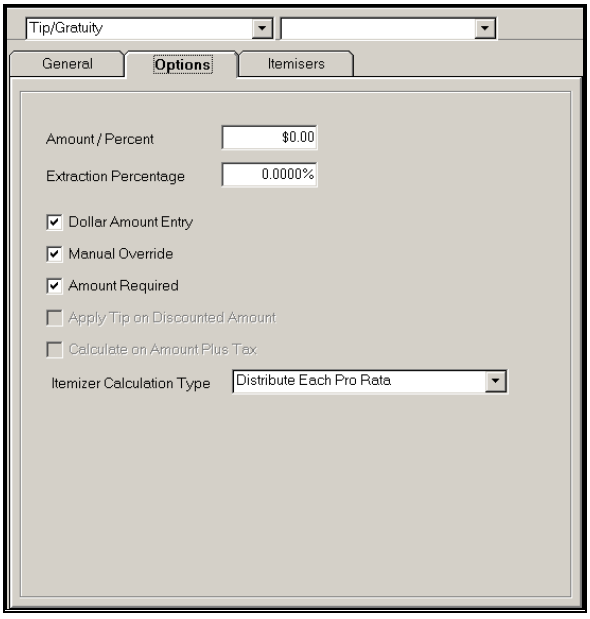


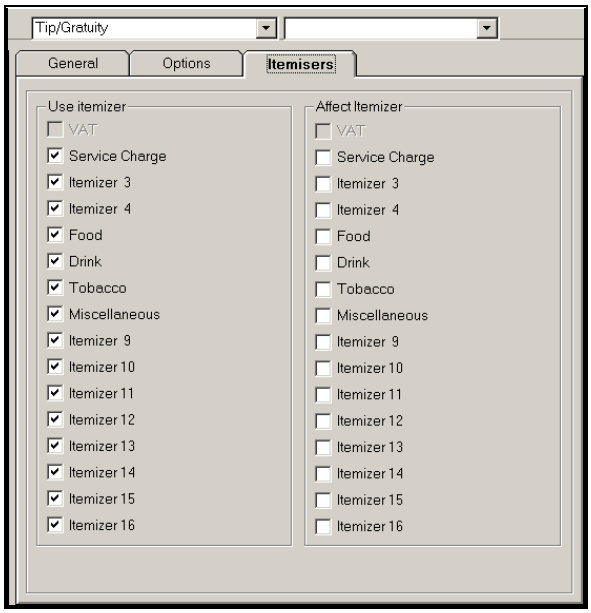
- Authorization Path. This identifies the URL with which the POS terminal communicates. The illustration above shows a standalone WorkStation Server. For multiple terminal installations, “Server1” is generally appropriate.
- Card Interface Processor. This identifies FreedomPay. It enables the POS software to use FreedomPay protocol and use the text, under Credit Card Types, which is sent by FreedomPay to identify the credit card used by the Patron.

Media Definition Programming – Tip/Gratuity

A tip may be optionally entered by the Patron on the Lane/3000 terminal. For proper balancing, a Tip/Gratuity media should be created which will be linked to all credit card types sent by FreedomPay.





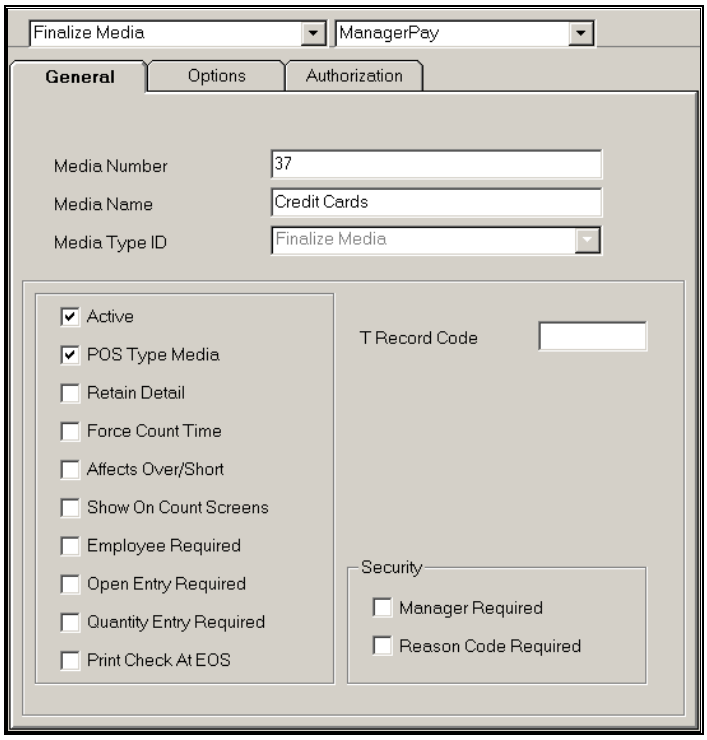


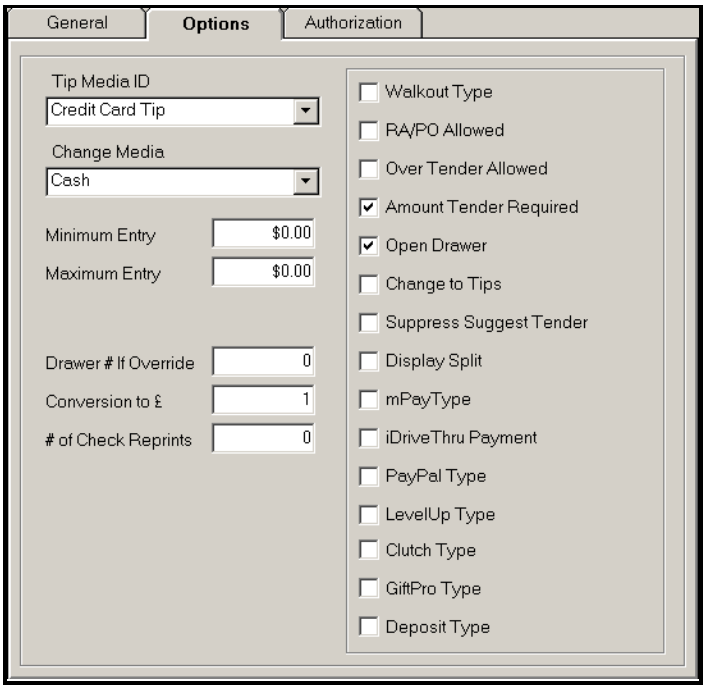
Media Definition Programming – Finalize Media – Credit Cards

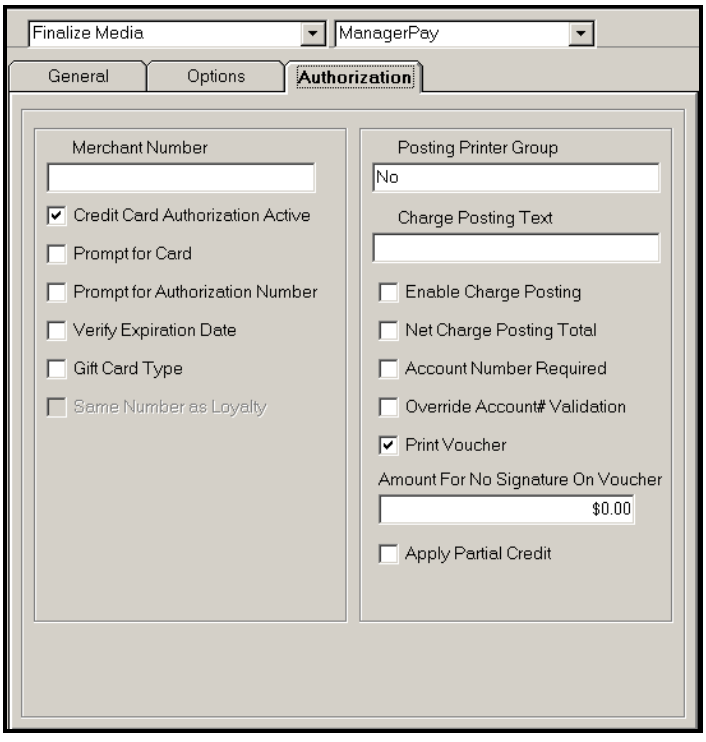
The POS can segregate up to eight (8) different credit card types, with the eighth being a "catch all" as either "Credit Cards" or "Other Credit Cards". Except for the Media Name, all credit card finalize media should be identically programmed.

It is imperative that the Finalize Media "Other Credit Cards" be created and properly linked, as shown in the section following this.

NOTE: The flag "Over Tender Allowed" should NOT be set.

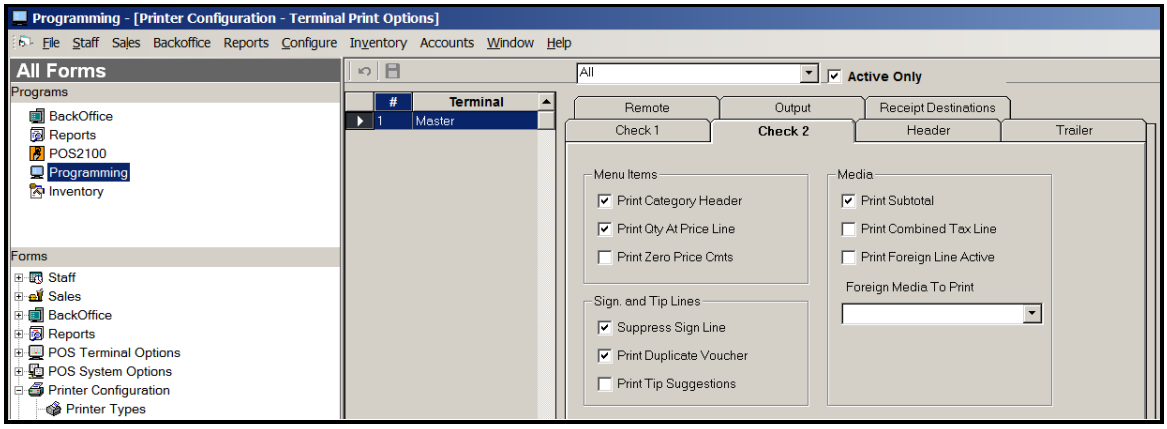






In order to print a voucher, the flag “Print Voucher” for the Finalize Media linked to Type 0 must be set to true. Usually this is media “Credit Cards” as shown in a following section on Credit Card Types. A duplicate voucher may be set to print as programmed in Printer Configuration – Terminal Print Options.

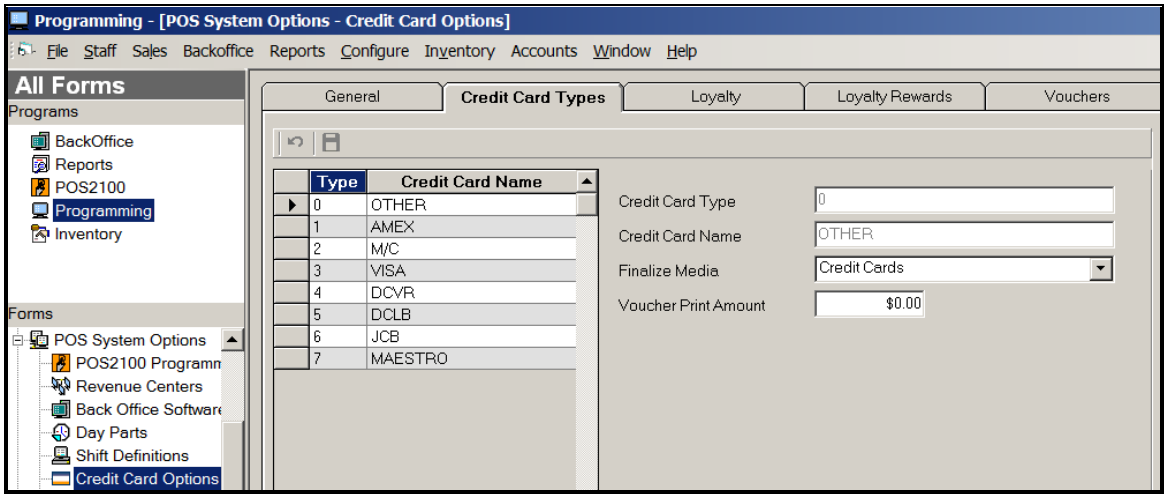
Printer Configuration – Terminal Print Options



In order to print a voucher immediately after the sale, the flag “Print Voucher” for the Finalize Media linked to Type 0 in Credit Card Types must be set to true. A duplicate voucher may be set to print as programmed in Printer Configuration – Terminal Print Options, as shown above. The above option also pertains to any subsequent print/reprint using the EMV Voucher Print button on either a Sales Desktop or the Closed Check screen.

POS System Options – Credit Card Options – Credit Card Types

The only Finalize Media which can be selected on the screen below are ones which have the flag “Credit Card Authorization Active” set as true. That is why it is important to follow the programming as outlined herein.



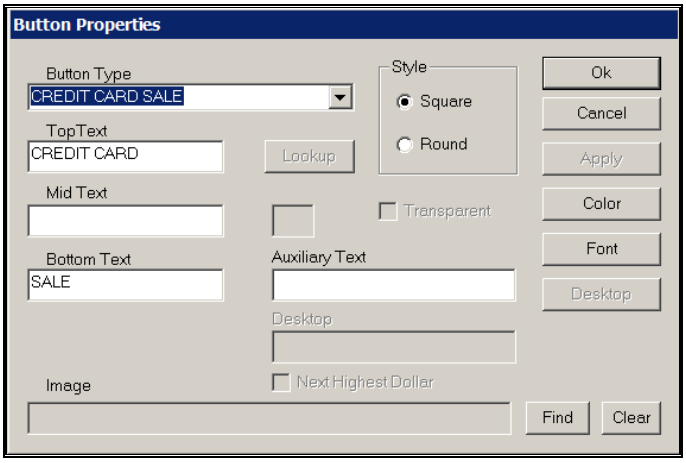
For each Credit Card listed on the left under “Credit Card Name”, select the appropriate Finalize Media. The Voucher Print Amount is not active with FreedomPay. If the merchant accepts cards other than those listed, they will be associated with “Other Credit Cards”, shown above as simply “Credit Cards”.

In order to print a voucher, the flag “Print Voucher” for the Finalize Media linked to Type 0 above must be set to true.

POS Programming and Operation

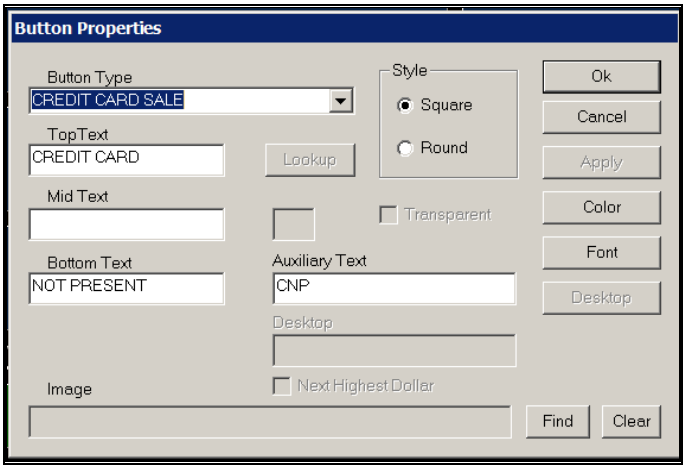
Point of Sale Programming – Credit Card Sale Button

POS programming requires a Credit Card Sale button on a Sales Desktop. Do not use any of the credit card Finalize Media on the Sales Desktop. The card type will be identified when the final result is sent from the FCC Server software. The FCC Server software will return appropriate text for each credit card type and the POS2100 will use the programming under Credit Card Types to identify the appropriate Finalize Media. Note the absence of text in the field Auxiliary Text.



Point of Sale Programming – Credit Card Not Present Button

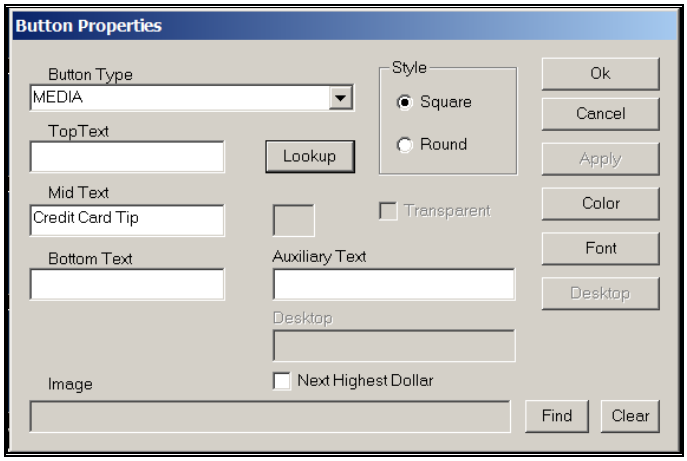
POS programming also requires a Credit Card Not Present Sale button on a Sales Desktop. Note the text "CNP"in the field Auxiliary Text. This button is used when the customer (credit card) is not present.



Point of Sale Programming – Manual Tip Entry Button

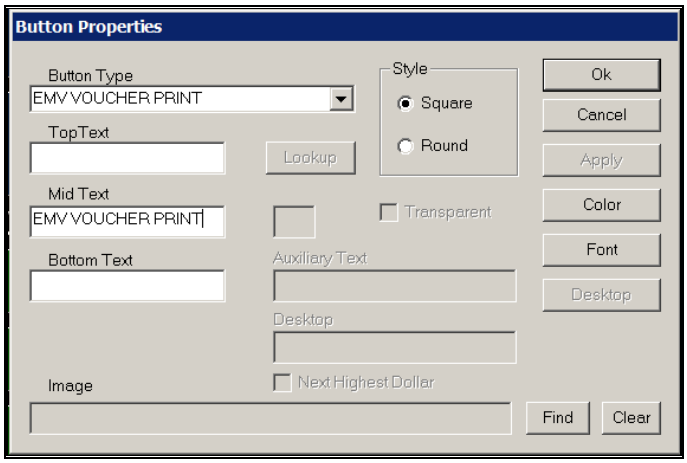
If the Lane/3000 terminal is not configured to prompt for a tip entry, and the merchant desires the ability to add a tip to a transaction, a manual credit card tip entry button should be configured on a Sales Desktop. If you wish to distinguish between cash and credit card tips, then you should configure two tip entry buttons appropriately labeled.

Following the earlier example of the programming of the Finalize Media “Credit Cards”, the manual credit card tip entry button should be associated with the media “Credit Card Tip”.



Point of Sale Programming – Button Type EMV VOUCHER PRINT

In most counter service operations, the POS2100 will be configured to not print an EMV Voucher. Refer to the later section Point of Sale Operation – Voucher Print.



This button may be used either prior to beginning a new sale or during a sale to print/reprint the EMV Voucher for the last transaction on the current terminal where a credit card was used for payment. If multiple credit cards were used to finalize the transaction, an EMV voucher for each credit card will print.

NOTE: This button cannot reprint an EMV Voucher which was originally printed on the Move/5000 terminal. It is solely for use with the Lane/3000.

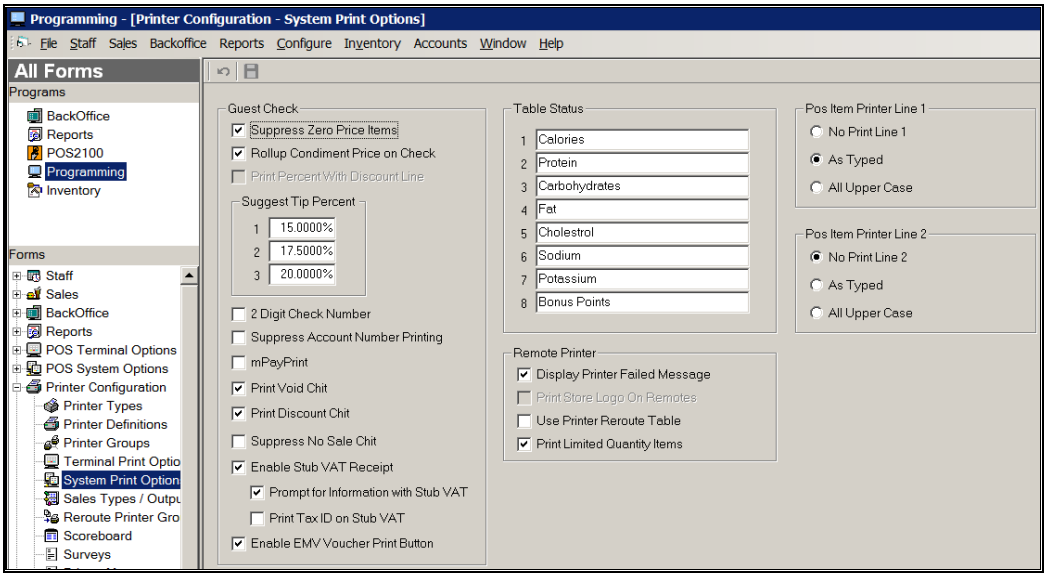
This button will function whether or not an EMV Voucher was originally printed when the credit card was processed on the POS terminal. There may be a duplicate voucher printed depending on the setting under Printer Configuration – Terminal Print Options on the Check 2 tab as “Print Duplicate Voucher”.

Point of Sale Programming – Button Type PRE-AUTHORIZATION

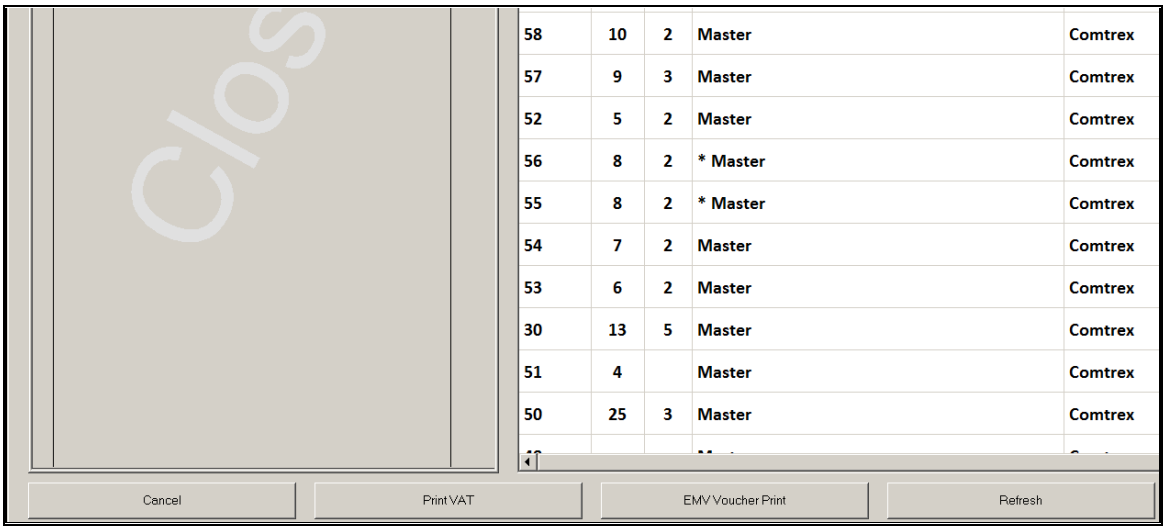
This button is for use in the U.S. to pre-auth a credit card prior to presenting a voucher to the patron for indicating a tip. If P@T is not implemented, this button will be used for table service. In a bar application, it is used for the same purpose, print a voucher so that the patron can indicate a tip amount. See the later section Point of Sale Operation – Pre-Auth Operation.

Point of Sale Programming – Closed Check Screen EMV Voucher Print

The EMV Voucher Print button is only placed on the Closed Check screen in situations where credit cards are processed. The optional button is configured in Printer Configuration – System Print Options as Enable EMV Voucher Print Button.

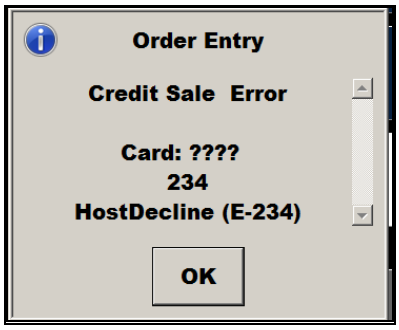


Since the Closed Check screen shows all guest checks for the entire Sales Day, from all terminals, which are closed, this selection allows the POS Operator to print/reprint the EMV Voucher for any guest check for the Sales Day. Select the check, then click on the EMV Voucher Print button. A Void or Refund transaction initiated from the Closed Check screed is not an EMV transaction and will not print an EMV Voucher.



Point of Sale Operation – Faulty Programming

If the programming under FreedomPay PAC Definitions is not properly entered, then the display below will appear. If this appears, check all programming and, if it appears correct, contact FreedomPay. This should never occur once an installation has gone live.

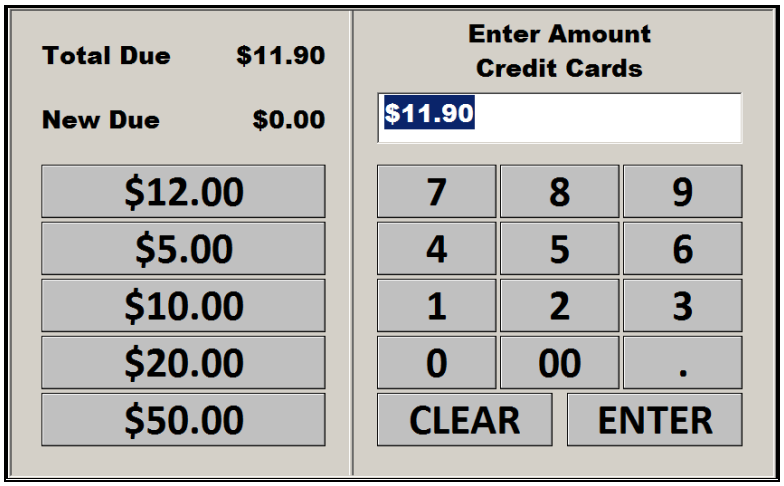


Point of Sale Operation – Payment Process – Card Present

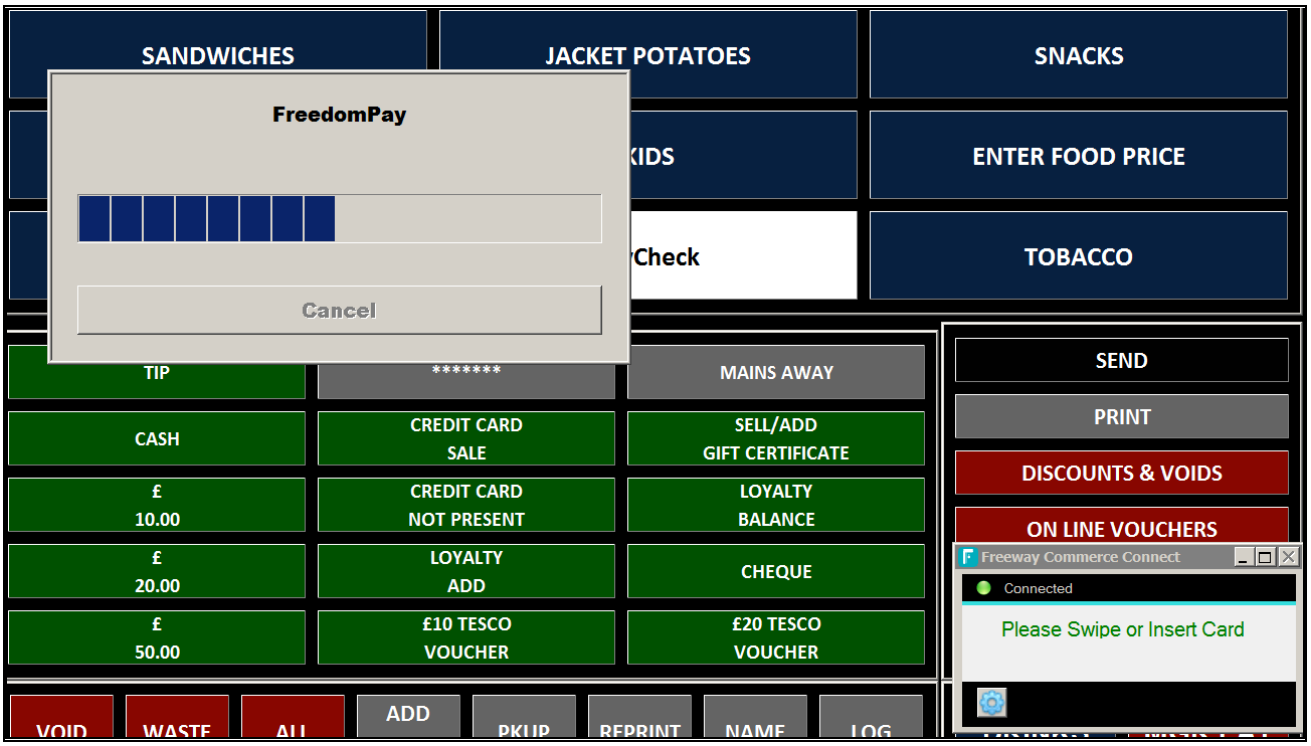
At payment time, the POS Operator will use the Credit Card Sale button to start the payment process. The entry methodology is determined by the programming of the Finalize Media "Other Credit Cards". If you wish to present the amount and allow the operator to enter an amount less than the amount due, check the flag "Amount Tender Required" in Finalize Media programming. Even if this flag is not set, the POS Operator can enter an amount first, then depress the Credit Card Sale button.

Depending upon local configuration, the Lane/3000 terminal may prompt the Patron to enter a tip or not. The flag "Over Tender Allowed" and the related flag, "Change To Tips" should not be set. If the Lane/3000 terminal is not configured to prompt for a tip, then a tip must be manually entered by the POS Operator with a credit card tip button on the POS.

With the flags set as noted above (and optional tip entry on the Lane/3000 disabled), the POS Operator will touch the Credit Card Sale button and be prompted as:



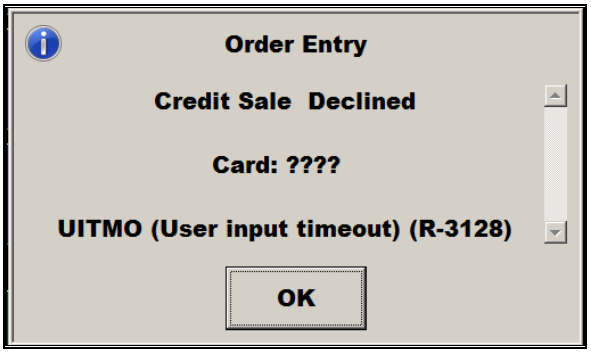
Touch Enter and the screen will show as shown below:



At the same time, the display of the Lane/3000 terminal will be prompting the patron to “Please Swipe or Insert Card”. NOTE: the popup in the lower right portion of the screen is a FreedomPay application which shows the POS Operator where the patron is in the payment process.

Once the card is inserted, the lower right will display “Card Inserted” then “Please Enter PIN” (if the card requires the entry of a PIN). The POS display will continue to show the moving blue line as shown above. For a successful payment process, the lower right display will show “Processing”, then “Approved” then “Card Removed”.

If the patron does not comply with the directions after approximately thirty (30) seconds, the operation will timeout. The lower right will display “Timeout Please Retry”. The POS will display as follows:

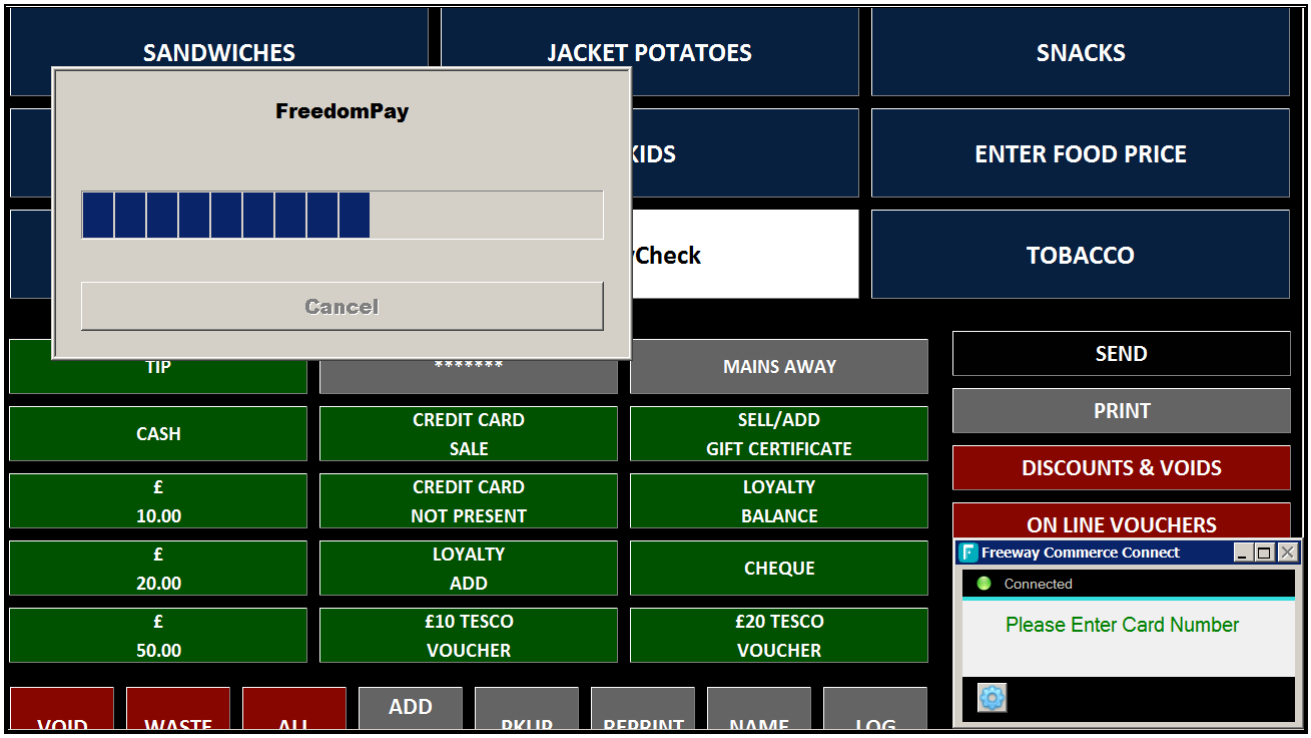


For a declined transaction, the APPROVED prompt above is replaced with a DECLINED prompt.

Point of Sale Operation – Payment Process – Card Not Present

At payment time, the POS Operator will use the Credit Card Not Present button to start the payment process. This button is used for telephone orders or any time the physical credit card is not present. Refer to the previous section for various methods of entering a payment amount.

Once a payment amount has been entered, the screen will show as shown below:



Whilst the Freeway Commerce Connect is showing as above, the Lane/3000 terminal is prompting the POS Operator as follows:

Enter Card Number

The POS Operator must use the Lane/3000 to manually enter the credit card number. After the card number is correctly entered, the Lane/3000 will prompt the POS Operator as below. Freeway Commerce Connect continues to display as shown above.

Enter Expiration Date

MM/YY

After the expiration date is correctly entered, the Lane/3000 will prompt the POS Operator as below. Freeway Commerce Connect continues to display as shown above.

Enter CVV or CID from card

The Lane/3000 is prompting for the three or four digit Card Verification Value on the rear of VISA and M/C and the front of AMEX. (The CID is the Card Identification number on the back of VISA and M/C, the same as the CVV.)

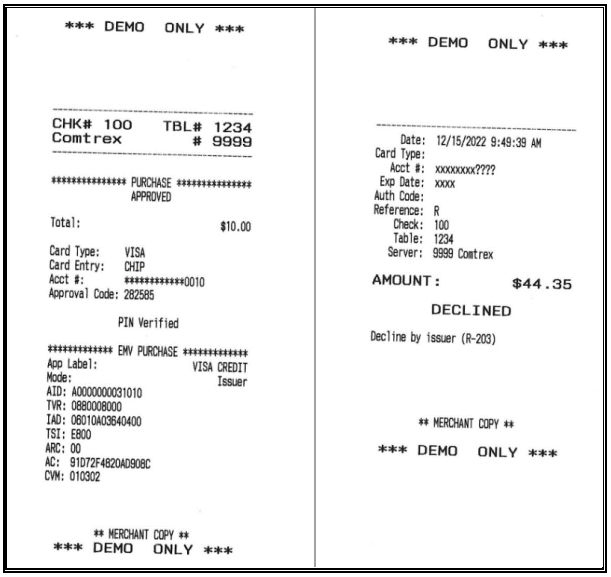
Point of Sale Operation – Voucher Print

The designated receipt printer of the terminal to which the Lane/3000 is attached will print a voucher only if the flag “Print Voucher” for the Finalize Media linked to Type 0 in Credit Card Types is set to true. Usually this is media “Credit Cards” as shown in the section on Credit Card Types. A duplicate voucher print as

programmed in Printer Configuration – Terminal Print Options on the Check 2 tab as “Print Duplicate Voucher”. Refer to prior sections on the ability to print/reprint an EMV Voucher after the sale is complete.

Examples of voucher printing are shown below.

NOTE: UK installations will show £ symbol instead of the $ symbol in this document.



*** DEMO ONLY ***

CHK# 100 TBL# 1234
Comtrex # 9999

********** PURCHASE **********
APPROVED

Total: $10.00

Card Type: VISA
Card Entry: CHIP
Acct #: **********0010
Approval Code: 282585

PIN Verified

********** EMV PURCHASE **********
App Label: VISA CREDIT
Mode: Issuer
AID: A0000000031010
TVR: 0880008000
IAD: 06010A03640400
TSI: E800
ARC: 00
AC: 91D72F4820A0908C
CVM: 010302

** MERCHANT COPY **
*** DEMO ONLY ***

*** DEMO ONLY ***

Date: 12/15/2022 9:49:39 AM
Card Type:
Acct #: xxxxxxxx????
Exp Date: xxxx
Auth Code:
Reference: R
Check: 100
Table: 1234
Server: 9999 Comtrex

AMOUNT: $44.35

DECLINED

Decline by issuer (R-203)

** MERCHANT COPY **

*** DEMO ONLY ***

Point of Sale Operation – Payment Process – Tip Entry

The default operation of the Lane/3000 for U.K. implementation does not prompt the patron for a tip.

NOTE: For Card Not Present transactions, the tip entry will be prompted prior to the request to enter the card number, just as the prompt to insert of swipe the card is after the tip entry.

In order to configure the Lane/3000 to prompt for a tip, the file “FreewayClientService.exe.config” residing on the POS2100 terminal must be modified. This file can be found in

C:\Program Files (x86)\FreedomPay\FreewayCommerceConnect. The text, as modified, shows below as “true”.

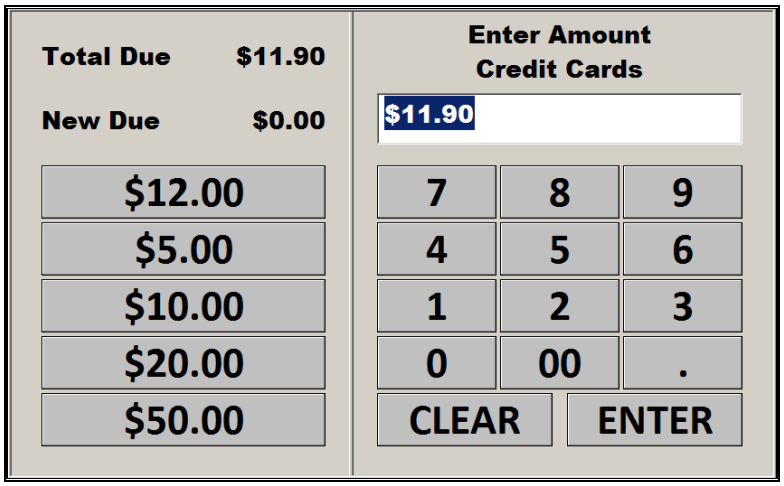
```
<!-- This will turn on PromptForTip on the device, and you can set the percentages -->
   <add key="promptForTip" value="true" />
   <add key="tipPrompts" value="15,18,20" />
```

At payment time, the POS Operator will use the Credit Card Sale button to start the payment process. The entry methodology is determined by the programming of the Finalize Media “Other Credit Cards”. If you wish to present the amount and allow the operator to enter an amount less than the amount due, check the flag “Amount Tender Required” in Finalize Media programming. Even if this flag is not set, the POS Operator can enter an amount first, then depress the Credit Card Sale button.

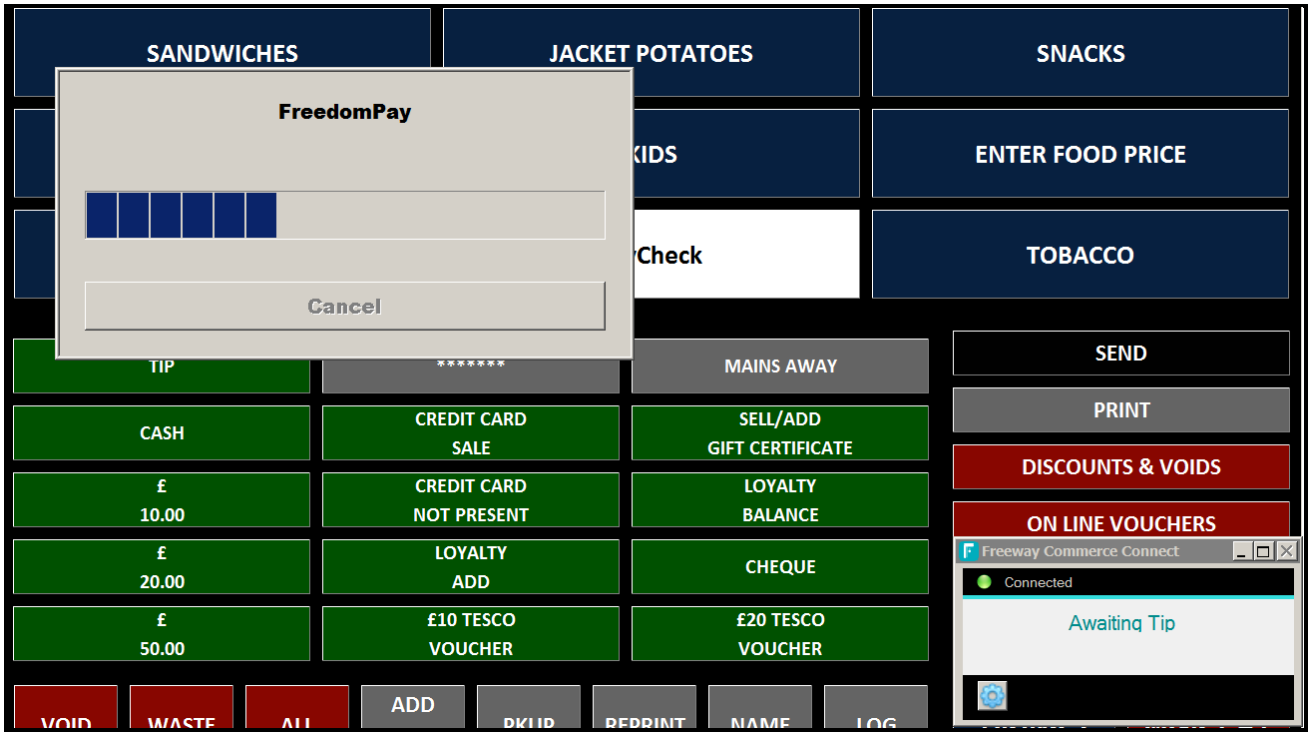
Depending upon local configuration, the Lane/3000 terminal may prompt the Patron to enter a tip or not.

NOTE: The flag "Over Tender Allowed" should NOT be set.

With the flags set as noted above (and optional tip entry on the Lane/3000 enabled), the POS Operator will touch the Credit Card Sale button and be prompted as:



Touch Enter and the screen will show as shown follows:

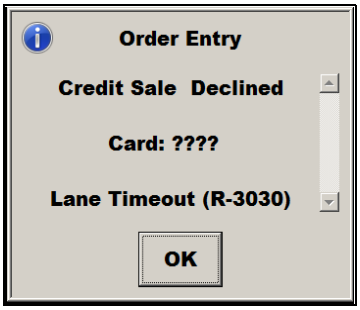


At the same time, the display of the Lane/3000 terminal will be prompting the patron to select a tip amount using the programmed percentages and also allowing for a patron override.

Once the tip has been selected, the "Please Swipe or Insert Card" prompt will appear. NOTE: the popup in the lower right portion of the screen is a FreedomPay application which shows the POS Operator where the patron is in the payment process.

Once the card is inserted, the lower right will display “Card Inserted” then “Please Enter PIN” (if the card requires a PIN entry). The POS display will continue to show the moving blue line as shown above. For a successful payment process, the lower right display will show “Processing”, then “Approved” then “Card Removed”.

If the patron does not comply with the directions after approximately thirty (30) seconds, the operation will timeout. The lower right will display “Timeout Please Retry”. The POS will display as follows:



Point of Sale Operation – Refund/Void Transaction

A Refund/Void transaction operation for a check in the same Sales Day with the Lane/3000 is handled in the standard manner. From the Closed Check Desktop, select the transaction you wish to refund/void.

The POS2100 will not require any additional information. The software will interact with FreedomPay and then print a VOID voucher and a receipt for the Refund/Void transaction.

NOTE Regardless of the setting on the Other Credit Cards Finalize media, a Refund/Void transaction initiated from the Closed Check screen or initiated through a Sales Desktop entry will always print a Voucher.

A customer present Refund/Void transaction is handled in the standard manner with the card insertion being required.

Point of Sale Operation – Signature Verification

Some cards and/or networks will require the POS Operator to verify the signature on the card. If that is the case, once the transaction is complete, after the receipt and the voucher has printed, the POS display will prompt as shown below.

The POS operator at this juncture should provide the patron with a slip on which to provide a signature. If the POS Operator touches Yes, then the transaction is complete. If the POS Operator touches No, then an error voucher will print with an amount of 0.00 and the error code E-101. The POS will display the following prompt.

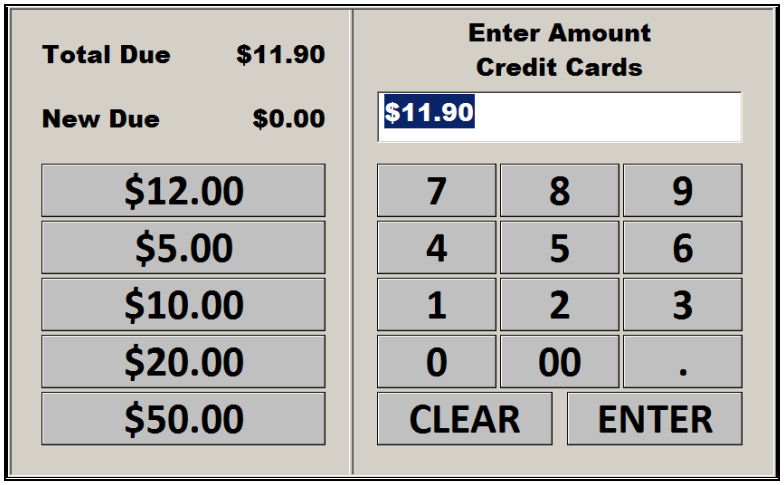
A transaction receipt will print, however, the POS Operator must now use the Refund/Void transaction procedure.

Point of Sale Operation – Pre-Auth Operation

In the U.S. the pre-auth operation on a credit card is implemented prior to presenting a voucher to the patron for indicating a tip and signature. If P@T is not implemented, this button will be used for table service. In a bar application, it is used for the same purpose, print a voucher so that the patron can indicate a tip amount and sign the voucher.

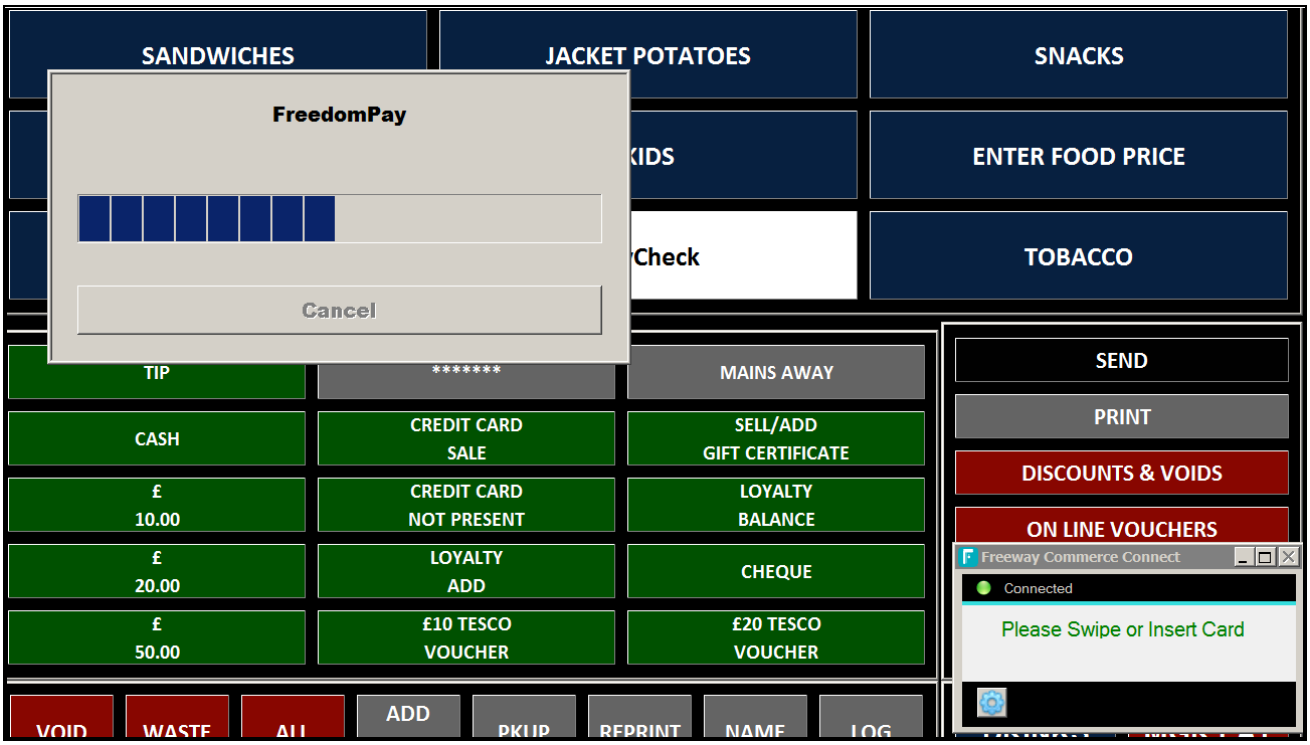
When the patron is ready to pay, the server or bar tender collects the credit card, opens the guest check and depresses the PRE-AUTHORIZATION button. The entry methodology is determined by the programming of the Finalize Media “Other Credit Cards”.

When the PRE-AUTHORIZATION button is touched, the POS Operator will be presented the same screen as the credit card payment operation.



To authorize the entire amount, the POS Operator merely touches the ENTER button. If there are multiple credit cards being used, or the payment will be only partially by credit card, the POS Operator may enter an amount then touch the ENTER button.

After touching the ENTER button, the screen will show as follows:



At the same time, the display of the Lane/3000 terminal will be prompting the patron to “Please Swipe or Insert Card”. NOTE: the popup in the lower right portion of the screen is a FreedomPay application which shows the POS Operator where the patron is in the payment process.

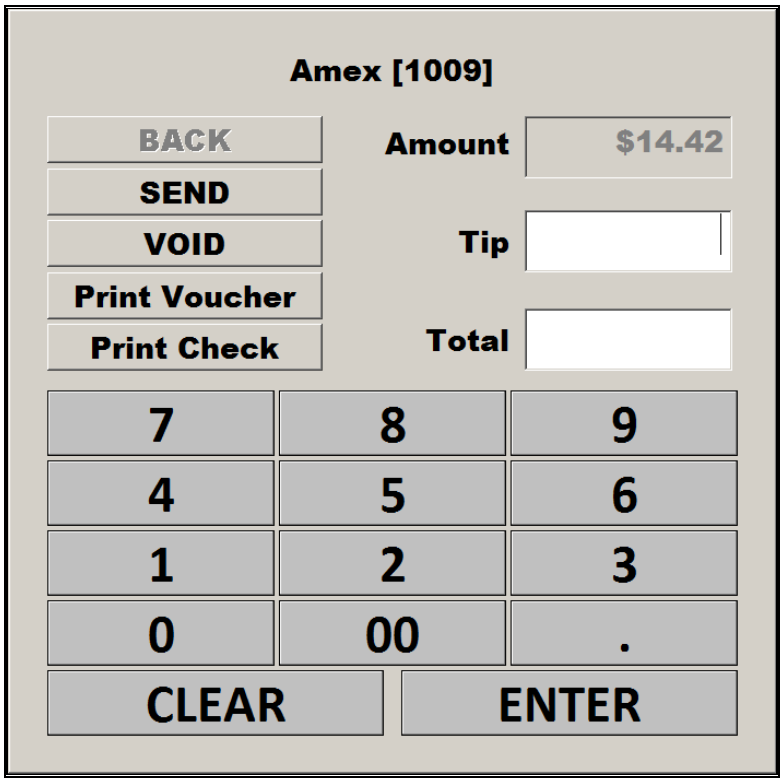
Once the card is inserted, the lower right will display “Card Inserted” then “Please Enter PIN”. The POS display will continue to show the moving blue line as shown above. For a successful payment process, the lower right display will show “Processing”, then “Approved” then “Card Removed”.

If the patron does not comply with the directions after approximately thirty (30) seconds, the operation will timeout. The lower right will display “Timeout Please Retry”. The POS will automatically send the open guest check.

If the total amount of the guest check was entered, the POS will automatically send the open guest check. It a partial payment was entered, the POS will allow for another payment, more items to be entered or the guest check sent.

Point of Sale Operation – Pre-Auth Tip Entry

After a pre-auth operation, the next time the guest check is retrieved, the screen will prompt for a tip entry as shown:



To finish the operation, the operator must enter a tip, even if it is 0. If the operator touches CLEAR, the terminal will prompt “This will store the check without finalizing. Are You Sure?” If the operator touches NO, the above screen will re-appear. If the Operator touches YES, the check will be stored.

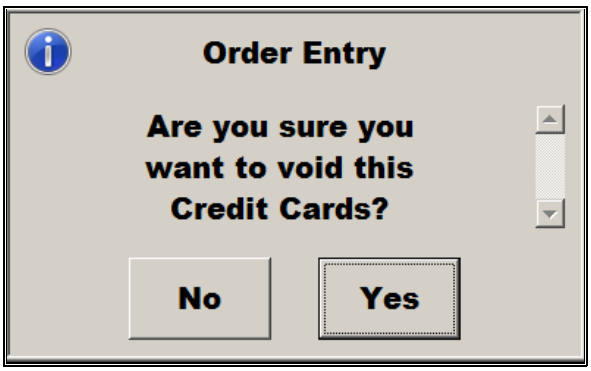
The normal mode of operation is to enter the tip provided by the patron and touch ENTER.

If there are multiple pre-auths to be finalized, the above screen will re-appear for each payment entered. NOTE the credit card type and last four digits of the credit card number appear at the top of the screen to assist the POS operator. The voucher signed by the patron also shows the card type and the last four digits of the card number.

A voucher with the amount pre-tip, the tip amount and the authorized total will print at the end of the sale.

Point of Sale Operation – Voiding A Pre-Auth

The preceding screen showed a VOID option. The VOID button will cause the terminal to prompt as follows:



Touching the No button will simply remove the prompt. Touching the Yes button will initiate a VOID operation and a VOID voucher will print, with no tip line.

If a pre-auth credit card payment is a partial payment, and a tip has already been entered, the payment may still be voided. Simply select the payment method from the displayed guest check, touch the CORRECT of VOID button and the payment, along with the associated tip entry, will be voided.

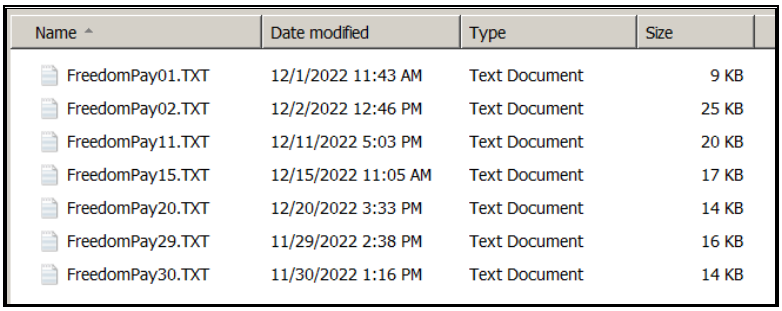
FreedomPay P@C Log Files

Comtrex Pay At Counter Log Files

The POS2100 will keep log files relating to FreedomPay operation on each individual POS terminal. The log files are located in the directory:

C:\Icom\POS2100\LogFiles\WS1\FreedomPay

Where WS1 is the terminal name. There is an individual text file for each day of the month. The information is overwritten therefore on a monthly basis.

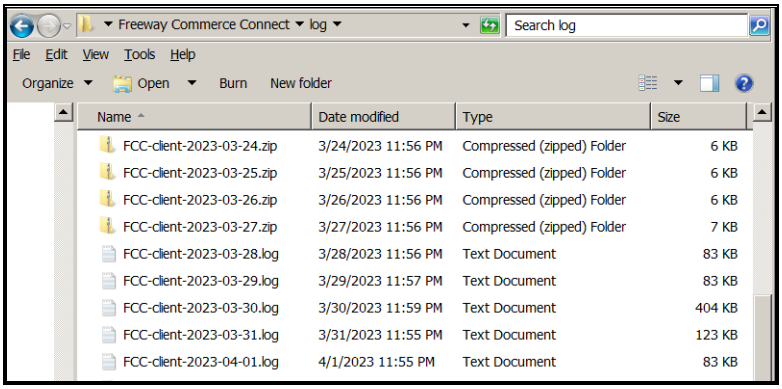


Name	Date modified	Type	Size
FreedomPay01.TXT	12/1/2022 11:43 AM	Text Document	9 KB
FreedomPay02.TXT	12/2/2022 12:46 PM	Text Document	25 KB
FreedomPay11.TXT	12/11/2022 5:03 PM	Text Document	20 KB
FreedomPay15.TXT	12/15/2022 11:05 AM	Text Document	17 KB
FreedomPay20.TXT	12/20/2022 3:33 PM	Text Document	14 KB
FreedomPay29.TXT	11/29/2022 2:38 PM	Text Document	16 KB
FreedomPay30.TXT	11/30/2022 1:16 PM	Text Document	14 KB

Freedom/Pay Pay At Counter Log Files

FreedomPay also maintains log files located in the directory:

C:\ProgramData\FreedomPay\Freeway Commerce Connect



Name	Date modified	Type	Size
FCC-client-2023-03-24.zip	3/24/2023 11:56 PM	Compressed (zipped) Folder	6 KB
FCC-client-2023-03-25.zip	3/25/2023 11:56 PM	Compressed (zipped) Folder	6 KB
FCC-client-2023-03-26.zip	3/26/2023 11:56 PM	Compressed (zipped) Folder	6 KB
FCC-client-2023-03-27.zip	3/27/2023 11:56 PM	Compressed (zipped) Folder	7 KB
FCC-client-2023-03-28.log	3/28/2023 11:56 PM	Text Document	83 KB
FCC-client-2023-03-29.log	3/29/2023 11:57 PM	Text Document	83 KB
FCC-client-2023-03-30.log	3/30/2023 11:59 PM	Text Document	404 KB
FCC-client-2023-03-31.log	3/31/2023 11:55 PM	Text Document	123 KB
FCC-client-2023-04-01.log	4/1/2023 11:55 PM	Text Document	83 KB

FreedomPay – Table Service (P@T)

Overview

This interface is exclusively for table service merchants. It uses remote handheld terminals from Ingenico, the Move/5000, to accept payment directly from the customer who provides a credit card to the server. The Move/5000 terminals are running as UPP.

The interface is custom and unique to FreedomPay. There is both a FreedomPay (FreedomPay Pay-At-TableService "Antonio") and a Comtrex service (FreedomPayInterfaceService) constantly running on the POS Server Terminal/PC. The payment process is initiated on the Ingenico terminal when the server enters a table number. The Comtrex FreedomPay P@T interface service receives the request and forwards the table number to the Comtrex service. The Comtrex service determines if there is a check(s) at the table and, if the check is not open on the system, forwards information to the Ingenico terminal using the FreedomPay P@T service as a “middleman”.

Payment information, credit card type and amount accepted are entered on the Ingenico until the server indicates entry is complete. The amount(s) is/are returned to the Comtrex FreedomPay P@T interface service (in an array if there have been multiple payments entered) which forwards information to the Comtrex service which places the payment information on the guest check to allow the POS2100 software to close the check if payment in full has been made.

No POS operator/server intervention is necessary in order to close a fully paid check. Since the point-of-sale is totally unaware of any credit card information, the interface is therefore out-of-scope for PCI compliance purposes.

In the P@T version, there is no credit card finalize button on the point of sale terminal. All the processing is accomplished by the Comtrex service, FreedomPayInterfaceService, itself. The POS application program is essentially unaware that payment is being made or that the guest check is being closed, since the service performs all these functions. The only tasks the POS software performs are locking and unlocking checks and moving the guest check from the table desktop to the closed check table in the database when it is paid in full.

Installation

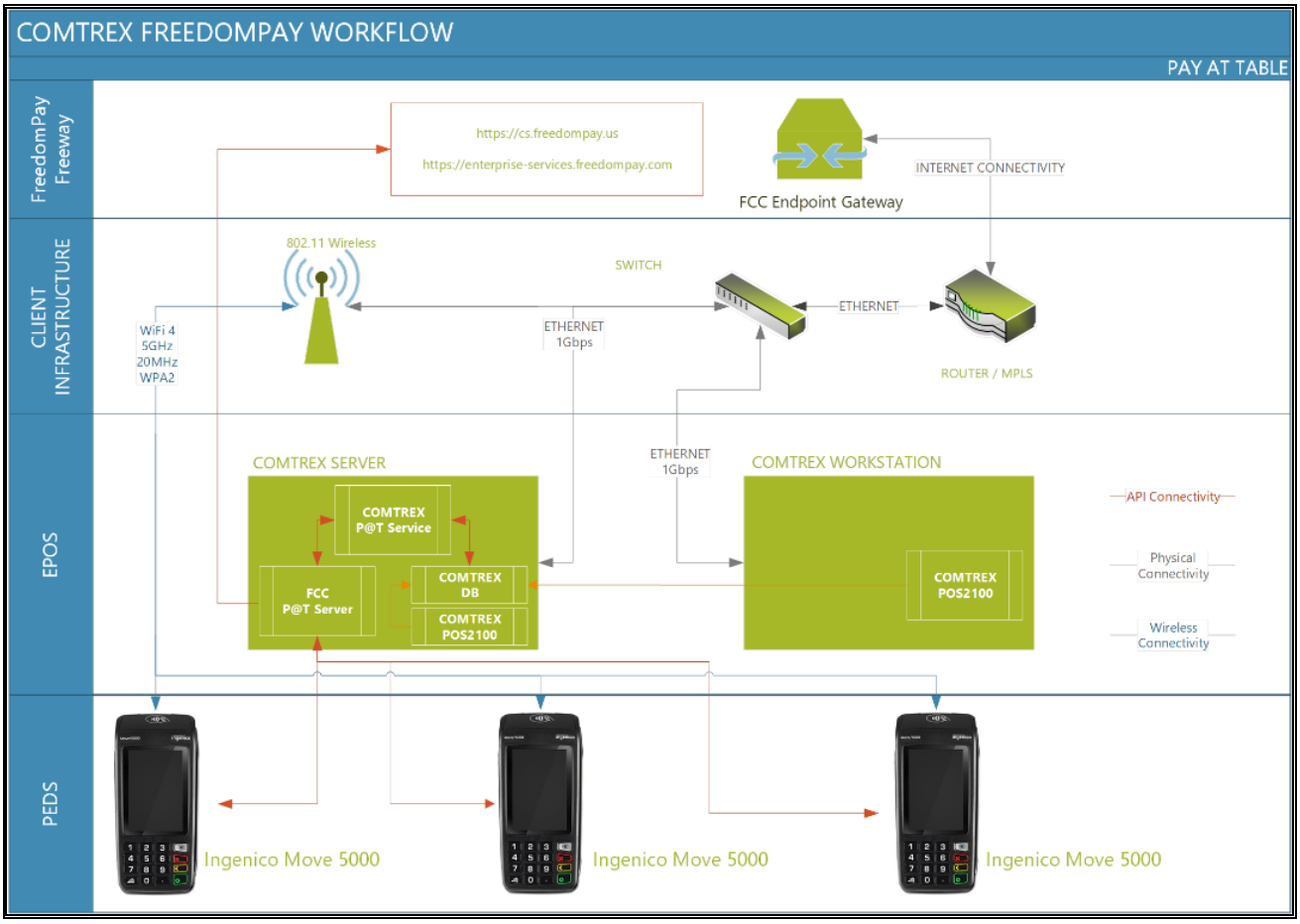
There are instructions, along with a link, on the web for Comtrex personnel to install the necessary software to enable the Comtrex FreedomPay P@T interface service integration. The two implementations, P@T and P@C, for FreedomPay are totally separate. There are no interdependencies and both may operate in the same location. The installation instructions for the P@T interface service may be found at: https://howitworks.comtrex.com/FreedomPay/ServiceInstallation.htm.

NOTE: The software is interacting with a service and the path G: \ is not valid for a service since the service is initiated prior to the path being established. Consequently, in Programming-PrinterConfiguration-TerminalPrintOptions on the Output tab, the path must be set to c:\icom\POS2100\Remote for Access installations.

Connections/Information Flow

The POS terminals are interconnected with a standard local area network. An Internet connection is required. The Ingenico terminals are on a local WiFi network for communication to the server running the FreedomPay service.

The following diagram, along with the communication narrative, explains the process.



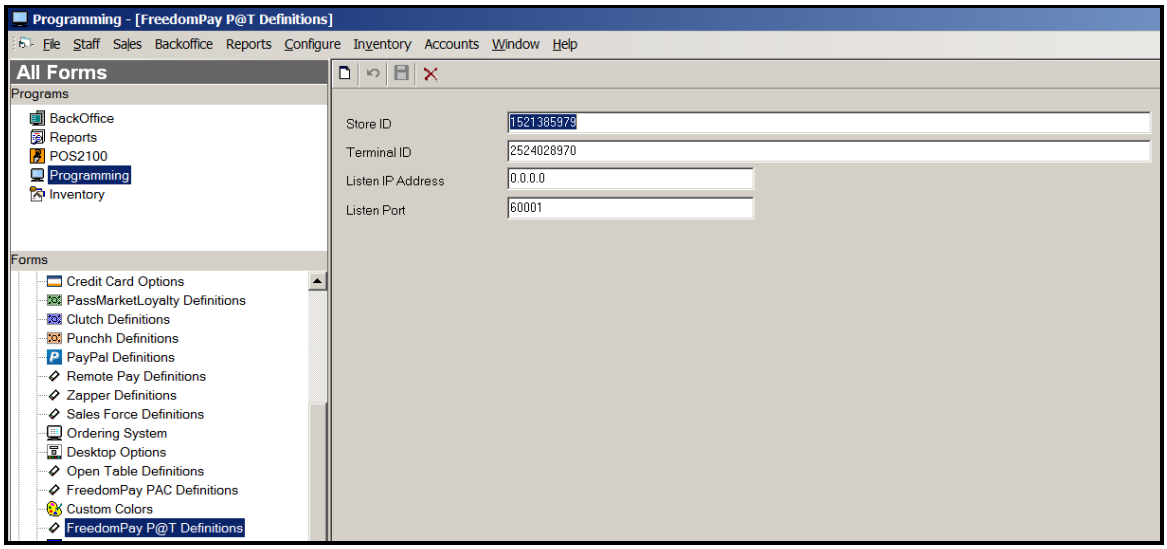
Pay at Table Information Flow Narrative

- The POS operator/server is prompted to “Sign in to begin”. Any number may be entered or you may simply press the green button to proceed.
- The POS operator/server enters a table number on the Ingenico Move/5000 terminal at the prompt “Select Table/Check”.
- If a check has been found as outlined below, the POS operator/server is prompted on whether or not to print a receipt with the prompt “Print Line Item Receipt?. A Yes prints a detailed receipt and a No moves forward to the payment screen
- Using the WiFi connection, the Move/5000 terminal communicates to the Comtrex FreedomPay P@T interface service with the entered value.
- The FreedomPay P@T service provides the entered value to the Comtrex Interface service.

- The Comtrex FreedomPay P@T interface service first determines if there is a check(s) at the table, then determines if the check is open on the POS system. If the check is open, the Comtrex interface service will determine if there is another check on the system. If the second check is not open, the check number and amount will be returned to the FreedomPay P@T service. If the second check is open, the process will continue searching for a possible third check. If all checks are open, or there is not a check at the table, the Comtrex interface service will indicate that there are no checks available for the entered table value and the Ingenico prompts “No Records Found”.
- When a non-open check is discovered, the amount due and check number are supplied to the Ingenico terminal. At this point the check is locked in the Comtrex POS system.
- The operator/server selects payment and may also enter a tip. The payment entry and authorization process does not involve the Comtrex POS system. All communication is handled between the Ingenico, the Comtrex FreedomPay P@T interface service and the cloud.
- When the payment process is complete, payment information (including the credit card type) will be returned to the Comtrex interface service through the Comtrex FreedomPay P@T interface service acting as a middleman.
- The next time a POS terminal enters the table entry screen, a check full paid by the Comtrex interface service will be moved to the closed check table.

BackOffice Programming

POS System Options – FreedomPay P@T Definitions



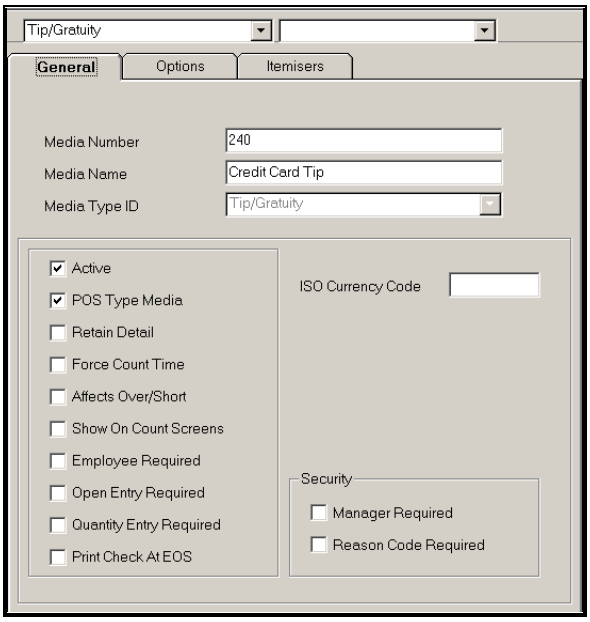
A new selection has been added under POS System Options for P@T with FreedomPay. These are the only entries relating to P@T operation. The StoreID and TerminalID are location entries and do not relate to the specific POS terminal.

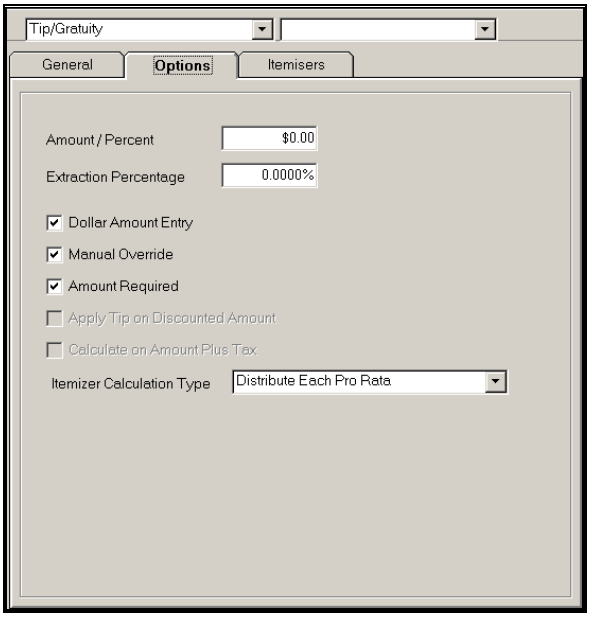
POS System Options – Credit Card Options – General

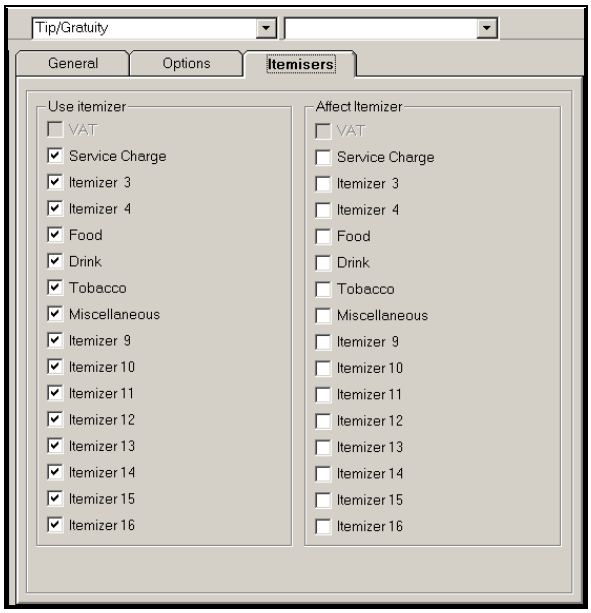
This selection is not used at all by the FreedomPay P@T. It is possible for the FreedomPay P@T implementation to coexist with the FreedomPay P@C application.

Media Definition Programming – Tip/Gratuity

A tip may be optionally entered by the Patron on the Move/5000 terminal. For proper balancing, a Tip/Gratuity media should be created which will be linked to all credit card types sent by FreedomPay.





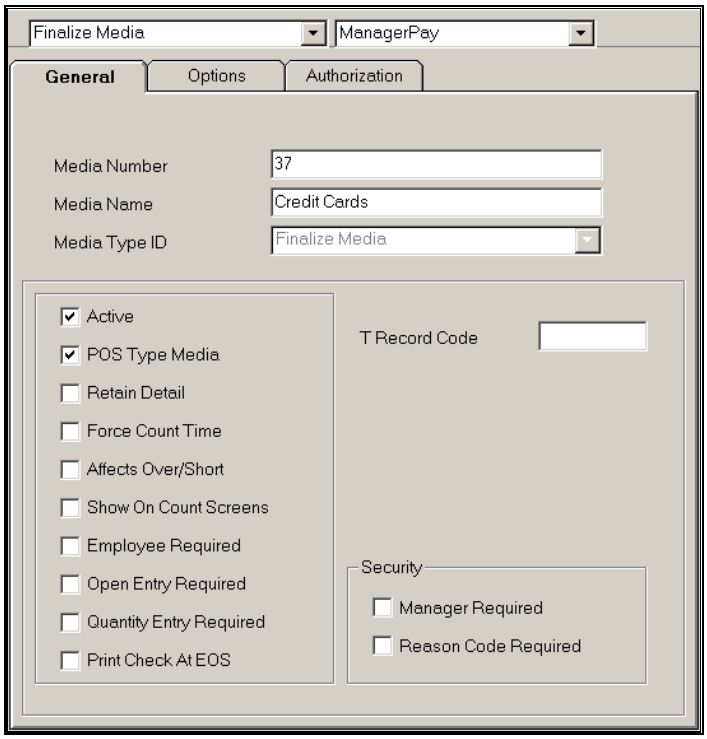


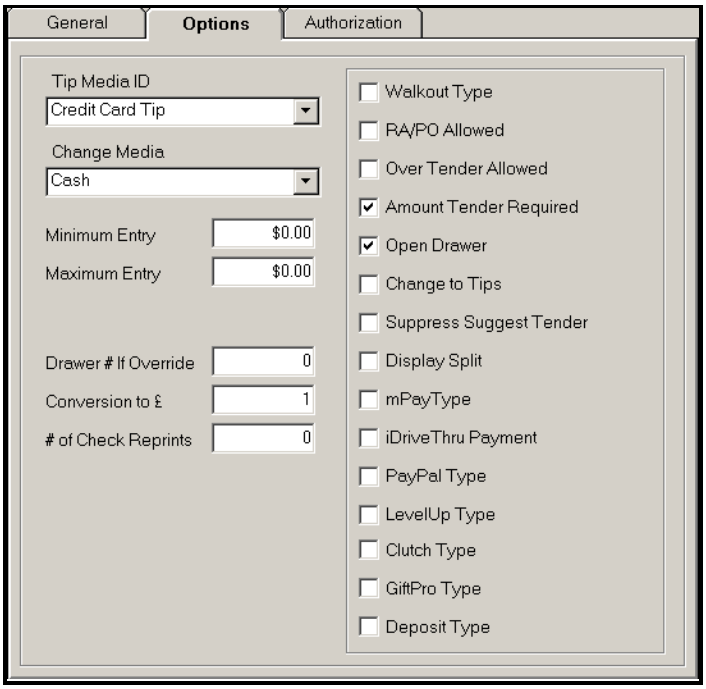
Media Definition Programming – Finalize Media – Credit Cards

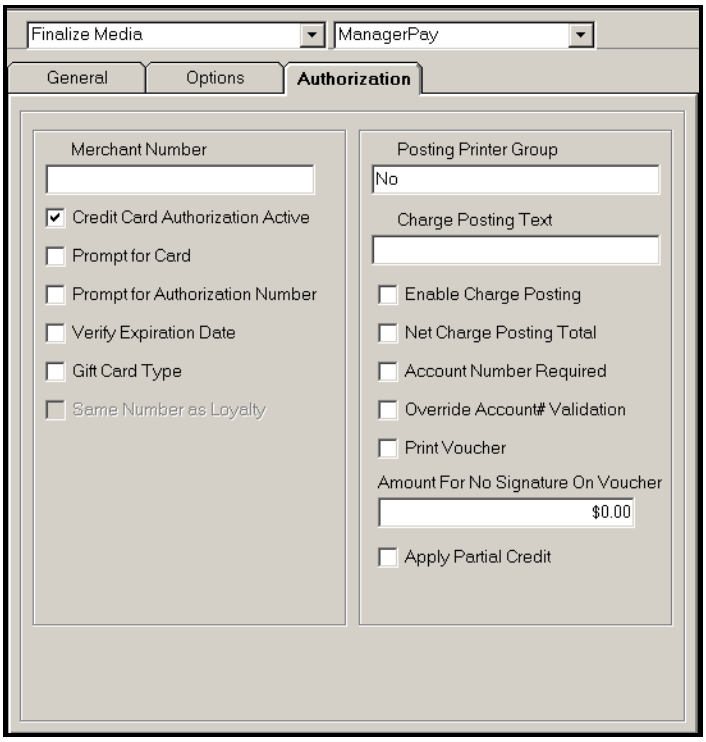
The POS can segregate up to eight (8) different credit card types, with the eighth being a "catch all" as either "Credit Cards" or "Other Credit Cards". Except for the Media Name, all credit card finalize media should be identically programmed.

It is imperative that the Finalize Media "Other Credit Cards" be created and properly linked, as shown in the section following this.

NOTE: The flag "Over Tender Allowed" should NOT be set.



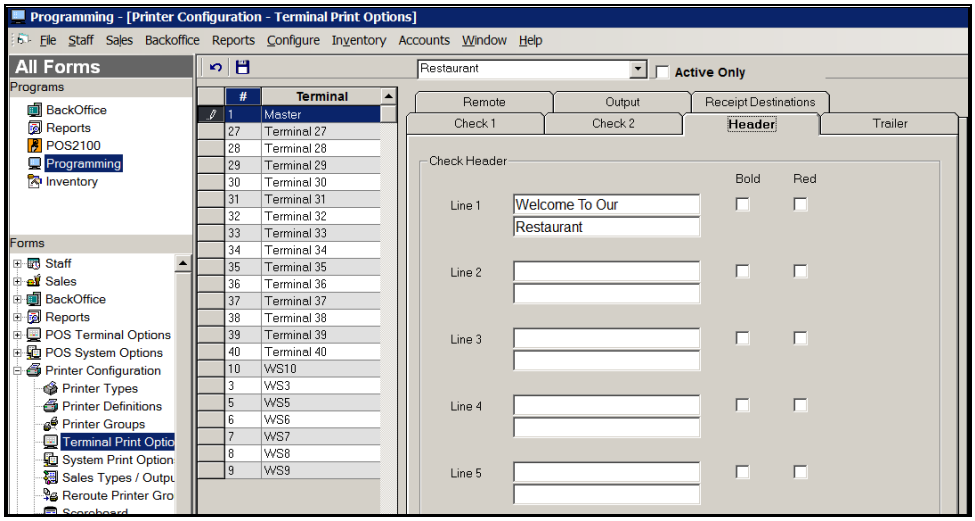




The “Print Voucher” flag should be left unchecked. The Move/5000 prints the EMV voucher. This flag pertains to a voucher printed by the POS terminal on its receipt printer. If Lane/3000 terminals are mixed in the location, the function of the flag is defined in the previous section.

Printer Configuration – Terminal Print Options

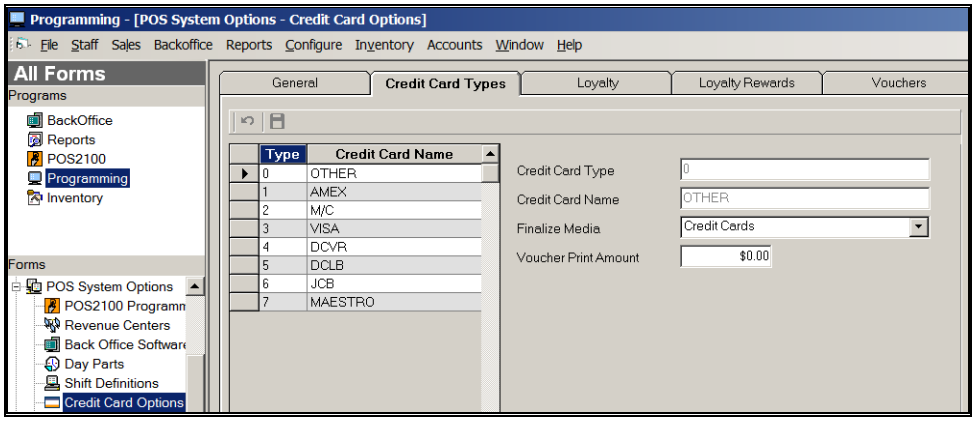
If the POS operator/server elects to print a receipt on the Move/5000 the receipt will include a header and trailer. The header and trailer are entered on the terminal (typically the Master) on which the Comtrex service (FreedomPayInterfaceService) is running.



The receipt printer on the Move/5000 is formatted in 40 columns. There is not an option to print bold or red, so those settings above are ignored.

POS System Options – Credit Card Options – Credit Card Types

The only Finalize Media which can be selected on the screen below are ones which have the flag “Credit Card Authorization Active” set as true. That is why it is important to follow the programming as outlined herein.



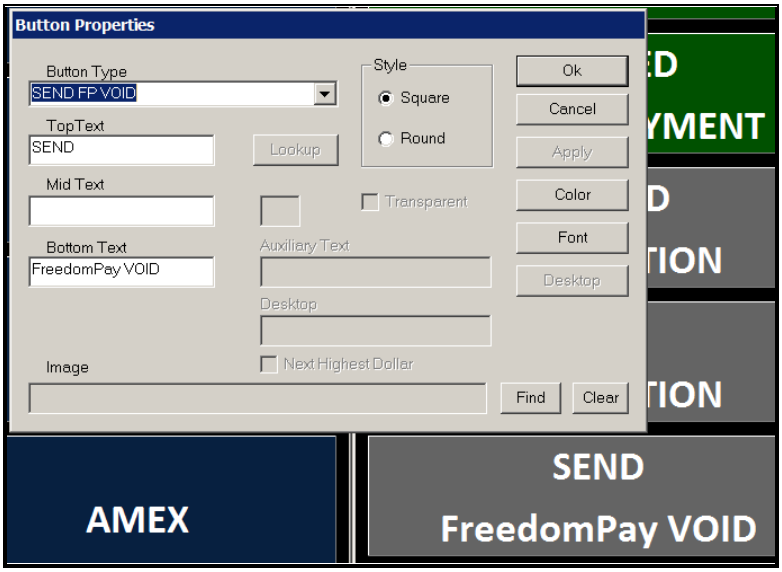
For each Credit Card listed on the left under “Credit Card Name”, select the appropriate Finalize Media. The Voucher Print Amount is not active with FreedomPay P@T. If the merchant accepts cards other than those listed, they will be associated with “Other Credit Cards”, shown above as simply “Credit Cards”.

POS Programming and Operation

The only POS Programming required is to add a Button Type SEND FP VOID to a payment desktop to send a refund/void transaction to the Comtrex FreedomPay P@T interface service .

Button Type – SEND FP VOID

This button is used after entering all items and amounts in a Void/Refund transaction which was initially paid using the Move/5000 terminal.



Ingenico Move/5000 - POS Interaction

Check Locking

After entering a number (not checked so enter any number) at the “Sign in to begin” screen on the Move/5000, the operator/server is presented with the Main Menu to either select a table or sign out. When a table is entered and a balance is returned to the Ingenico, the check is locked on the POS system. That prevents any entry on the guest check while is it being handled by the Ingenico. In normal operation, the operator/server will begin the payment process. When the payment process is complete, the amount paid will be returned to the POS system and the check will be unlocked.

There are three events which unlock the check on the POS system after the POS system has provided the Ingenico with a check and amount.

- Receiving payment amount(s)
- Selecting a different table number
- Signing out from the Main Menu

What does not unlock the check is canceling out (depressing the red button on the Ingenico) to return to the “Enter Table number” screen. If the wrong table number has been entered, but the operator/server is not immediately prepared to select a different table, it is imperative that sign out is selected.

Check Is Fully Paid Prompt

The FreedomPay service maintains a mirror image of the database and is aware of prior payments on a particular table. When the POS system returns an empty array to the Ingenico, the FreedomPay service will

show the last payment made at that table with the header “Check is fully paid”. This can be a confusing prompt.

An issue with the “Check is fully paid” prompt is that when the check total is displayed, it does not include the entered tip. Consequently, it is not the authorized amount.

If there is actually no current check at the table, but there has been a check at the table during this sales day, the prompt and amount will display.

If there is currently a check at the table, but the check is open on the POS system at the time, the prompt and amount will display.

If there is currently a check at the table which has been partially paid, and the check with the remaining balance is open on the POS system, the prompt and amount for the partial payment will display.

Multiple Checks At Table

Unlike other pay at table implementations, the current API from FreedomPay does not allow the POS system to return a list of checks at the table. This facility would allow the operator/server to select the correct check.

As a temporary “work around” the POS system will respond to a table number entry with a leading zero differently. As an example, assume there are three checks open at table 34. None of the checks are currently open on the POS system. If the operator/server enters 34, the lowest numbered check number (the one opened on the POS system first) will be returned to the Ingenico.

If the operator/server enters 0134, the same check will be returned. The leading “01” informs the POS system that the first check should be returned. If the operator/server enters 0234, then the check opened second (the one with the second lowest check number) will be returned.

As an additional note, again with three checks at table 34, if the operator/server enters 34 and the lowest numbered guest check is open on the POS system, the POS system will return the next lowest check number that is not open on the system. However, if the operator/server enters 0134, the POS system will return an empty array. Unfortunately, in the case of the first check being currently open, the Ingenico will display “Check fully paid” and show the last payment entered at table 34, exclusive of any entered tip.

Refund/Void of a Transaction Paid on the Move/5000

Overview

There is a process required to Refund or Void a transaction initially paid on the Move/5000. In the normal flow of operation, when the table number is entered on the Move/5000, the guest check is not open on the POS system and is locked when the check is requested by the Move/5000. When the Refund/Void process is begun on the POS2100, the check cannot be sent. The refund/void guest check must remain open until the process is complete and the total payment amount is entered/received. This, then, requires special processing by the POS2100.

The refund/void process is begun on the POS2100 in the normal manner, either by depressing the REFUND TRANSACTIO N or VOID TRANSACTION button or by selecting a closed check from the Closed Check screen. The process of interacting with the Move/5000 is begun when the SEND FP VOID button is depressed. At this point the POS terminal is locked until the process is complete or a lengthy timeout occurs.

The POS terminal prompts the operator, as discussed later in this section, and begins a timeout operation. The POS terminal then passes information to the Comtrex FreedomPay P@T interface service. At this point the Interface service stores the information provided by the POS terminal. The service is waiting on the receipt of the entry on the Move/5000 terminal of a unique number associated with a refund/void operation on the Move/5000.

When the unique “table number” is entered on the Move/5000 and then passed to the Comtrex P@T Interface service, the interface service provides the information which it has been retaining to the Move/5000 with the indication that this is a negative transaction. The payment information is passed from the Move/5000 to the

P@T Interface service, which in turn provides the information to the POS terminal which has been locked during this time waiting for the ability to finalize the refund/void operation.

Select Item(s) Void or Prior Sales Day's Bill Void

This process is begun by depressing the REFUND TRANSACTIO N or VOID TRANSACTION button. As soon as the button is depressed, a prompt will appear in the entry screen to indicate to the POS Operator that a refund or void transaction is in process.

The items being voided are entered, or an amount may be entered into an open entry button. As items are entered, the word "Overring" will precede the item description. As with any transaction, an entered item may can be corrected and if all items are removed, the transaction can be canceled.

The process of interacting with the Move/5000 to issue the refund/void to a credit card begins when the button SEND FP VOID is depressed. This is outlined in a following section, "Refund/Void Process Detail".

Void Entire Bill – Current SalesDay

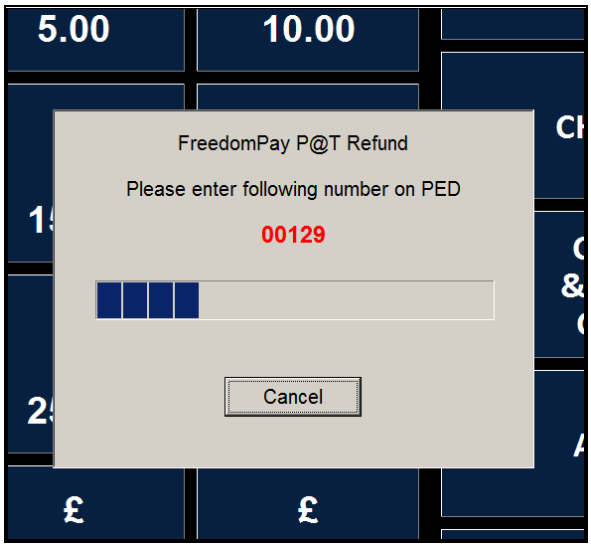
The void or refund of an entire current Sales Day's bill can be initiated from the Closed Check screen in the standard manner. A POS Operator with Manager authorization accesses the Closed Check screen and selects a bill with a payment amount entered on the Move/5000. The standard prompt, shown below, will appear.

Once Yes is selected, the POS terminal will display the pre-programmed Sales Desktop. At this point, the only options are as shown, to refund/void the transaction or modify payment. If the BEGIN MODIFY PAYMENT button is selected, no payments made on the Move/5000 can be removed, although any other payment amounts can be removed, then an alternate payment method selected. This process is completed when the END MODIFY PAYMENT button is depressed.

To refund/void the entire bill, the POS Operator depresses either a VOID TRANACTION of REFUND TRANSACTION button. Either of these two buttons will begin the process of interacting with the Move/5000 to issue the refund/void to a credit card. There is no need, nor the ability, to depress the SEND FP VOID button.

Refund/Void Process Detail

The process of refunding/voiding a transaction finalized on the Move/5000 terminal begins either with the SEND FP VOID button after entering all items and/or amounts to be refunded/voided or with depressing the VOID TRANSACTION or REFUND TRANSACTION button after selecting a closed check. At this point, the POS terminal prompts as follows.



The two leading zeroes are not standard table numbers and are used by the Comtrex FreedomPay P@T interface service to identify a special request by the Move/5000 to provide information related to a Void/Refund transaction. The display above will remain on the POS screen until either payment information is received from the Comtrex P@T Interface service or a timeout has occurred.

In normal operation, the operator will enter the “table number” beginning with the two zeroes on the Move/5000 and be provided with the check information. The operator may or may not be prompted with “Print Line Item Receipt?” to create a check for the patron. As with standard operation, the Move/5000 prompts for the insertion, swipe or tap of a credit card. When the transaction is approved or declined, the information is provided to the Comtrex FreedomPay P@T interface service and then to the POS terminal. For an approved transaction, the POS terminal will prompt as follows.

If there are multiple credit card payments on the selected bill each amount will be sent separately to the Move/5000. The POS terminal display will continue to display the table number beginning with the “00”. The Move/5000 operator must re-enter the table number for each amount sent by the POS terminal since each amount initially paid must be separately entered as a refund.

Timeout Setting for Refund/Void

Unless there are unique and special circumstances in a particular location, it is recommended that the timeout setting not be changed.

The settings are included in the file c:\icom\POS2100\POS2100.ini

The standard setting is for five minutes as:

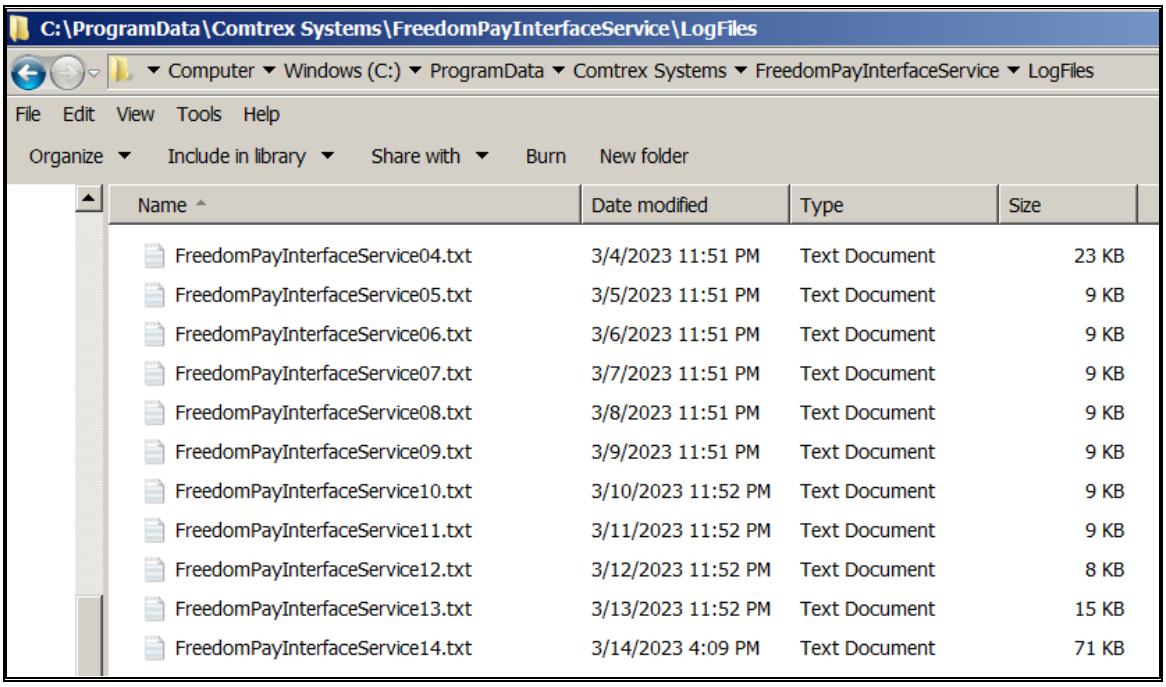
FreedomPayPATRefundTimeoutMinutes = 5

FreedomPay P@T Log Files

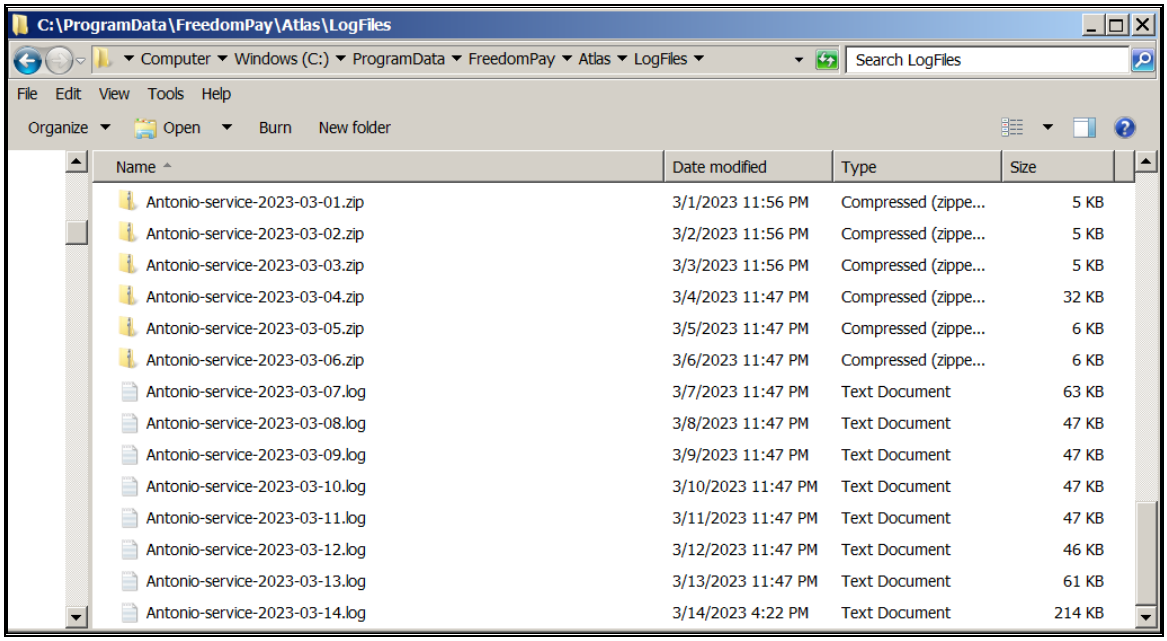
Comtrex Interface Service Logs

The POS2100 will keep log files relating to FreedomPay P@T operation on the POS server, where the Comtrex interface service is running. The log files are day of the month encoded and are located in the directory:

C:\ProgramData\Comtrex Systems\FreedomPayInterfaceService\LogFiles



FreedomPay Pay At Table Service Logs

The FreedomPay service will keep log files relating to its operation on the POS server, where the FreedomPay service is running. The log files are day of the month encoded and are located in the directory:

C:\ProgramData\FreedomPay\Atlas\LogFiles