



LEARNER GUIDE

TSYS Express – FEO

Terminal Hierarchy

Module 3

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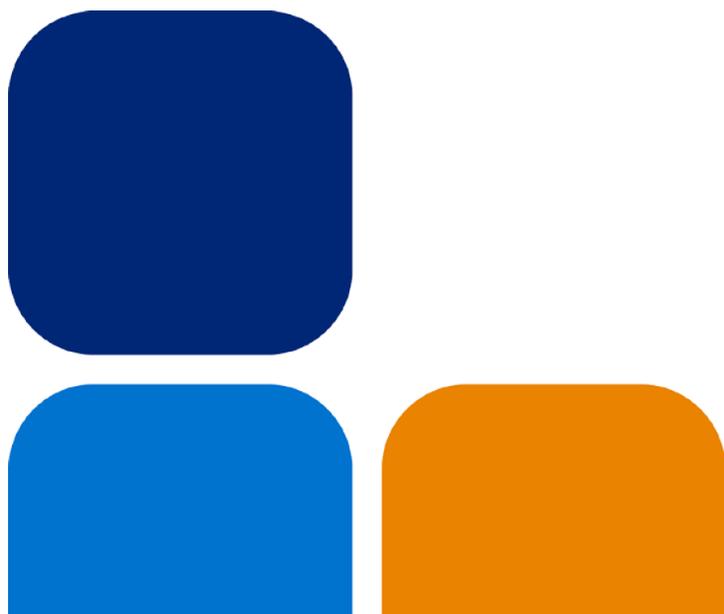
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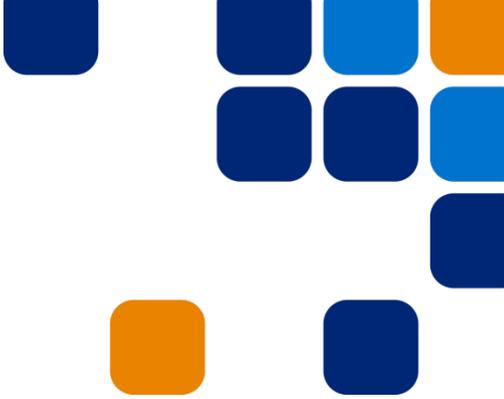


Table of Contents

Module Introduction.....	5
Front-End Terminal Hierarchy.....	6
Components of a Terminal Hierarchy	6
Terminal Components and Build Process	9
Terminal Software	9
Terminal Hardware.....	9
Terminal File-Build Process.....	10
Create a Standard Terminal File.....	12
Standard Terminal File Assumptions.....	12
Express Pages Used for Standard Terminal File Build	12
TSYS Express Homepage.....	13
Merchant Summary Page.....	14
Terminal Setup Page.....	15
Navigational Features	16
Steps to Complete the Terminal Setup Page.....	18
Terminal Details Page	21
Navigational Features	22
Steps to Complete the Terminal Details Page	23
Card Range Select Page and Card Range Setup Page	25
Host Select Page and Host Setup Page	29
Create a Secondary System Terminal File	33
Secondary System File Build.....	33
Comments for Secondary System File Build	34
Merchant Summary – Secondary System Build Status Page	34
Terminal-Specific File Build	37
Hypercom/Equinox Terminal Specific Pages.....	37
Hypercom/Equinox Setup Page	38
Hypercom/Equinox Card Settings Page	40

Hypercom/Equinox Host Settings Page.....	41
Terminal Details Page – Advanced Terminal Settings Section	42
Module Summary	44



Module Introduction

Your credit card and the terminal used to swipe your card are the most commonly recognizable items involved in the process of electronic payment transactions. In this module, you will learn the detailed process involved in setting up a terminal to authorize electronic payments, store transaction data, and facilitate electronic deposits involved in bank card processing.

MODULE OBJECTIVES

Upon completion of this module, you will be able to:

- Explain the front-end terminal hierarchy
- Understand the hardware and software components of a terminal and describe the terminal file build process
- Perform the following in the Express system:
 - A standard terminal file build
 - A secondary system terminal file build
 - A terminal specific file build



LESSON 01

Front-End Terminal Hierarchy

The first phase of payment card processing is Authorization and Capture. Authorization refers to the electronic process for approving or denying purchases. Capture is the recording and storing of the transactional data. Terminals are devices used in the Authorization and Capture process.

The three main functions of a terminal are:

- Facilitate the authorization process
- Capture (store) the transactional data
- Transmit transaction data for electronic deposit

The unit used to swipe your payment card at the grocery store is an example of a terminal. POS (Point of Sale) Device is the generic name for all electronic payment devices, including terminals. Examples of POS devices that can be used for electronic payment transactions are terminals, touch screen monitors connected to a computer, and a website. For the purposes of this training we will use the terms terminal and POS device interchangeably.

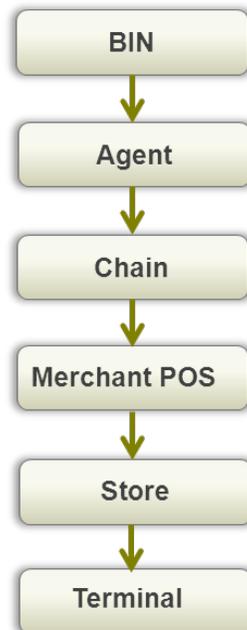
Components of a Terminal Hierarchy

Terminal data is organized and accessed by the Express system using the front-end terminal hierarchy model. The front-end terminal hierarchy is an electronic address used to identify a terminal.

The front-end terminal hierarchy has six components:

- BIN
- Agent
- Chain
- Merchant POS
- Store
- Terminal

In the Express system you will see the terminal hierarchy referred to by the first letter of each component, BACMST (Bin, Agent, Chain, Merchant POS, Store, and Terminal).



Bank Identification Number (BIN)

The Bank Identification Number (BIN) is a six-digit number which is assigned by Visa. A bank is identified by the BIN number.

Agent and Chain Numbers

The Agent and Chain numbers are six-digit numbers which are determined by the user/acquiring bank. The Agent and Chain numbers are optional numbers used for reporting purposes. Define categories or groups for analysis by using Agent and Chain numbers.

The Agent and Chain numbers can correspond to the Group and Association levels of the back-end merchant hierarchy. The Agent and Chain numbers can directly link to the Group and Association levels, or can be used as separate reporting features such as using the Agent number to represent a smaller bank or ISO (Independent Sales Organization) and the Chain number to identify a corporation.

Merchant POS Identification Number (MID)

The Merchant POS Identification Number is referred to as the POS MID. The Merchant number is a unique number which identifies the merchant. The acquiring bank assigns the 12-digit POS Merchant number.

Store Number

The four-digit store number is used to identify the store where the terminal is assigned. The store number can be used to identify a store or a department within a store or business. The Store number can also be used to identify the individual stores of a multi-store merchant.

Terminal Identification Number

The Terminal Identification Number is a four-digit number assigned to a specific terminal or POS device.



LESSON 02

Terminal Components and Build Process

POS devices/terminals are made up of two separate components:

- Terminal Software
- Terminal Hardware

Terminal Software

The software application on the terminal provides the functional directions and rules which allow the terminal to operate. A terminal model can use more than one type of software. The type of software selected will be based on the functionality needs of the merchant using the terminal. Terminal software is typically divided into the following industry types: retail, restaurant, lodging, and cash advance. There are two types of TSYS support available for terminal software.

Levels of TSYS Support for Terminal Software

- **Class A** – TSYS supported software
- **Class B** – Third party software that is TSYS certified but not supported by TSYS. Class B is known as Stage Only.

Terminal Hardware

The actual unit used to swipe a card or enter the data is the hardware component. The number of keys on the terminal, the display screen, and the amount of memory contained in the device are all terminal hardware features.

The memory on the terminal allows it to store electronic purchase data and the software rules, which enables the terminal to operate and function. Batch capacity is the term used to describe the amount of transactions a terminal can store. For example the batch capacity for a terminal may be 400 transactions. Transmitting or sending one or more transactions to the storage database is referred to as a batch, as well as batching or batching out.



Terminal File-Build Process

“Building a file” is the phrase used to describe entering all of the information needed to activate a new terminal in the Express system. The Express terminal file build is a six-stage process:

1. Locate the merchant
2. Introduce the terminal to the database
3. Create terminal operating instructions
4. Assign the allowable payment cards
5. Set authorization communication
6. Board the terminal

Locate the Merchant

Stage one of the terminal file build process is to find the intended merchant for the new terminal. Based on the hierarchal structure of Express, merchants are assigned terminals.

Introduce the Terminal to the Database

Stage two of the terminal file build process is to introduce the new terminal to the front-end terminal hierarchy database. An address is created in the database to identify the new terminal within the system. The new terminal's address within the database is called the V Number.

Create Terminal Operating Instructions

Stage three of the terminal file build process is to create the operating instructions for the terminal. Define the terminal's functionality by specifically setting up what the terminal can and cannot do.

Assign the Allowable Payment Cards

Stage four of the terminal file build process is to assign the payment cards to the new terminal. A terminal will be assigned to accept debit cards as well as specific credit card brands such as Visa, Master Card, Discover, and American Express.

Set Authorization Communication

Stage five of the terminal file build process is to set the authorization communication. The terminal facilitates the card authorization process providing an approval or denial of the transaction. A terminal will send an authorization request to the cardholder's issuing bank. A host is the processor or switch the terminal uses to communicate with the card issuing bank.

Board the Terminal

Stage six of the terminal file build process is to board the terminal. The new terminal file information created in Express will be downloaded on to the terminal and boarded or placed into the front-end terminal hierarchy database.



LESSON EXERCISE

Answer the following questions about the terminal components and terminal file build process.

1. Explain “Stage Only”.
2. Batch Capacity is _____.
3. “Batching Out” is a term used to describe what process?
4. Define Class A.
5. What is a V Number and in what stage of the file build process is the V number created?

LESSON SUMMARY

To review, terminals consist of both hardware and software. In this lesson, you explored the high-level method of enabling a terminal to authorize bank card transactions, called the terminal file build process.



LESSON 03

Create a Standard Terminal File

There are over 100 POS devices to choose from as well as multiple software applications for those terminals. However, there is a standard process to build the most common terminals/POS devices.

Standard Terminal File Assumptions

Before you begin creating any standard terminal file in Express, you will have already gathered the information needed about the merchant and terminal. We will use the following assumptions to build our standard terminal file in this module:

- Merchant Name and Number
- Terminal Model Number: Ingenico
- Software Support Level: Class A – Full Support
- Card Type Acceptance: Credit and Debit
- Card Brand Acceptance: Visa, Master Card, American Express, Discover, and Debit
- Multi-Merchant Terminal: No
- Industry: Retail, gratuity is not added on to the receipt

Express Pages Used for Standard Terminal File Build

The Express pages used to build a standard terminal file are:

- TSYS Express Homepage
- Merchant Summary page
- Terminal Setup page
- Terminal Details page
- Card Range Select and Card Range Setup pages
- Host Select and Host Setup pages



TSYS Express Homepage

The TSYS Express Homepage is the page that displays when you log on to Express. You can begin building a standard terminal file from this page. First, you will need to locate the merchant that will be assigned the new terminal.

TSYS Express Homepage

Portal | Main | Help | Profile | Log Off

e-CONNECTIONS

TSYS ExpressSM Homepage

Last Logon:

Admin

Locate a merchant file.

Search Criteria

Merchant Number: BIN:

Agent: Chain:

Store: Terminal Number:

DBA Name: V Number:

Create New Entity

New Entity Type: AMEX Merchant Regis

Quick Links

Report Generator

Work In Progress

Third Party Status

Other Searches

Advanced Search

To locate a merchant:

1. From the Search Criteria section, enter the Merchant ID number in the **Merchant Number** field.
2. Click the **Search** button. The Merchant Summary page for that merchant displays.



Merchant Summary Page

The Merchant Summary page is the main page for the merchant record. You can initiate the terminal setup from this page.

Merchant Summary Page

The screenshot shows the 'e-Connections' Merchant Summary page. At the top, there is a navigation bar with 'Portal', 'Main', 'Help', 'Profile', and 'Log Off'. Below this, the page title 'Merchant Summary' is centered, with 'Last Logon:' to its right. A menu bar contains 'FE Merchant', 'Terminal', and 'Admin'. A callout box points to the 'Terminal' menu with the text 'New Terminal Setup option'. Below the menu, the merchant's record status is 'Submitted'. Key details include: Merchant Number: 0000000000, Source: O-Online, and Merchant Type: FEO. A 'Merchant Details' table is also visible.

Merchant Details	
BIN:	000000
POS Merchant ID:	000000000000
Industry SE:	0000000000
Seller ID:	000000
Discover:	0000000000000000
PayPal Ind:	Y
JCB:	
JCB Processing:	Y
Merchant Status:	O-Open
Last Maintained:	
MCC/SIC:	
DBA Name:	
Owner Name:	
DBA Address:	
DBA City / State / Country:	
DBA Postal Code:	
Phone:	
Sales Code:	

To continue with the terminal setup:

1. From the Merchant Summary page, select **New Terminal Setup** from the **Terminal** menu.
2. The Terminal Setup page displays.



Terminal Setup Page

The purpose of the Terminal Setup page is to introduce the terminal to the database and identify the base characteristics of the terminal. You can also define the terminal's front-end hierarchy and generate a V Number for a terminal on the Terminal Setup page.

Terminal Setup Page

Connections Terminal Setup

Portal | Main | Help | Profile | Log Off

Last Logon:

FE Merchant | Terminal | Admin

Terminal Header

DBA Name: TEST FE
 POS Merchant Id: 000000000000 BIN: 000000 Agent: 000000 Chain: 000000 Store: Terminal: V Number:

Terminal Summary

Request ID: 0 Request Status: Open Received: Date and Time of Last Download: Not Available
 Merchant Type: FED Request Age: 0 Entered By: Last Software Downloaded: Not Available
 Merchant Number: 0000000000 Profile Received Via: E - ELECTRONIC MAIL ORDER Client Does Secondary Build:
 BIN Contact: BIN Phone:

Inquiry

Inquiry Code: B 05 Inquiry Code Lookup Type: B - BANK Code: 05 - NEW INSTALLATION REQUEST
 Description: NEW INSTALLATION REQUEST

Hierarchy

BIN: 000000 Stores: V Numbers: Get V Number
 Agent: 000000 Terminal: Master V Number:
 Chain: 000000 MCF Numbers: Risk:
 POS Merchant ID: 000000000000 MVV:

Request Contact: CONTACT NAME Request Contact Email:
 Request Contact Phone: Request Contact Fax:

Terminal Information

Host Capture Participant: SSL Participant: PRR MCC Participant: Attachment Code: - Please Choose... Alt. Build Type:
 Service Level: - Please Choose... Project #: Alt. Build Description:
 Tokenization: Token Zone Name: - Please Choose... Encryption Vendor: - Please Choose... DialPay Passcode:
 Copy An Existing Terminal? Copy From V Number: Copy Copy To V Number:

HW/SW Information

Processor: Manufacturer: Track Type: Retain Current Values:
 Model: Software:
 Accept AMEX: Accept Discover: Accept JCB: Accept ATM:
 Industry SE: Accept PayPal: JCB ID: Disc/PayPal ID: JCB Processing:

Store Description Information

AMEX SE	MCC	Format	Name/Address	City	State	Postal Code	Phone
*	5199						

Merchant Information

Merchant Name: City: DST: Contact:
 Merchant Address: State/Province: Currency: 840 Phone:
 Postal Code: Country: US Time Zone Diff: 107 Email Address:
 Daily Auth Count: 0 Fax Number:
 MCC: 5199 5199 20 AMEX CPC II NON-DURABLE GOODS, NOT ELSEWHERE CLASSIFIED
 Terminal Support Comments:

Dial Settings

Access Code	Phone	Description
Customer Service:		
EDC Primary:		PRM EDC WATS
EDC Secondary:		SEC EDC WATS
Download:		

Terminal Status

Blocked: From: Profile Completed: Close Profile:
 To: Date: Date: Date:
 Terminal Setup Details
 Resolution Code: INSTALLATION COMPLETED
 Closed By: Date Closed:
 Exceptions? : Exceptions Notes

Cancel Save Next



Navigational Features

The Terminal Setup page was designed to provide an intuitive navigational flow to the terminal file build process. The Terminal Setup page has the following navigational features:

1. Smart Navigation
2. Collapse/Expand Sections
3. Quick Links

Smart Navigation

The Smart Navigation feature on the Terminal Setup page will direct the pages displayed as a terminal file is being created. After the completion of the Terminal Setup page, the terminal type of the file will determine the page displayed, for example Class A, Class B/Stage Only, or Secondary System.

Smart Navigation Page Display Order

Type of Terminal File	Page Display Order
Class A	The Terminal Details page will display.
Class B/Stage Only	The Profile Build page or Card Range page will display based on the type of hardware and software being used. The Terminal Details page will not display for this terminal file type.
Secondary System Build* *The Secondary System terminal build file process will be discussed later in this training.	The Profile build page will display and then the Terminal Details page.

In this lesson, Creating a Standard Terminal File (Class A), we will explore the Terminal Details page. The Profile Build page will be discussed in another lesson.



Collapse and Expand Sections

The Terminal Setup page allows the user to open (expand) and close (collapse) the sections of the page. The sections will display Collapse when the section is open or Expand when the section is closed. Perform the Collapse/Expand function by clicking the title bar on the desired section.

Terminal Setup Page

The screenshot shows the 'Terminal Setup' page with the following sections and their respective Collapse/Expand buttons:

- Terminal Header:** Collapse
- Terminal Summary:** Expand
- Inquiry:** Collapse
- Hierarchy:** Expand
- Terminal Information:** Expand
- Merchant Information:** Expand
- Dial Settings:** Collapse
- Terminal Status:** Collapse

A callout box labeled 'Collapse or Expand' points to the 'Collapse' button of the 'Terminal Status' section.

Quick Links Menu

The **Quick Links** menu is located on the Terminal Setup page. The **Quick Links** menu provides a list of terminal-related pages, allowing you to open a link to the desired page. The Quick Links menu is available from any of the terminal file build pages in Express.

Terminal Setup Page

The screenshot shows the 'Terminal Setup' page with the 'Quick Links menu' open. The menu items are:

- Terminal Quick Links
- Terminal Setup - New
- Terminal Setup
- Terminal Details
- Store Terminals
- Front-End Merchant Information
- Store Descriptor Information
- Card Range Select
- Host Select
- Terminal Profile Build
- Hypercom Setup
- Convert Terminal Hierarchy
- Notes
- POS Partner Parent Assignment
- POS Partner Shipment Information
- Terminal Deployment

A callout box labeled 'Quick Links menu' points to the menu.



Steps to Complete the Terminal Setup Page

To complete the Terminal Setup page, enter information into the various sections. The Terminal Setup page contains the following sections:

- Terminal Header
- Terminal Summary
- Inquiry
- Hierarchy
- Terminal Information
- HWSW Information
- Merchant information
- Dial Settings
- Terminal Status

Inquiry Section

First, review the Inquiry section to confirm it is a new install request:

- **Inquiry Code** – B 05
- **Description** – New Installation Request

Hierarchy Section

Use the Tab key on the keyboard to move between fields and enter the field information:

- **Bin**
- **Agent**
- **Chain**
- **POS Merchant ID**
- **Store**
- **Terminal**
- **Get V Number:** Click **Get V Number** to generate the V number. The V number is the address assigned to the new terminal for the database.
- **Request Contact:** Enter your name as the person creating the file.
- **Request Contact Phone:** Enter your phone number as the person creating the file.



Terminal Information Section

The information entered into the Terminal Information section will determine what will display on the Terminal Details page. Enter information for the following fields:

- **Host Capture Participation:** Select this field if the terminal file is a host capture setup. Enabling this field will display additional options on the Terminal Details page.
- **Attachment Code:** This field identifies the voice authorization center used by the merchant. Select one of the following:
 - **IT** = DialPay Voice Approvals/Authorization Only
 - **IV** = DialPay Transaction Data Capture
 - **All other drop-down options** = Non-DialPay Authorization Centers
- **Service Level:** Select the service level for the terminal. **RAO – OLA Full DLL** Install will identify the terminal software as Class A.
- **Copy An Existing Terminal?** This field allows you to copy the terminal information from an existing merchant's terminal. Select the checkbox, enter the V number you wish to copy in the **Copy From V Number** field, and then click **Copy**.

HWSW Information Section

The model and other hardware and software identifications used by the terminal are entered in the HWSW Information section. The information entered into this section will influence the fields displayed on the Terminal Details page. Enter the predetermined information into the following fields:

- **Processor**
- **Manufacturer**
- **Model**
- **Track Type**
- **Option 1** = Credit Card Number, Expiration Date, and Card Holder Name
- **Option 2** = Credit Card Number and Expiration Date
- **Software**
- **Retain Current Values**

The next part of the Hardware/Software Information Section is used to enter the type of cards accepted by the terminal. The Merchant Product Setup page may impact the options displayed in this area. Complete the card information fields as needed:

- **Accept AMEX**
- **AMEX SE** or **Industry SE:** AMEX SE displays for merchants participating in the American Express ESA program, Industry SE displays for merchants participating in the American Express OptBlueSM program.
- **Accept Discover**
- **Discover ID**
- **Accept JCB**
- **JCB ID**
- **JCB Processing**
- **Accept ATM**



Store Descriptor Section

The Store Descriptor Section will display when the merchant already has other terminals built in the system. This section only displays when you are adding a new terminal for a merchant with pre-existing terminals.

Terminal Merchant information Section

The merchant information contained in this section will pre-populate from the Merchant Summary page and the Store Descriptor section on the Terminal Setup page. Review the fields in this section for accuracy and make any needed corrections.

Dial Settings Section

Information on the Terminal Setup page will default from the data entered into the HWSW Information section, Terminal Setup page. Review the information in this section and make any edits as needed.

To continue to the next page, click **Next** and the Terminal Details page displays.



Terminal Details Page

The Terminal Details page contains the specific data and instructions for terminal operation. This page will establish what a terminal can and cannot do.

Terminal Details Page

The screenshot displays the 'Terminal Details' configuration page. Key sections include:

- Terminal Header:** Fields for USA Name, POS Merchant Id, BIN, Agent, Chain, Store, Terminal, and V Number.
- Amex:** Amex DBA Name and Description.
- Terminal Information:** Serial Number, D/C Current Batch Number, Attachment Code, MEF Location Code, D/C Dial Maximum Count, Transaction Prime 1 Key/Prime 2 Key, Idle Prompt, and Static IP Info Present.
- Printer Settings:** Printer Model, Printer Type, Auth Only Receipt, Print Customer Copy, Slip Receipt Format, Receipt Account Number Truncation, Merchant Receipt Truncation, Print Time Indicator, and Roll Receipt Type.
- Auto Close Settings:** Auto Close, Auto Close Time 1/2, Auto Close Attempts, Display Reminder, Reminder Time/Mag, Verify Totals, Force Settle, Auto Close Reports, and Host Connection Type.
- Header / Custom Footer Lines:** Fields for Header Line 1-4 and Footer Line 1-4.
- Debit, EBT, Surcharge and Other Settings:** EBT Settings, ATM Settings, PIN Settings, Surcharge Settings, and Other Settings.
- Dial Settings:** Dial Type, Settle Comm Type, Auth Comm Type, PreDial Flag, Force Dial, Auto Answer Indicator, Auto Answer Number of Rings, Batch Upload Speed, Download Speed, and Transaction Speed.
- Tip Settings:** Tip Option, Tip At Time Of Sale, Auto Tip Percentage, Display Tip Percentage, Tip Assist Percentage 1/2/3.
- Flags and Adjustments:** Market Specific Data, Freed Control Keys, Manager Password, Password Protect Keys, Maximum Number of Adjustments, Device Codes, Language Indicator, Beeper On, Amount Adjustment, Amount Adjustment Password, Settle to PC, Duplicate Trans Processing, AVS Flag, and Authorization Only.
- CPS Settings:** Reset Ref Number to 001 Flag, Data Augmentation Flag, Purchasing Card Flag, Check Expiration Date.
- Invoice Settings:** Number Keys, Number Flag, Prompt.
- Hotel and Lodging:** Calculate Check-In Amount, Room Rate Amount, Print Check-In Amount, Print Check-In Receipt, Print Check-Out Receipt, Prestigious Property Indicator, Fire Safety Indicator.
- Advanced Terminal Settings:** Print Close Tab Receipt, Print Open Tab Receipt, Print Disclaimer, Print Customer Copy, Customer Label Indicator, Custom Label Text, Auto Close Unadjusted Tip, Counter Pay Tip, IRS Signature Line, Excessive Tip %, Tip Overage %, Auto Close Open Tab, Close Tab With New Card, Open Tab Signature, Default Open Tab Amount, Excessive Tab %, E-Commerce Indicator, Manual Entry Password, Shift Processing, Signature on Gift, Cash Advance, Lock Keyboard, Batch Authorization, Process Tax, Process Tax %, and Supervisor Password.



Navigational Features

The Terminal Details page contains the same navigational elements as the Terminal Setup page. These elements are:

1. Smart Navigation
2. Collapse/Expand Sections
3. Quick Links Menu

Smart Navigation

Sections contained within the Terminal Details page will display based on the sections and fields completed in the Terminal Setup page. The hardware and software specifications will affect the sections shown on the Terminal Details page. For example, the Hotel and Lodging section will display on the Terminal Details page when using an Equinox model terminal with lodging enabled software (SPOSHTL).

Collapse/Expand Sections

The Terminal Details page contains the **Collapse/Expand** sections feature. This feature operates in the same manner as it does on the Terminal Setup page.

Quick Links Menu

The **Quick Links** menu displayed on the Terminal Setup page is also available on the Terminal Details page.



Steps to Complete the Terminal Details Page

To complete the Terminal Details page, enter information into the various sections. The Terminal Details page contains the following sections:

- Terminal Header
- AMEX
- Printer Settings
- Auto Close Settings
- Header/Custom Footer Lines
- Debit, EBT, Surcharge, and Other Settings
- Dial Settings
- Tip Settings
- Flags and Adjustments
- CPS Settings
- Invoice Settings
- Hotel and Lodging
- Advanced Terminal Settings

Terminal Header Section

Use the Terminal Header to reference the terminals hierarchy information which auto populates from the Terminal Setup page. Verify the auto-populated information as needed.

Amex Section

The Amex section is auto-populated from the Terminal Setup page. If needed, verify the auto-populated data in this field.

Printer Settings Section

The Printer Settings section fields default from the HWSW section of the Terminal Setup page. Review the fields as needed.

Auto Close Settings Section

Use the Auto Close Settings section to set a specific time to transmit the batch capture data, in military time. Complete the fields contained in the Auto Close Settings section as needed.

Header/Custom Footer Lines Section

Add customized messages to the header and footer of the receipt using the Header/Custom Footer Lines section. The character limits of the header/footer are driven by the terminal and the terminal printer requirements. If custom headers or footers are needed, complete this section.

Debit, EBT, Surcharge and Other Settings Section

This section contains the Debit, EBT, and Other Settings for the terminal. Verify the information on this page is correct, make any necessary changes.



Dial Settings Section

The dial settings in this section will default from the HWSW section of the Terminal Setup page. It is not necessary to enter any information in this field.

Tip Settings Section

The Tip Setting section will display if the terminal model entered into the HWSW section of the Terminal Setup has the tip feature. If desired, complete the tip fields available in this section.

Flags and Adjustments Section

This section contains the terminals flags, adjustments, and password settings. Complete the flags and adjustment section as needed. The password protect keys will be based on the terminal make and model.

CPS Settings Section

The CPS Settings page contains card present services settings. Complete the following fields as needed:

- **Reset Ref Number To 001 Flag**
- **Data Augmentation Flag** – If this field is enabled, ensure field check is displayed.
- **Purchasing Card Flag**
- **Check Expiration Date** – If this field is enabled, ensure field check is displayed.

Invoice Settings Section

The Invoice Settings section is used to capture invoice numbers on the terminal receipts. The capture of invoice numbers can be based on type of transaction or all transactions. Complete the fields in this section, if desired.

Hotel and Lodging Section

The Hotel and Lodging section contains hospitality specific fields. This section will display based on terminal hardware and software entered on the Terminal Setup page. Complete the Hotel and Lodging section fields as needed.

To finalize the Terminal Details page, click **Save** or **Next**. Clicking **Next** will open the Card Range Select page.



Card Range Select Page and Card Range Setup Page

You can assign the payment cards accepted by the terminal using the Card Range Select page. The Card Range Select is used to establish the card types as well as the card brands. Examples of card types are Credit and Debt, and examples of card brands are Visa, MasterCard, American Express, and Discover. You will need to know the card ranges that you need to add before you start.

Keep in mind that the American Express and Discover card brands may be assigned to the merchant when the merchant is first boarded to Express. The card types and brands can then be added to the front-end terminal using the Card Range Select page. For example, the merchant must be set up for American Express during the Merchant Setup process in order to add the AMEX card range to the terminal.

Card Range Select Page

e-Connections Card Range Select

Portal | Main | help | Profile | Log Off

Merchant Terminal Admin

V Number: V0000003
 BIN: 000000 Chain: 000000 Merchant Number: 00000000
 Agent: 000000 POS Merchant Id: 000000000000 Store Number: 0001 Terminal Number: 0003

Card Range

Available Card Ranges: Selected Card Ranges:

07 - Credit Card Range
 08 - Credit Card Range
 09 - Credit Card Range
 10 - Credit Card Range

Add Remove Setup New Card Range

Existing Card Ranges

Payment Service:	Card Range Type
<input type="radio"/> VISA	01
<input type="radio"/> MAST	02
<input type="radio"/> AMEX	03
<input type="radio"/> AMEX	04
<input type="radio"/> JCBC	05
<input type="radio"/> DISC	06

Update View Delete

Previous Validate Next

Add a Card Range

Edit a Card Range

A configuration option which allows the most common card ranges to automatically populate is often active for this page. You can view a list of the populated card ranges in the Existing Card Ranges section.

Add a Card Range to the Existing Card Ranges

If the card range is not available in the Existing Card Range section, you will need to add the card range.

To add the card range:

1. From the **Available Card Ranges** list, select the card ranges you want to add. Use the **SHIFT** key to select multiple options.
2. Click **Add**. The card range you selected will display in the **Select Card Ranges** list.



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3. From the **Selected Card Ranges** list, select the first card range, and then click **Setup New Card Range**.
4. The Card Range Setup page displays for the selected card range. Review the page and make edits to ensure all of the card range information is correct on the Card Range setup page.
5. Repeat steps for each card range you need to add.

Review Existing Card Ranges

If the correct card ranges are available in the Existing Card Ranges section:

1. Select a card range from the **Payment Service** column, and then click **Update**. The Card Range Setup page displays.
2. Review the page and make edits to ensure all of the card range information is correct on the Card Range Setup page.
3. Repeat steps for each of the card range options.



Card Range Setup Page

The Card Range Setup page displays when you are adding a card range or editing a card range in the terminal file. You can use the card range setup page to configure the fields for the specific card range.

Card Range Setup Page

The screenshot shows the 'Card Range Setup' interface. At the top, there are navigation links: 'Portal', 'Main', 'Help', 'Profile', and 'Log Off'. Below the title bar, there are tabs for 'Merchant', 'Terminal', and 'Admin'. The main form area is divided into several sections:

- Header Information:** V Number: 00000000, BIN: 000000, Chain: 000000, Merchant Number: 0000000000000000, Agent: 000000, POS Merchant Id: 000000000000, Store Number: 0000, Terminal Number: 0000.
- Payment Service:** VISA - VISA (dropdown), Card Type: VI (dropdown).
- Merchant ID:** 000000000000, Card Present: 3 - Both (dropdown).
- Store Number:** 0000, Host: 01 - 2Gen Host (Visa) (dropdown).
- Terminal Number:** 0000, IIID/RIID: (empty field).
- Voice ID:** 0000000000000000, Account Range - Low: 400000000000, Account Range - High: 499999999999.
- Accumulator Label:** VI, Account Number Range Order: 01.
- Check Subscriber Number:** (empty field), Cashback/Tip: Choose... (dropdown).
- Telecheck Region Code:** (empty dropdown).
- Floor Limits:** Use Floor Limits: , Receipt Floor Limit: 0000, QPS Receipt Option: 0 - No Receipt (dropdown), Auth Floor Limit: 0000, Signature Floor Limit: (empty field).
- Indicators:** Data Capture Required: , Mod 10 Check Account Number: , Printer Required: , Print Special Data: , Request Verification Code: , Service Indicator: .
- Partial Authorization Indicator:** Partial Auth: PARTIAL AUTHORIZATION WHEN CARD PRESENT (dropdown).
- Voice Authorization Phone:** Access Code / Phone, Description: Primary, WEST I/R VOICE.
- Sharing Group:** Available: 1 - ATHEvertec, 1 - AFFN ATM, 3 - Alaska Option, 5 - Visa Chik Card II, 7 - Shazam (ITS), 8 - Maestro. Existing: (empty). Buttons: Add, Remove, Move Up, Move Down.

At the bottom, there are buttons for 'Cancel', 'Save', 'Validate', and 'Board'. A footer note reads: '© 2001-2014 TSYS Acquiring Solutions, L.L.C. All rights reserved.'

Configure or review the following fields:

- **Payment Service:** Select the appropriate card brand service.
- **Voice ID:** Enter the Voice ID number for the card range. The Voice ID number is often a form of the merchant account number for the card brand.
- Confirm the following auto-populated fields are correct:
 - **Accumulator Label**
 - **Host:** This field identifies the host for the card brand.
 - **Host 01** = Visa, MC, JCB, Discover, and American Express
 - **Host 05** = Debit and ATM
 - **Host 10** = Check Authorization Services



- **Indicators Section:** Confirm the needed items are selected for the following options:
 - **Data Capture Required:** This option enables the POS device to capture authorization information.
 - **Mod 10 Check Account Number:** This option is required for all card types except Debit; the Mod 10 check box must remain unchecked.
 - **Printer Required:** This option enables receipt printing.
 - **Print Special Data:** This option provides additional authorization data on the receipt.
 - **Request Verification Code:** This option enables CVV and CID prompts.
 - **Service Indicator:** This option is used for the Visa card range.
- **Voice Authorization Phone Section:** Confirm the Access Code/Phone number in the Primary field has auto-populated correctly, complete if not populated. This field will be left blank for Debit/ATM card ranges.
- **Sharing Group Section:** For Debit/ATM card ranges, select the networks from the **Available** list, and then click the **Add** button. Add the networks in order of dialing preference.

Finalize the Card Range Data

To finalize the data on the Card Range Setup page:

1. Review and enter data in the necessary fields.
2. Click **Save** to complete the Card Range setup.
3. Click **Continue** or **Cancel**. The Card Range Select page will display.
4. When all card ranges have been added or edited, click **Next**. The Host Select page will display.



Host Select Page and Host Setup Page

As you learned in lesson one, Stage Five of the terminal file build process is to set the authorization communication. The Host Select page in Express is used to designate the authorization communications. Separate settings will be used for credit cards, debit cards, and check services. The Host Select page displays after you set up the card ranges.

Host Select Page

The screenshot shows the 'Host Select' page in the eConnections system. At the top, there is a navigation bar with 'Portal', 'Main', 'Help', 'Profile', and 'Log Off'. Below this is the 'eConnections' logo and the title 'Host Select'. The page is divided into several sections:

- Merchant Information:** A table with fields for V Number, BIN, Agent, Chain, POS Merchant Id, Merchant Number, and Store Number.
- Hosts Section:** A table with two columns: 'Available Host' and 'Selected Hosts'. The 'Available Host' column lists: Host 02 2Gen Host (Visa), Host 03 2Gen Host (Visa), Host 04 2Gen Host (Visa), and Host 10 Check Guarantee Host. There are 'Add' and 'Remove' buttons below this table.
- Existing Hosts Section:** A table with two columns: 'Payment Service' and 'Host Type'. The 'Payment Service' column has radio buttons for 'VISA' and 'ATM'. The 'Host Type' column lists '01 2Gen Host (Visa)' and '05 ATM Host (Visa)'. There are 'Update', 'View', and 'Delete' buttons to the right of this table.
- Buttons:** A 'Setup Host' button is located to the right of the Hosts section, and a 'Back' button is at the bottom left.

At the bottom of the page, there is a copyright notice: © 2001-2014 TSYS Acquiring Solutions, L.L.C. All rights reserved.

The Host Select page allows you to view and edit the host settings for the terminal. The assigned hosts will auto-populate into the Existing Hosts section. You will need to review the Host Setup information for each host listed.

To view the Host Setup information,

1. Select a host from the **Payment Service** column, and then click **Update**. The Host Setup page displays.
2. Review the page and make edits to ensure all of the host information is correct on the Host Setup page.
3. Repeat steps for each of the Host options.



LEARNER GUIDE

Host Setup Page

The Host Setup page allows you to configure the specific settings for the host. The settings will vary depending on if it is for credit card transactions or debit card transactions.

Host Setup Page – Credit

eConnections Host Setup

Merchant Terminal Admin

V Number: V9618493
BIN: 447475
Agent: 000000
Chain: 000000
POS Merchant Id: 186800460000
Merchant Number: 18680046
Store Number: 0001

Terminal Number: 0002
Host: 01
Host Payment Service:* VISA
Record Format: D
Transaction Code: Swiped or Swiped and Mail Order
Check Guarantee IIID/RIID:
MCC: 5999

Authorization Phones			
	Access Code	Phone	Description
Primary		OTHER 18004116902	PRIME EDC WATS
Secondary		OTHER 18774880757	SEC EDC UATS

Hypercom

Cancel Save Validate

* - indicates a required field

Host Setup Page – Debit

eConnections Host Setup

Merchant Terminal Admin

V Number: V9618493
BIN: 447475
Agent: 000000
Chain: 000000
POS Merchant Id: 186800460000
Merchant Number: 18680046
Store Number: 0001

Terminal Number: 0002
Host: 05
Host Payment Service:* ATM
Record Format: A
Transaction Code: Swiped or Swiped and Mail Order
Check Guarantee IIID/RIID:
MCC: 5999

Authorization Phones			
	Access Code	Phone	Description
Primary		18003708507	PRIM AUTH WATS
Secondary		18774880358	SEC AUTH WATS

Hypercom

Cancel Save Continue

* - indicates a required field



Complete the Host Setup and Finalize Terminal File

Use the following steps to complete the Host Setup Page and finalize the terminal file:

1. On the Host Setup page, verify the auto-populated information is correct for each host, and then click **Save** to complete the Host setup.
2. Click **Continue** or **Cancel**. The Host Select page will display.
3. When all hosts have been added or edited, click **Validate**. Express will check all of the necessary fields for the terminal file for errors.
4. If errors are found, make the necessary changes using the links in the **Data Field** column, and then click **Validate**.
5. If no errors are found, click **Board**.



LESSON EXERCISE

Build a Standard Terminal file using the steps learned in Lesson Three: Creating a Standard Terminal Build. Example files will be provided by your trainer.

LESSON SUMMARY

To review, building a standard terminal file requires certain information be known before you start, such as the terminal model, terminal software type, terminal support level, merchant name, and merchant industry type. You have learned how to build a standard terminal file within the Express system.



LESSON 04

Create a Secondary System Terminal File

A secondary system is a separate terminal download system which provides additional terminal management functions. A secondary system terminal file may handle all or parts of the terminal operations, such as:

- Creating or modifying a terminal file
- Downloading a file to a terminal
- Generating reports and data management
- Diagnosing terminal problems and help desk issues

Based on individual needs, you may choose to use secondary system software in conjunction with other TSYS products and services. One of the most common reasons for using a secondary system is when one terminal will be shared by multiple merchants, referred to as a multi-merchant terminal. Another reason a secondary system may be required is if the merchant participates in Dynamic Currency Conversion (DCC).

The secondary system software may include:

- TermMaster
- VeriCentre

Secondary System File Build

You will follow the standard file build process that you learned in lesson two, Creating a Standard File Build, with the addition of completing the information needed for the secondary system application. Express will display additional terminal file build pages when a secondary system application is being used; these pages are called Terminal Details - Profile Build pages. The Express Terminal Details - Profile Build pages are specific to the terminal model.

Express Terminal Details - Profile Build Pages:

- Hypercom/Equinox
- VeriFone
- VirtualNet
- Microsoft RMS



Comments for Secondary System File Build

Comments will be entered in two separate locations when completing a secondary system file build. The Terminal Setup and the Terminal Profile Build pages are the two pages comments are entered.

Comments on the Terminal Setup page will address information needed by the TSYS Help Desk. The Terminal Profile Build page comments are directions intended for the TSYS Implementation Process (IP) team. Enter a comment such as the example shown below, plus any additional team-specific information.

Example Comment

An example comment for a multi-merchant file build is:

Multi-merchant/Software system name/V#XXXXXXX/Terminal X of X/New Terminal Build

Merchant Summary – Secondary System Build Status Page

Completing the Terminal Details – Profile Build page will allow the terminal-specific secondary system information to be sent to the TSYS IP team. The IP team will then use the information contained on the Terminal Details – Profile Build page to create the terminal file. You can view the status of the secondary system file build by accessing the Express Merchant Summary Page – Secondary System Build Status page.



Merchant Summary Page – Secondary System Build Status

[Portal](#) | [Main](#) | [Help](#) | [Profile](#) | [Log Off](#)

Merchant Summary

Merchant
Terminal
Admin

Record Status: Submitted **Merchant Number:**

Date of Last Activity: 01/01/1900 **Source:** O-Online

User ID: **Merchant Type:** FS

Merchant Options

Merchant Details

Bank Number: 0000	DBA Name:	
Association: 999999	Owner Name:	
BIN: 000000	Legal Name (00):	
POS Merchant ID: 000000000000	Attn:	
AMEX SE: 0000000000	Address:	
Discover:	City / State / Country:	
Authorization and Capture: 6011000000000000		
Clearing and Settlement: 6011000000000000	Postal Code:	
JCB: 0000000000	Phone:	(000)000-0000
JCB Processing: N	Manager's Name:	
Sales Code:	DDA:	000000000
Merchant Status: Open	T/R:	000000000
Last Maintained: 04/04/2014	Amount of Last Deposit:	0.00
Date of Last Deposit: 1900-01-01		
MCC/SIC: 5999 MISCELLANEOUS AND SPECIALTY RETAIL STORES		

Merchant Terminals

(Maximum table display is 100 terminals)

Print Profile	V Number	Agent	Chain	Store	Terminal	Merchant Name	Model / Alt Build Type	Software / Alt Build Type Desc	Boarded (2nd Sys)
	V9999999	000000	000000	0001	0002		STAGE	STGENCR	Y (N/A)
	V0000000	000000	000000	0001	0003		VX510	SEVA321	N (N/A)
	V0000000	000000	000000	0001	0005		VX520	XEVA431	N (N/A)

Merchant Quick Links

Merchant Parameters Merchant Account Product Setup Merchant Card Plans Merchant Charge Records	Point to BETS Notes Pricing Summary MATCH Inquiry	Merchant Credit Petro Link Terminal Setup MyPosLink
--	--	--

Status of secondary file build

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LESSON EXERCISE

Follow the steps provided by your trainer to build a secondary system file build request.

LESSON SUMMARY

To review, a secondary software system for a terminal provides the standard functions as well as additional terminal management features. You have learned how to build a secondary system file build request within the Express system.



LESSON 05

Terminal-Specific File Build

Some terminal models allow for additional settings or features. The terminal-specific settings will display on separate pages within the terminal file build process. The terminal models with specific pages within Express are:

- Hypercom/Equinox
- Ingenico
- VeriFone

Hypercom/Equinox Terminal Specific Pages

The Hypercom or Equinox terminal offers users extra functionality which is not available in all terminal models. The Hypercom/Equinox Terminal pages are:

- Hypercom/Equinox Setup
- Hypercom/Equinox Card Settings
- Hypercom/Equinox Host – Settings



Hypercom/Equinox Setup Page

The Hypercom Setup page contains additional terminal options available for the Hypercom/Equinox terminal. The Hypercom Setup page will generally display after the Terminal Details page has been completed.

Hypercom Setup Page

Hypercom Setup

Portal | Main | Help | Profile | Log Off

Merchant | Terminal | Admin

Merchant Number: 18680005 V Number: V9474218 DBA Name : DBA NAME
POS Merchant Id: 186800050000 Bin: 447475 Agent: 000000 Chain: 000000 Store: 0001 Terminal: 0001

Password Settings [Collapse]

General Functions	Numbered Functions
<input type="checkbox"/> Adjust Key	<input type="checkbox"/> 0 Test Transaction
<input type="checkbox"/> Balance Reporting Key	<input type="checkbox"/> 1 Display Journal
<input type="checkbox"/> Batch Hold Key	<input type="checkbox"/> 2 Merchant Configuration
<input type="checkbox"/> Checkout	<input type="checkbox"/> 3 Terminal Reset
<input type="checkbox"/> Check Authorization Key	<input type="checkbox"/> 4 Keyboard Lock
<input type="checkbox"/> Credit Key	<input type="checkbox"/> 5 Display Totals/Counts
<input type="checkbox"/> Default to Cash Advance	<input type="checkbox"/> 6 NMS Call
<input type="checkbox"/> House/Cash Key Password	<input type="checkbox"/> 8 Display Batch Number
<input type="checkbox"/> Initialize Key	<input type="checkbox"/> 9 Delete Batch
<input type="checkbox"/> Mail Key	<input type="checkbox"/> 10 Authorization Only Transaction
<input type="checkbox"/> Offline Key	<input type="checkbox"/> 21 Find Journal Transaction
<input type="checkbox"/> Open/Close Tab Key	<input type="checkbox"/> 25 Speed Dial Configuration
<input type="checkbox"/> Transmit Key	<input type="checkbox"/> 29 Display Transmit Status
<input type="checkbox"/> Void Key	<input type="checkbox"/> 30 Local Programming
	<input type="checkbox"/> 68 PC Upload
	<input type="checkbox"/> 69 Clear PC Upload Flag
	<input type="checkbox"/> 70 Training Password
	<input type="checkbox"/> 71 Printer Password
	<input type="checkbox"/> 72 Reprint Last Receipt
	<input type="checkbox"/> 73 Reprint Any Receipt
	<input type="checkbox"/> 76 Debit Transaction
	<input type="checkbox"/> 77 Server/Clerk Configuration
	<input type="checkbox"/> 78 Cashier Functions
	<input type="checkbox"/> 79 Reports
	<input type="checkbox"/> 82 Printer Test
	<input type="checkbox"/> 83 Display Test
	<input type="checkbox"/> 84 Keyboard Test
	<input type="checkbox"/> 86 Manager Password Configuration
	<input type="checkbox"/> 87 Tip Discount Configuration
	<input type="checkbox"/> 89 Card Reader Test
	<input type="checkbox"/> 90 Terminal Password Configuration
	<input type="checkbox"/> 91 Display Software Version
	<input type="checkbox"/> 92 Program Load
	<input type="checkbox"/> 94 PIN Pad Test
	<input type="checkbox"/> 95 Network Statistics
	<input type="checkbox"/> 96 Response Time Monitor
	<input type="checkbox"/> 97 Local Option Configuration
	<input type="checkbox"/> 98 Communication Parameters

Terminal Settings [Collapse]

Server and Clerk Settings	Receipt Settings	Dial Settings
Accept Tips: <input type="checkbox"/>	Pre-Print Receipt: <input type="checkbox"/>	Audible Modem: <input type="checkbox"/>
Adjust By Server/Clerk: <input type="checkbox"/>	Printer Used: <input checked="" type="checkbox"/>	Keyboard Dialing: <input type="checkbox"/>
Assign Name For Server/Clerk: <input type="checkbox"/>	Print Error Receipt: <input type="checkbox"/>	Memory Dialing: <input type="checkbox"/>
Print Server/Clerk Sign Line: <input type="checkbox"/>	Print Receipt Disclaimer: <input checked="" type="checkbox"/>	Pre-Dial Dialing: <input type="checkbox"/>
Prompt For 'Clerk': <input type="checkbox"/>	Print 'Tip': <input type="checkbox"/>	Referral Dialing: <input type="checkbox"/>
Review By Server/Clerk: <input type="checkbox"/>	Print Time On Receipt: <input checked="" type="checkbox"/>	Toll Dialing: <input type="checkbox"/>
Server/Clerk Password: <input type="checkbox"/>	Print 'Total' On Receipt: <input checked="" type="checkbox"/>	
Server/Clerk Processing: <input type="checkbox"/>		

Hotel and Fine Dining Settings	Other Settings (1)
Duplicate Trans Processing: <input type="checkbox"/>	Cash Advance Address Verification: <input type="checkbox"/>
Exceeds Auth Amt' Prompt: <input type="checkbox"/>	Cash Advance Processing: <input type="checkbox"/>
Open/Close Tab Key: <input type="checkbox"/>	House Account Cash Key: <input type="checkbox"/>
Process By Shift: <input type="checkbox"/>	Manual Programming Check: <input type="checkbox"/>
Prompt For 'Folio Or Room': <input type="checkbox"/>	
Folio/Room Prompt Text: FOLIO	
Open Tab Amount: 0000000000.0	
Tip Calculation %: 00	

Other Settings (2)			
Auto Answer: <input type="checkbox"/>	ECR Baud Rate: 00	Reconcile Totals: Press Enter (01)	
Capture Track I Name: <input type="checkbox"/>	Printer Baud Rate: 00	Settle Merchant Number:	
Display Card Number: <input type="checkbox"/>	Manager Password: 0000	Telephone Line Hold: 2 seconds	
Lock Keyboard: <input type="checkbox"/>	Terminal Password: 0000	Terminal Phone:	
Process Credits Offline: <input checked="" type="checkbox"/>	Process Voids Offline: <input checked="" type="checkbox"/>		

Previous Save Next



The Hypercom Setup page contains two main sections:

- **Password Settings Section:** The Password Settings section provides additional password settings for the Hypercom/Equinox terminal including placing a password on specific keys or functions. You can use this section to customize passwords.
- **Terminal Settings Section:** The Terminal Settings page contains information for specific functionality including servers, receipts, hotel, and other settings. Complete the subsections on the Terminal Settings section as needed:
 - Server and Clerk Settings
 - Receipt Settings
 - Dial Settings
 - Hotel and Fine Dining Settings
 - Other Settings (1)
 - Other Settings (2)

Complete the Hypercom/Equinox Setup page

To complete the Hypercom Setup page, configure the needed options and then click **Next**. The Hypercom Card Settings page will display.



Hypercom/Equinox Card Settings Page

The Hypercom/Equinox Card Settings page provides industry specific options. Select the options which best meet the needs of the individual merchant. A separate Hypercom/Equinox Card Settings page will be completed for each card range.

Hypercom/Equinox Card Settings Page

Portal | Main | Help | Profile | Log Off

e-Connections

Hypercom Card Settings

Merchant | Terminal | Admin

V Number : V9414021 Chain : 000000 Merchant Number : 18680009
Bin : 412700 POS Merchant Id : 186800090000 Store Number : 0001
Agent : 000000 Terminal Number : 0001

Card Payment Service VISA

<input type="checkbox"/> Additional AMEX Prompts	<input type="checkbox"/> Print Special Data	Authorize Margin % <input type="text"/>
<input checked="" type="checkbox"/> Adjustment Allowed	<input type="checkbox"/> Process Debit Transaction	Floor Limit <input type="text" value="0000"/>
<input type="checkbox"/> Block Credits	<input checked="" type="checkbox"/> Process Refunds Offline	Tip Discount % <input type="text" value="00.00"/>
<input type="checkbox"/> Block Voids	<input checked="" type="checkbox"/> Process Voids Offline	Transactions Requiring PIN
<input type="checkbox"/> Cash Only Transaction	<input type="checkbox"/> Prompt For Special Data	<input type="checkbox"/> Adjust
<input checked="" type="checkbox"/> Expiration Date Required	<input type="checkbox"/> Reference Number Required	<input type="checkbox"/> Balance Inquiry
<input checked="" type="checkbox"/> Manual Entry Allowed	<input checked="" type="checkbox"/> Thanks For Using Visa	<input type="checkbox"/> Cashback
<input checked="" type="checkbox"/> Offline Entry Allowed	<input checked="" type="checkbox"/> Validate Expiration Date	<input type="checkbox"/> Credit
<input type="checkbox"/> PIN Entry Required	<input type="checkbox"/> Verify 1st 4 Digits (Cash Advance)	<input type="checkbox"/> Pre-Authorization
<input type="checkbox"/> Preferred Customer Card	<input type="checkbox"/> Verify Last 4 Digits	<input type="checkbox"/> Purchase
<input type="checkbox"/> Print 'Signature Not Required'	<input type="checkbox"/> Voice Referral Allowed	<input type="checkbox"/> Void

Cancel Save Validate

Use the following steps to complete the Hypercom/Equinox Card Settings page:

1. On the Card Range Setup page, click **Hypercom/Equinox** to open the Hypercom/Equinox Card Settings page.
2. Select the check box next to the desired options. Some available Hypercom card options are:
 - **Verify Last 4 Digits:** An option which requires the last four digits of a card be entered for each transaction.
 - **Additional AMEX prompts:** An option primarily used by the hotel industry that must be enabled for an American Express card range.
 - **Cash Advance: Verify the 1st 4 Digits:** This option is used for cash advance.
3. Click **Continue** on the Hypercom Card Settings page, and then click **Continue** on the Card Range Setup page.
4. Repeat the above process for each individual card range.
5. Click **Next** and the Host Select page will display.



Hypercom/Equinox Host Settings Page

The Hypercom Host Setting page provides for additional host-level features. A separate Hypercom Host Settings page is required for each card range.

Hypercom Host Settings Page

The Visa Hypercom Host Settings page contains the fields required to change a batch number on a Hypercom. The fields you can use to change the batch number are:

- Current Batch Number
- Next Batch Number

Caution: Only adjust the Host Message Protocol field on the Hypercom Host Settings page under direction of the Help Desk. Adjusting this field could have financial impact.



Terminal Details Page – Advanced Terminal Settings Section

The Advanced Terminal Settings section of the Terminal Setup page is available for the Ingenico and VeriFone terminal types. The field defaults and drop-down menu options in the Advanced Terminal Settings section will be slightly different based on the terminal type in use. The Advanced

Terminal Details Page

Flags and Adjustments				Collapse			
Market Specific Data:		Maximum Number of Adjustments:	03	Amount Adjustment:	0		
Fraud Control Keys:	00000000	Device Code:	DR	Amount Adjustment Password:	0		
Manager Password:	Z66831	Language Indicator:	00	Settle To PC:	N		
Password Protect Keys:	0000000000000000	Beeper On:	0	Duplicate Trans Processing:	N		
				AVS Flag:	Y		
				Authorization Only:	N		
CPS Settings				Collapse			
Reset Ref Number To 001 Flag:	Y	Data Augmentation Flag:	Y	Purchasing Card Flag:	Y	Check Expiration Date:	Y
Invoice Settings				Collapse			
Number Keys:		Number Flag:	N	Prompt:			
Hotel and Lodging				Collapse			
Calculate Check-In Amount:	N	Print Check-In Amount:	N	Print Checkout Receipt:	N		
Room Rate Amount:		Prestigious Property Indicator:					
POS Check Settings				Collapse			
ATM:		Check Decline Disclosure:		Returned Item Fee Payee:			
Check Cashback Indicator:		Owner Code:		Check Auth Disclosure:			
Check Cashback Limit:		Returned Item Fee Method:		Check Print L2:			
Check Reader Model:		Returned Item Fee Amount or Percentage:					
Advanced Terminal Settings				Collapse			
Print Close Tab Receipt:	Y	Auto Close Adjustment Tip:	Y	Auto Close Open Tab:	Y		
Print Open Tab Receipt:	Y	Counter Pay Tip:	N	Close Tab With New Card:	N		
Print Disclaimer:	Y	IRS Signature Line:	Y	Open Tab Signature:	Y		
Print Customer Copy:		Excessive Tip %:	00	Default Open Tab Amount:	025		
Customer Label Indicator:	N	Tip Overage %:		Excessive Tab %:	00		
Custom Label Text:							
E-Commerce Indicator:	0	Cash Advance:	N	Process Tax:	N		
Manual Entry Password:	0	Lock Keyboard:	N	Process Tax %:	0000		
Shift Processing:	0	Batch Authorization:	N	Supervisor Password:	Z66831		
Signature on Gift:							

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Terminal Settings section provides additional terminal specific options such as:

- Receipt settings
- Tip settings
- Tab settings
- Other settings

During the terminal file build process, you can configure the settings in the Advanced Terminal Settings section to provide additional functionality to the terminal.



LESSON EXERCISE

Build a terminal-specific file following the steps provided by your trainer.

LESSON SUMMARY

To review, specific terminal models contain additional functions and features which require additional steps within the Express system. You have learned how to create a terminal-specific file within Express.



MODULE EXERCISE

Following the directions provided by your trainer build a Hypercom/Equinox terminal with a secondary system build.

Module Summary

In Summary, there are three terminal file build models in the Express system, they are: 1) A Standard File Build, 2) A Secondary System File Build, and 3) A Terminal-Specific File build. In this module, you learned the process within the Express system to build a standard terminal file as well as a terminal specific and secondary system file.