LinkPoint® 9100 REFERENCE MANUAL



LinkPoint® 9100 Reference Manual FDC Omaha Retail Application; LP9100, Software Version 1.05

Reference Manual Version 1.4

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Printed in the United States of America.

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Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's expense.

Caution: Danger of explosion if lithium battery is incorrectly replaced. Replace only with the same of equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

NOTICE

LinkPoint International reserves the right to make changes to specifications at any time and without notice. The information furnished in this publication is believed to be accurate and reliable; however, no responsibility is assumed by LinkPoint International for its use.

Page	Brief Description Of Change	Revision Date
42	Added special note	08/14/2002
323	Added two download error messages	08/14/2002
4	Added merchant should call help desk if icon flashes	09/20/2002
6	Removed "and local functions" from 4th bullet point	09/20/2002
13	Added customer copies can be set to 0 through 9	09/20/2002
80	Added ATM/Debit tax amount is optional	09/20/2002
136	Added alphanumeric capability	09/20/2002
138	Added a special loopback cable is needed for test	09/20/2002
166	Added a special loopback cable is needed for test	09/20/2002
35	Changed (Wireless or Dialup) to (Wireless or Phone)	11/03/2003
137	Removed "XXX" from Enter Item Number display	11/03/2003

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REVISION HISTORY

The following is a revision history of the *draft* versions (not the "published" version) of the LP 9100 manual:

Manual Number Draft 1.1, June 14, 2002. The following changes have been made from the previous *draft* version (1.0) of this manual:

- Under "Download Parameters and Options," the descriptions of many of the fields in the table were enhanced or clarified. Parameters to be removed and hard-coded in the next software release were shaded in gray. (NOTE: These changes have been superseded by the changes in Manual Draft 1.3; please see below for details.)
- Under "Special Setup Functions," various details were added on how to perform a number of these functions.
- A section entitled "Revision History" was added (but this is for internal LinkPoint use only; not for inclusion in the published manual).

Manual Number Draft 1.2, June 20, 2002. The following changes have been made from the previous *draft* version of this manual:

- In "Download Parameters and Options," a note was added stating, "Important Note: Except for the receipt header and trailer line fields, fields must NOT be left blank in a Zontalk file, unless the table below shows that their default value is [Blank]. Including other fields in a Zontalk file and then leaving them blank will cause the terminal to lock up on an Application Error!"
- Under "Download Parameters and Options," the default values in the following fields were changed in the table because of changes in the software:
 - o 1106 from 020 to 030
 - o 1125 from N to Y
 - o 7002 from N to Y
 - o 9004 from PZ01. to PLP1.
 - o 9024 from PZ01. to PLP1.
- Under "Error Transactions," "Application Error" was added at the end of the error table.
- Under "Appendix: Troubleshooting Guidelines," "Application Error" was added.
- Under "Appendix: Troubleshooting Guidelines," "Keymanager 1.2 Keyload Error" was added.

Manual Number Draft 1.3, August 28, 2002. The following changes have been made from the previous *draft* version of this manual:

- Under "Getting Started / Unpacking," Point 3, added the following note: "If the display screen has a plastic protective film on it, this may be removed or left on as desired (it is used to protect the screen during manufacturing)."
- Under "LinkPoint 9100 Specifications," added the following:
 - o Added section entitled "Accessories Available."
 - o Under "Battery Charger," added "Optional car charger is available."
 - o Under "Card Reader," added "ISO 7811."
 - Under "Communications Module," added "The wireless modem operates at up to 19.2 Kbps."
 - o Under "Display," added "high contrast" and "full graphics capability."
 - Added section entitled "Physical."
 - o Added section entitled "PIN Pad."
 - o Under "Printer," added "Thermal" and "with integral paper roll holder" to first line of this section. Added "Translucent paper door."
 - o Under "SAMS (Security Access Modules)," added "Up to four ID-000 SAM cards internally on a removable expansion board."
 - o Under "Serial Port," added that the RS-232 is a dual port.
 - o Added section entitled "Standards."
 - Added section entitled "Warranty."
- Under "Download and Encryption Procedures / Direct Full Download (PC-to-Terminal)," added a note after the operator action to plug in the download cable, stating: "Plug a charger into each terminal."
- Under "Download and Encryption Procedures / Direct Full Download (PC-to-Terminal)," a warning was added that the terminal must be allowed to reboot and initialize after the download, and a note was added that the application version numbers should be verified in AppMan after the download.
- Under "Download Parameters and Options," the default values or field lengths of the following fields were changed in the table because of changes in the software:
 - o 1131 from a field length of 14 to a field length of 14,14
 - o 1132 from a field length of 21 to a field length of 21,21
 - o 1152 from 00000 to 000
 - o 1252 from a field length of 10 to a field length of 10,1
 - o 9010 from a field length of 4 to a field length of 4,4
 - o 9030 from a field length of 4 to a field length of 4,4
 - o 20002 from 30 to 030
 - o 20008 from a field length of 19 to a field length of 19,19

- o The FDC card range field numbers were changed from 61700-61710 to 61700-61711
- Under "Download Parameters and Options," the following fields were removed from the table (because they were removed from the Terminal Definition File and hard-coded in the application): Fields 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1130, 1353, 1354, 1355, 1356, 1357, 1367, 1368, 1369, 7511, 7512, 7513, 9004, 9024, 20585, 20589, 27815, and 27819.
- Under "Download Parameters and Options," the parameter descriptions in the table were all rewritten so that they exactly matched the field descriptions in the Terminal Definition File; explanatory comments were placed in parentheses after the descriptions where necessary.
- Under "Standard Transactions / Using the Card Reader," Step 4, a note was added that "Bad Card Swipe" on all cards may mean the card reader needs cleaning, and that card reader cleaners can be purchased at office supply stores.
- Under "Reviews," added the following note: "Note: After a batch has been successfully closed, it can still be viewed in the Reviews until a new batch is started."
- Under "Reports," added the following note: "Note: After a batch has been successfully closed, reports for that batch can still be printed until a new batch is started."
- Under "Special Setup Functions / Application Manager / 4 Version Numbers; Name and Function of Each Applet," added the following note: "Note: This list does *not* include the terminal's "boot" program version or the modem firmware version. The "boot" version number may be viewed for a few seconds when the terminal is powering up after being turned off. The modem firmware version may be viewed when the regular application is running, by pressing the blue [F] key for the Admin menu, then 0 for Diagnostics, then 9 for Wireless Test."
- Under "Appendix: Troubleshooting Guidelines," "Sys Error 0x67B2" was added.
- Under "Appendix Troubleshooting Guidelines," in "Battery frequently runs down" and in "Battery needs to be charged," added the following notes: "(for 12-volt systems only; not for use in 24-volt truck systems)" and "Charging a discharged battery for only a few minutes and then removing the charger will cause three bars to appear in the battery icon, but this does *not* mean the battery is charged. It only means the voltage has gone up, but not the battery capacity. The merchant should be instructed to leave the charger in for several hours, until the battery icon stops flashing."

- Under "Appendix: Troubleshooting Guidelines," added the following new sections:
 - "Declined on any transaction"
 - "Formatting Error"
 - "Invalid Merch #"
 - o "Mount fail / likely cause unformatted device"
 - o "Sending error"
 - "Unobtainable / check phone #"
 - o "Unsuccessful / no comms"
 - "Unsuccessful / not responding."
- Under "Appendix: Troubleshooting Guidelines," made the following changes to existing sections:
 - Under the section "Bad card swipe," changed the note at the end to read, "Note: Debit sales, debit returns, EBT cash sales, and EBT food returns cannot be entered manually" (i.e., added debit returns and EBT food returns to the list of transactions that cannot be entered manually).
 - Under "Battery frequently runs down," changed the second sentence in point (b) to read, "Do this by fully charging it, then using the terminal until the battery is fully discharged, then fully recharging it" (i.e., instead of leaving the terminal on until the battery is fully discharged, because the new application automatically shuts off the terminal after only one hour, so the battery will not discharge in this way).
 - o Under "Display is blank," added point (e) about tamper events being a possible cause of blank display.
 - o Added new information under the section "Keymanager 1.2 Keyload Error."
 - o Under "Network error 0," removed the word "report" from the title of this section (since reports do not dial out).
 - o Added new information to the section "Out of network coverage."
 - Under "Paper roll requires replacement," added the following sentence:
 "LinkPoint recommends Appleton 1012 paper."
 - Under the section "Printer will not print," added point (e) "Make sure the paper is the correct type (high-grade thermal; LinkPoint recommends Appleton 1012)".
 Also renamed the old point (e) as point (f).
 - Added new information in points (e), (f) and (g) of the section "Terminal is not getting a signal."
 - Under the section "Terminal will not power up," added the following sentence at the end of point (a): "But do not hold down the button for more than a second, or the terminal may power down again."

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INTRODUCTION

Congratulations on your choice of the LinkPoint® 9100 point-of-sale (POS) terminal. The LinkPoint 9100 is ideal for the retail needs of you and your merchants. Scientifically engineered to exceed the quality found in current terminal technology, the LinkPoint 9100 combines flexibility, mobility and user-friendly operation with "soft" programmable functions. The scrolling menus and an innovative backlit display panel make terminal operation quick, easy and user-friendly.

The LinkPoint 9100 is a full-featured, hand-held mobile terminal that can process transactions either wirelessly or on a dial-up phone line. In areas where there is no access to either a phone line or a wireless network, offline "store and forward" credit sales can also be performed. The 9100 can process credit, debit and EBT transactions and has an optional smart card reader as well. Its integrated "clam shell" printer makes changing paper quick and easy.

Figure 1

This manual includes step-by-step guides through specific transactions and operations, and shows how to keep the terminal in peak operating condition. It was designed to assist FDMS, its help desk, and bank/ISO clients. Words that appear in capital letters and brackets, [LIKE THIS], stand for keys on the terminal keypad. Words that appear in capital letters without brackets, LIKE THIS, stand for display messages.

Printer

The LinkPoint 9100 terminal has an integrated thermal printer that uses standard financial-quality thermal paper. The paper is two and one-fourth inches wide and up to one and seven-eighths inches in diameter. The printer prints eight lines per second and has a "clam shell" design for quick, easy replacement of paper.

Battery

A high-capacity rechargeable battery frees the terminal from having to be attached to an electrical outlet. An innovative cartridge design and a quick-release door on the battery compartment make battery replacement easy and simple.

PIN Pad

The LinkPoint 9100 terminal has an integrated PIN pad to support debit and EBT transactions. Both Master/Session and DUKPT encryption are supported.

GETTING STARTED

Unpacking

Carefully inspect the shipping carton and its contents for any damage that may have occurred during shipping. If the terminal is damaged, file a claim immediately with the shipping company or carrier and notify LinkPoint International.

Do not try to use a damaged terminal!

To unpack the LinkPoint 9100:

- 1. With the shipping carton right side up, open the carton's lid.
- 2. Lift the terminal, its charger, charger cable, and line cord up and out of the box. If it has not already been installed on the terminal, also remove the door of the "clam shell" printer from the box.
- 3. Remove the terminal from its protective bubble wrap and place the bubble wrap back in the shipping carton. If the display screen has a plastic protective film on it, this may be removed or left on as desired (it is used to protect the screen during manufacturing). Remove the charger from its protective box and return the box to the shipping carton. Close the shipping carton and save the shipping materials so that the unit can be repacked for shipping or moving in the future.
- 4. The LinkPoint 9100 is a fully mobile terminal that can be used either in wireless or dialup mode. When using the LinkPoint 9100 terminal, avoid areas with:
 - Direct sunlight or objects that radiate heat
 - Excessive dust
 - Electrical devices that cause excessive voltage variations such as air conditioners, space heaters, fans, or high-frequency security devices



Shipping Carton Contents **Figure 2**

INSTALLATION

Setting Up the Terminal

Installing the LinkPoint 9100 terminal is simple and requires no tools.

1. If the printer cover has not already been installed, carefully position the recesses in the cover over the two small plastic posts on the back of the printer module and push the door into place. If the terminal comes with both a larger and a smaller printer door, you can choose the one you want to use. (The smaller door will accommodate smaller rolls of paper.) When you are using the larger door, both of the two adjustable paper holders must be pulled out. For the smaller door, both paper holders must be pushed in (Figure 3). Install the roll of paper on the two paper holders, making sure the roll is positioned evenly and turns freely. Install the paper so that the thermal (printing) side is toward the *front* of the terminal. Before closing the printer door, pull out the paper so it will be held between the roller and the printer mechanism. Make sure the paper is centered. Then close the printer door. When opening or closing the printer door, always push evenly on *both* sides of the door or it may break.



Figure 3

2. For use in dial-up mode *only*, install the telephone line cord into the modular jack on the right side of the terminal. Insert the other end of the line cord into a modular telephone wall jack, just as one would connect a telephone (see Figure 4). The modular plug may be inserted directly into the wall jack or by using a four-prong adapter (not included) for older four-prong jacks. For use in dial-up mode, the terminal must be changed to dial-up mode in setup (see the section entitled "Comms Setup" under "Local Functions" later in this manual for the procedure).



Figure 4

- 3. For wireless mode *only*, the line cord is not necessary. For use in wireless mode, the terminal must be changed to wireless mode in Setup (see the section entitled "Comms Setup" under "Local Functions" later in this manual for the procedure). When in wireless mode, the whip antenna should be fully extended. (Note: When the terminal is in wireless mode, a "Y"-shaped icon will appear in the upper left corner of the display.)
- 4. Before the terminal is used for the first time, the battery should be fully charged. To charge the battery, securely plug the charger cable into the charger (see Figure 5). Plug the charger cable into a standard 110-volt wall outlet. (Note: A car or truck "inverter" is not recommended, as it can damage the battery. For charging in a vehicle, an optional car charger may be ordered from LinkPoint International.) Plug the cord from the charger fully into the round port on the right side of the terminal. With the terminal turned off, fully charge the battery overnight before using the terminal for the first time. When charging, make sure all connections are secure and the bars in the battery icon in the upper left corner of the display screen are flashing from right to left. When charging the battery, leave the charger plugged in until the battery icon has three solid black bars and has stopped flashing. If the icon is still flashing after the battery has been charged overnight, the merchant should call the help desk. Note that the battery can be recharged before it has fully discharged, but it is best to "condition" the battery by fully charging it, using the terminal until the battery is fully discharged, then repeating this cycle several times. Also note that the battery can be charged while the terminal is turned on, but this is *not* recommended. The battery charges better with the terminal turned off.



Figure 5

5. When the terminal is turned on, it will display the message WAITING FOR DOWNLOAD unless an application has been pre-downloaded; in this case it will "boot up" to the SWIPE CARD idle screen.

Maintenance

The LinkPoint 9100 terminal does not need preventive maintenance. However, LinkPoint International does recommend periodic cleaning of the keypad, using a soft brush to remove any dust. Because the terminal can be damaged by liquids, do not spray liquid cleaners directly on the terminal. Always apply the cleaner to the cloth before cleaning the terminal. Only use cleaners that are safe for plastic. To avoid costly downtime, LinkPoint International also recommends protecting the terminal's charger with a surge protector while the battery is being charged.

Returning the Terminal for Service

LinkPoint International has both warranty and non-warranty LinkPoint 9100 services. Refer to your sales agreement for specific details on coverage. To repair or replace the LinkPoint 9100 terminal, contact LinkPoint International.

GENERAL FEATURES

Application Software Features

- This application supports retail credit card transactions. It also supports debit and EBT (electronic benefits transfer) transactions. Supported EBT transaction types are food sale, food return, food stamp balance inquiry, cash sale, cash balance inquiry, voucher sale, and voucher return.
- Offline ("store and forward") credit sales can be performed when there is no access to either a telephone line or a wireless signal. The offline sales can later be uploaded in either wireless or dial-up mode.
- New local functions include: a) view last five host responses ([F], [4], press [OK] to scroll back through the responses); b) view last five settled batches ([F], [5], [1], press [OK] to scroll back through the batch close responses).
- ♦ All transaction types have optional password protection, which is configurable in the merchant's Zontalk file.
- ◆ At the terminal level, debit and EBT transactions will have the item numbers 999, 998, 997, etc. Credit transactions will have the item numbers 001, 002, 003, etc. Maximum batch size is 300 transactions (total of any combination of online credit, offline credit, debit, and EBT).
- Track 2 data are always transmitted to the host on swiped transactions. If track 2 is damaged, the transaction will be rejected. The cardholder name is extracted from track 1 for printing on receipts, but it is not transmitted to the processing host.
- There is predial capability to reduce transaction time. This can be enabled or disabled selectively for each phone number (primary authorization, secondary authorization, primary close, secondary close, and download phone number) in the individual merchant Zontalk files.
- The [CLR] key can be used either as a backspace key to delete a key-in error, or to return to the previous menu.
- The terminal calendar automatically recognizes leap year.
- Account range fields are available to customize options for each card type via Zontalk downloads. The options are AVS, direct marketing (order number), purchasing card (customer code), tax, and card verification value (Visa's CVV2, MasterCard's CVC2, or AMEX's CID).
- There is an optional retail gratuity feature which can be used by retail businesses like beauty salons to add tips to retail transactions. This is configurable in the Zontalk file or in terminal setup.

- There is also an option to print a pre-sale gratuity receipt. This is not a sale transaction, but it allows the customer to write in the tip before the actual sale transaction with tip is performed. Pre-sale can be enabled or disabled in terminal setup or in the merchant's Zontalk file.
- The transaction types EBT Inquiry, EBT Cash Sale, Debit Cash Back, Debit Return, and Credit Return can be individually enabled or disabled either locally in terminal setup or in the merchant's Zontalk file.
- Sales Tax, Order Number (for direct marketing), AVS Only, and Customer Code exist as universal overrides which, when enabled, take precedence over these options if they are disabled within each account range option setting. These prompts can be enabled either locally in terminal setup, or in the merchant's Zontalk file.
- An Invoice Number prompt can be enabled or disabled globally either in terminal setup or in the Zontalk file.
- An operator ID prompt can be globally enabled or disabled in the merchant's Zontalk file or in terminal setup.
- ◆ The fraud control prompts, ENTER LAST 4 and ECHO CARD (display MSR), can be selectively enabled or disabled for each credit card transaction type (online sale, offline sale, credit return, authorize only, and ticket only) via the Zontalk file. ENTER LAST 4 and ECHO CARD can each be globally enabled or disabled for all credit card transactions via terminal Setup.
- The customer code field for MasterCard and Visa purchasing card transactions allows for entry of a maximum of 17 alphanumeric characters. This field is separate from the order number field.
- Merchant ID can be changed either in the merchant's Zontalk file or locally in Setup. The application does not allow the merchant ID to be changed when an open batch is present in the terminal. Additionally, the merchant ID is protected from unauthorized changes in setup by means of a secret code. This is a variable code that is date-dependent and is created by a password generator. The code can be obtained only from the service provider.
- Invalid batch sequence errors are resolved via the merchant calling his service provider help desk.

Hardware Features

The primary hardware components of the LinkPoint 9100 terminal are the display panel, the card reader, the keypad, the battery, the thermal printer, the smart card reader and an RS-232 interface. Their respective features are detailed below in the description of each component.

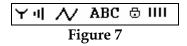
The Display Panel

During normal operation the LinkPoint 9100 graphics display has a 14-character by 4-line text display (see Figure 6). Each single character is 9 pixels wide by 16 pixels high. When required, a font allowing 16 or 20 characters across the display is used for numeric data only. Non-English fonts are also supported. The screen is backlit with a configurable timeout time. Display contrast is adjustable locally in setup, or in the merchant's Zontalk file.



Figure 6

Several context-sensitive icons located immediately above the graphics display are used to generate additional information for the user. These include, among others, the wireless mode icon, the "lightning bolt" battery charging icon, and the battery icon as shown in Figure 7 below.



From left to right, the meaning of each icon is as follows:

- **Antenna:** Indicates that the Motient wireless modem is connected and is functioning. (Note that this icon will display in wireless mode even when there is no wireless network coverage.) This icon appears when the terminal is in wireless mode, but not when it is in dialup mode.
- **Signal Strength:** Provides an approximate indication of the signal strength for the Motient modem. The more vertical bars displayed, the stronger the signal. One black bar = less than RSSI 10 [signal strength]; two bars = 10 to 24; three bars = 25 and above. The maximum number of bars that can be displayed is three. When no bars are displayed, this indicates that the signal is very weak or the terminal is out of network coverage. It is recommended that a wireless transaction not be attempted unless at least two bars are present (although transactions are often successful with one bar).
- **Lightning Bolt:** Displayed when the battery is being charged.
- **ABC:** Indicates that alphanumeric input is available.

- **Padlock:** Indicates that the terminal is locked and must be unlocked before it can be used. (Note: The "lock" feature is not available in the current application.)
- **Battery:** Indicates the approximate reservoir strength of the 9100 battery. The more bars, the stronger the battery. (The maximum number of bars is three when the battery is fully charged. When the battery is fully discharged, the icon will display as an empty rectangle and will begin flashing if a transaction is attempted.) When the unit is being charged and the lightning bolt appears, the battery bars will pulse in sequence from right to left.

The idle screen normally displays the date and time at the top, SWIPE CARD in the middle, and the names of the four yellow "soft" keys at the bottom. After a configurable period of time, this idle screen times out to the LinkPoint International logo. Zontalk includes a field to disable this time-out so that the terminal stays on the SWIPE CARD idle prompt indefinitely when the terminal is not being used. The three areas of the idle screen are Zontalk-configurable so that they can be replaced by text (such as advertising messages).

The LinkPoint International logo is contained in one of the application modules. It is not configurable via the merchant's Zontalk profile, but this logo can be replaced by writing a new application module with a new logo, then performing a remote application upgrade to load it into the terminal.

As described in detail later in this manual, the menu displays allow the user to make selections from a list of options. There are three basic menus, the main menu for transactions and the admin menu and special setup menu for local functions such as reports, review, setup, demo mode, and date and time.

The Card Reader

The LinkPoint 9100 terminal includes a dual track magnetic card reader (Figure 8), so the terminal can read both track 1 and track 2. The card reader reads the cardholder's account number, expiration date, name (track 1 only) and security data from the magnetic stripe on the back of all major credit and bankcards. Only track 2 data are transmitted to the processing host for credit, debit and EBT cards. The cardholder name is extracted from track 1 for printing on the receipt, but track 1 data are not transmitted to the host.



Figure 8

Note: When swiping the card (bi-directionally), face the magnetic stripe up and <u>away</u> from the keypad. The card must be positioned all the way to the back of the card reader while swiping it.

To begin an on-line credit card sale, the card can be swiped at the "SWIPE CARD" idle prompt or at the LinkPoint logo. To begin any other transaction type (such as credit return, debit sale, EBT cash sale, etc.), it is necessary first to choose the transaction type from the menus as explained later in this manual. The merchant Zontalk files have a field that allows the default card-swiped transaction type to be changed from on-line credit sale to debit sale or to EBT food sale, depending on the special requirements of the merchant.

The Keypad and Key Functions

Transactions are performed via the terminal's keypad (See Figure 9). The keypad allows the user to select transaction types and information.



Figure 9

As Figure 9 illustrates, the LinkPoint 9100 terminal keypad has 20 keys that can be used to select numbers or letters, choose functions, or enter data. During transactions, the number keys and the yellow "soft" keys are used to respond to prompts or to enter alphanumeric data.

In addition to the 20 keys, the terminal also has an on/off button in the upper right corner. To turn on the terminal, this button is pressed momentarily. To turn off the terminal, this button is depressed and held down for about seven seconds until the display goes blank.

The keypad is used for data input operations in the following ways:

- To access the transaction and batch main menu from the idle prompt, any one of several keys can be pressed, including the green [OK] key, the red [C] key, or the orange [CLR] key.
- To scroll through menus, the up or down arrow keys must be pressed. When a menu selection is highlighted, it can be selected by pressing the [OK] key. Menu options can also be selected by pressing their corresponding numbers on the keypad.

- The blue function key, which is labeled [F], is used to access the admin (local functions) menu. This menu includes such functions as reprint, review, report, setup, date and time, and so on.
- When numeric only input is required, the keys marked [1] through [9] and [0] are used for keying data, with the data appearing from the right hand side of the display.
- When alphanumeric input is required, the **ABC** icon will appear above the display. On the first press of a number key the appropriate digit will appear. If the same key is pressed again quickly (in less than two seconds), the first associated alpha character will appear. Quickly pressing the key again will cause the second associated alpha character to appear, and so on. Repeated pressing of the key will eventually result in the numeric digit reappearing on the display. For example, when the **ABC** icon is displayed, pressing the [2^{ABC}] key once will generate a "2." Quickly pressing the key again will generate the letter A and so on. To make another letter using the same key, it is necessary to wait two seconds before pressing the key again.
- Pressing the 0 (zero) key repetitively while in alphanumeric input mode will allow access, in turn, to each of the characters shown below:

- The green [OK] key, which is labeled OK, acts as the [ENTER] key. When it is pressed, the next input request is prompted.
- The orange clear key, which is labeled [CLR], deletes the last character entered when it is pressed once. If the [CLR] key is held down for more than two seconds, all the information on the current input line will be cleared. If [CLR] is pressed while no data are present, the transaction or local function will be terminated and the terminal will "step back" to the previous menu.
- The red cancel key, which is labeled [C], exits the current input function and aborts the current operation. Either the transaction or the local function will be terminated. In most cases, pressing [C] will return the terminal to the idle prompt (in some cases it will "step back" to the previous menu).
- Where appropriate, the four yellow soft keys below the display are used. For example, when the user is changing the value of a local function in setup, the terminal will ask for confirmation of the change, prompting the user to press either YES or NO. The left-most yellow soft key selects YES, while the right-most soft key selects NO.
- Pressing and holding the [0] (zero) key from the idle prompt will cause the printer to feed paper until the [0] key is released.
- The key "beep" can be enabled or disabled by means of a field in Zontalk.

The Battery

The main (nickel-metal hydride) battery in the terminal is located above the printer inside the printer module. The battery can be accessed by opening a quick-release door on the right side of the terminal. This door is located below the telephone jack and the charger port. The battery has a "tag" on the end which can be used to pull it out. If the battery must be replaced, always turn off the terminal before removing the battery! Removing the battery while the terminal is on can cause a programming error that will render the terminal inoperable.

The main battery has a unique "cartridge" design consisting of a sealed unit containing four AA-sized nickel-metal hydride cells. The nominal battery pack voltage is 4.8 volts, but the actual voltage ranges from about 5.5 volts maximum, down to 4.0 volts when the battery is completely discharged. The battery pack has a total capacity of 1450 mAh.

The battery pack contains a polyswitch that provides short-circuit and over-current protection for the battery. Once the short-circuit or over-current condition has ended, the polyswitch will reconnect (but the battery will lose some of its efficiency if this happens).

A battery icon in the upper right corner indicates the approximate state of charge of the nickel metal hydride battery. This icon consists of a rectangle with up to three black bars in it. Three bars indicate maximum charge, while no bars indicates that the battery is almost or completely discharged. When the icon has no bars in it and begins to flash, the battery is totally discharged. For instructions on the correct procedure for charging and conditioning the battery, please see "Installation" above.

Under normal conditions, a fully charged battery that has been properly conditioned can yield as many as 120 transactions with receipts. During the last ten or twenty transactions before complete discharge, a LOW BATTERY warning will appear. More transactions can be done at this point, but the battery should be fully recharged as soon as practicable.

The terminal also contains a permanent lithium battery which can be accessed only by removing the printer/battery module. The operator should *not* attempt to replace this battery.

To help conserve battery power, the terminal has an activity timer. If there is no activity on the terminal for the defined interval, it will automatically power down. It can be powered up again by simply pressing the on/off button. The activity time-out time is adjustable via a field (#1192) in the merchant's Zontalk file. (Note: The factory default setting is 60 minutes. If this value is changed by changing Field 1192 in the merchant's Zontalk file, a configuration download must be performed, then the terminal must be hard-booted by powering it down and up.)

The Thermal Printer

The thermal printer is contained in a module that is attached to the bottom of the terminal. The printer uses standard financial-quality thermal paper. The paper is 2 and one-fourth inches wide and can be up to one and seven-eighths inches in diameter (when the large printer door is used—please see "Installation" earlier in this manual). The printer prints eight lines per second, and has a "clam shell" design for quick and easy paper replacement (see "Installation" for detailed instructions about replacing the paper).

The rectangular space on the front of the printer module has the LinkPoint International logo, but this space is slightly recessed so that a sticker with a custom logo can be placed on top of the LinkPoint logo if desired.

The printer can be disabled or enabled via either Zontalk or local Setup in the terminal. The number of customer copies of the receipt can also be set in Zontalk or Setup, to as few as zero or as many as nine copies. Customer copies mask all but the last four digits of the account number and do not print the expiration date, in accordance with new regulations in California and several other states. Additionally, only the merchant copy has a signature line; the customer copy does not.

The Smart Card Reader

The smart card reader is an optional feature. When present, it is located on the right side of the terminal near the top of the unit. The LinkPoint 9100 supports up to four SAM smart card modules, as well as a full-sized customer smart card.

The RS-232 Interface

An RS-232 interface on the back of the terminal allows it to be direct-downloaded. It also allows the terminal to connect to peripherals such as barcode readers, check readers, etc.

LinkPoint 9100 Specifications

Accessories Available Spare battery pack, leather case, car charger.

Battery Single removable, rechargeable battery pack, which

contains four nickel-metal hydride cells.

Battery pack has 4.8 volts, 1300 mAH nominal.

A fully charged and conditioned battery will perform at least 80 transactions run one right after the other, and may perform as many as 120.

The lithium backup battery protects stored software and data for a minimum of 3 years.

Battery Charger Operates at 110 volts and 60 Hz.

Charging time of a discharged battery is approximately four hours under normal conditions. Fast charging lasts about 2.5 hours and takes the battery to about 80 percent of capacity. After this slow charging takes an additional 1.5 hours to bring the battery to 100 percent.

Optional car charger is available.

Card Reader Track 1 and track 2, bi-directional ISO 7811 magnetic stripe card reader.

Both tracks are read simultaneously, but only track 2 data are sent to the processing host in the FDC Omaha application. Cardholder's name from track 1 is printed on the receipt.

Minimum reader head life is 1x10⁵ swipes.

Swipe speed range 15 cm/sec to 100 cm/sec.

Terminal has the capability for factory addition of a track 1, 2 and 3 head reader and decoder at extra cost.

Communications Module

Wireless communication occurs via a Research in Motion (RIM) R802D modem.

The wireless modem has a whip antenna that may be used in either raised or lowered position (but performance will be improved in the raised position).

The wireless modem operates in the 800-900 MHz band.

The wireless modem operates at up to 19.2 Kbps.

The dialup modem allows connection through a PSTN (public switched telephone network) to the processing host.

The dialup modem supports asynchronous connection. Limited support for synchronous may be provided.

The dialup modem operates at speeds up to 2400 baud, offering V.21 and V.22 bis.

The dialup modem has an RJ11 connector that allows connection to standard telephone cords.

The dialup and wireless modems cannot operate simultaneously.

Display LCD (Liquid Crystal Display).

High contrast resolution 128 x 64 pixels.

Default font offers 14 columns by 4 lines.

Full graphics capability.

21 columns by 8 lines and 16 columns by 5 lines are also available.

Capable of displaying character bit maps.

Backlit.

Readable over the terminal's full operational temperature range, unless the LCD is exposed to direct sunlight.

Keypad 20-key alphanumeric keypad plus on/off button.

Keys include alphanumeric (white on black); C (Cancel) (white on red); F (Function to select merchant functions) (white on blue); OK (to confirm entry of data) (white on green); CLR (Clear to backspace or step back to previous menu) (white on orange); four software-assignable "soft" function keys below the LCD (yellow); up and down arrow key (scroll) (white on black).

Audio feedback tone (short tone for valid key entry, longer tone for invalid key entry).

All keys have tactile feedback and are software debounced by at least 20 ms delay.

Keypad life exceeds 1x106 operations per key.

Keys are backlit when the LCD is backlit.

The "1" key also allows entry of a space in any field in which alphanumerics are permitted.

The "0" key also allows entry of the following special characters:

$$0.,'-:()!@#$%&*+=/?$$

LED Indicator A red/green/amber LED indicator is located between the F and C keys. It flashes when certain kinds of invalid operations are attempted (such as attempting to scroll farther than the last transaction in a batch review).

Memory 2 megabytes of flash memory for application and data storage, inclusive of the BIOS and bootloader.
512 kilobytes of battery-backed SRAM for data storage.

Operating Environment Operating temperature range is between 32 and 104 degrees F (0 to 40 degrees C).

> Storage temperature range is between 14 and 158 degrees F (-10 to 70 degrees C).

> Relative humidity is up to 85 percent non-condensing at 104 degrees F (40 degrees C).

Physical 3.1 in. (78 mm) H x 2.9 in. (74 mm) W x 8.07 inc. (205 mm) L, 1.31 lb. (595 g).

PIN Pad Secure design capable of secure PIN capture. Dedicated ID-000 slot for cryptographic coprocessor for ultra-fast public key processing.

Printer

Thermal with "clam shell" design with integral paper roll holder.

Translucent paper door.

Paper width is 57 mm (approximately 2.25").

Maximum paper roll diameter (total diameter including the core) is one and seven-eighths inches.

Resolution is 384 dots/line minimum.

Print speed is at least 15 mm/sec (8 lines per second) for typical receipt printing.

Printer life exceeds 50 kilometers (31 miles) of paper. Paper must be rolled with the thermal side outside and facing the front of the terminal.

SAMs (Security Access Modules) The terminal can be upgraded to support manufacturer-Up to four ID-000 SAM cards approved SAMs. internally on a removable expansion board.

Security

Tamper detection to erase sensitive data in memory if the secure part of the unit is opened.

Warning: An excessive impact such as that caused by dropping the terminal may open a tamper switch and render the terminal inoperable.

Tamper evidence to indicate that a unit has been opened.

Secure key scanning to minimize the possibility of directly intercepting the keypad signals.

Software implementation of DES encryption algorithms in the BIOS.

Secure application download to prevent loading of unauthorized applications.

Serial Port Dual RS-232 serial port allows direct PC-to-terminal download, barcode readers, check readers, etc.

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The serial port complies with RS 232-E electrical characteristics.

The communications speeds supported by the serial port are 1200, 2400, 4800, 9600, 19200 bps, 7 or 8 bits, odd, even or no parity, 1 or 2 stop bits.

The default setting is 9600 baud, 8 bits, no parity and 1 stop bit.

Smart Cards The terminal can be upgraded to support smart cards. This requires addition of a smart card board and manufacturer-approved smart card reader.

Standards FCC Rules and Regulations, Part 15, FCC Rules and Regulations, Part 2 (SAR and Transmitter), FCC Rules and Regulations, Part 90 (Transmitter), FCC Rules and Regulations, Part 68, CSA C.22 No 950/UL 1950. ISO 7816 1-3: EMV'96 V 3.1.1, EN 50082-1:1992, EN 55022: 1994, EN 60950.

Systems Engineering

The terminal will respond to user input within one second.

The system has the capability to support multiple applications within the application manager (AppMan).

Warranty Standard 12-month warranty.

If the terminal does not have an application already loaded into it, the application can only be downloaded by means of a direct PC-to-terminal download, as described below. Once an application has been direct-downloaded and the terminal has been deployed, the application *can* be upgraded remotely via a dial-up telephone connection. This means that application modules ("applets") can be replaced with newer versions by means of a remote download. Additionally, a configuration (parameter) download can be performed remotely.

After a direct full download has been performed, the terminal should be encrypted and then given a configuration download to load the merchant-specific parameters. If this last step is not performed, the terminal will still have the "default" test parameters that are loaded into its memory as part of the direct full download (the terminal will appear to be functional, but it will not be able to perform live transactions until it has been downloaded with the merchant's parameters including merchant ID number).

The procedures below are described in the order they would normally be performed: (1) direct full download; (2) encryption (Master/Session and DUKPT); (3) configuration download. Additionally, for software upgrades after the terminal has been deployed, the application upgrade is described.

Direct Full Download (PC-to-Terminal)

<u>Caution</u>: This procedure will erase the old application <u>and</u> the encryption keys before it loads the new application!

TERMINAL DISPLAY OPERATOR ACTION

IDLE PROMPT POWER THE TERMINAL DOWN

POWER THE TERMINAL BACK UP WHILE HOLDING DOWN THE 1 KEY

BOOT V3.11 K78-204

ENTER SECURITY

CODE: KEY 411412 PRESS [OK] KEY

BOOT V3.11 S1 NEXT MENU 1. LOAD CONFIG 2. BOOT LOADER 3. REBOOT

SELECT OPTION: PRESS 2 KEY

(1) LOAD AT 19200 (2) LOAD AT 38400 LOAD AT 19200 IN ## S

[SECONDS] PRESS 1 KEY

WAITING ## [SECONDS] WAITING FOR DOWNLOAD

PLUG THE DOWNLOAD CABLE INTO THE RS-232 PORT ON THE BACK OF EACH TERMINAL AND INTO PORT ON THE MULTIPLE DOWNLOAD "BRUMBY BOX"

<u>OR</u> INTO COM PORT ON PC

PLUG A CHARGER INTO EACH TERMINAL

START DOWNLOAD ON PC AS FOLLOWS:

DLL PC DISPLAY ACTION

(PC DISPLAY)

GO INTO DOS MODE ON THE DOWNLOAD PC AND CHANGE DIRECTORIES TO THE

9100 APPLICATION TO BE DOWNLOADED.

TYPE NAME OF DLL BATCH FILE ON THE PC AND ENTER

(VARIOUS INFORMATION DISPLAYED ON DLL PC) PRESS ANY KEY TO

CONTINUE

PRESS ENTER ON THE PC
WAIT UNTIL DOWNLOAD STARTS—THIS MAY TAKE A COUPLE OF MINUTES

DOWNLOADING

APPMAN.HEX, ETC. WAIT UNTIL THE PC PROMPTS FOR SERIAL NUMBER

ENTER SERIAL NUMBER

FOR CHANNEL (#): ON THE PC, TYPE THE SERIAL NUMBER FROM THE LABEL ON THE BACK OF

THE TERMINAL AND PRESS ENTER ON THE PC.

WAIT FOR DLL TO CONTINUE.

(DLL CONTINUES...) WAIT ABOUT 15 MINUTES FOR DLL TO COMPLETE

PINPADS SUCCESSFULLY LOADED FOR CHANNELS (PORT #S DISPLAYED) PRESS ANY KEY TO

CONTINUE.. PRESS ENTER ON THE PC

IF NECESSARY, REPEAT ABOVE PROCEDURE TO DOWNLOAD MORE TERMINALS

OF

EXIT DOS MODE ON THE PC

TERMINAL DISPLAY ACTION

LOADING PRESS ORANGE [CLR] KEY ON THE TERMINAL

REBOOTING... WAIT FOR TERMINAL TO REBOOT AND INITIALIZE

IDLE PROMPT

Important: The terminal must be allowed to reboot, initialize, and go to the idle prompt ("Swipe Card" or

"LinkPoint"). If it is powered off before this, the flash memory will be corrupted.

After completing the download, go into AppMan to verify that the correct current version number of each application "applet" has been downloaded. See procedure for doing this under "Special Setup Functions / Application Manager" in this manual.

Important: The terminal must now be encrypted and given a configuration download before it can be

deployed!

Master/Session Key Encryption

<u>DISPLAY</u> <u>ACTION</u>

IDLE PROMPT POWER THE TERMINAL DOWN

POWER THE TERMINAL BACK UP WHILE HOLDING DOWN THE ORANGE [CLR] KEY

IDLE PROMPT PRESS THE BLUE [F] KEY

APPMAN V2.13C 1 TERMINAL SETUP 2 S/W MAINTENANCE 3 APPLICATION SETUP

4 VERSION NUMBERS PRESS 3 KEY = APPLICATION SETUP

APPLICATION SETUP 1 FILE SYSTEM 2 SRVTRN78LINKPOINT

3 KEY MANAGEMENT PRESS 3 KEY = KEY MANAGEMENT

ENCRYPTION

IS NOT ENABLED

EDIT OK PRESS EDIT KEY

[ENCRYPTION]
1 DUKPT
2 MASTER SESS

3 CHECK PRESS 2 KEY = MASTER SESS

MASTER/SESSION 1 MKIXOR 2 MASTER KEY

3 WORKING KEY PRESS 1 KEY = MKIXOR AND DOWNLOAD THE KEY VIA SECURE KEYLOADER PC

<u>OR</u>

PRESS 2 KEY = MASTER KEY AND ENTER THE THREE KEY PARTS MANUALLY

VERIFY THE CHECKSUM PRESS THE [OK] KEY

PRESS 3 KEY = WORKING KEY AND ENTER THE WORKING KEY MANUALLY

VERIFY THE CHECKSUM PRESS THE OK KEY

IDLE PROMPT POWER THE TERMINAL DOWN

The terminal <u>must</u> be powered down after this procedure to exit the application manager!

DUKPT Key Encryption

<u>DISPLAY</u> <u>ACTION</u>

IDLE PROMPT POWER THE TERMINAL DOWN

POWER THE TERMINAL BACK UP WHILE HOLDING DOWN THE ORANGE [CLR] KEY

IDLE PROMPT PRESS THE BLUE [F] KEY

APPMAN V2.13C 1 TERMINAL SETUP 2 S/W MAINTENANCE 3 APPLICATION SETUP

4 VERSION NUMBERS PRESS 3 KEY = APPLICATION SETUP

APPLICATION SETUP 1 FILE SYSTEM 2 SRVTRN78LINKPOINT

3 KEY MANAGEMENT PRESS 3 KEY = KEY MANAGEMENT

ENCRYPTION IS NOT ENABLED

EDIT OK PRESS EDIT KEY

[ENCRYPTION] 1 DUKPT 2 MASTER SESS

3 CHECK PRESS 1 KEY = DUKPT AND DOWNLOAD THE KEY VIA SECURE KEYLOADER PC

The terminal <u>must</u> be powered down after this procedure to exit the application manager!

Configuration (Parameter) Download

This loads the merchant parameters such as business name and merchant ID into terminal. This download requires a PC with Zontalk that has been set up with the files for the LP 9100 FDC Omaha application. For a remote configuration download, a telephone cord must be plugged into the terminal. For a direct PC-to-terminal download, a download cable must be connected from the Com 1 port on the PC to the RS-232 port on the back of the terminal.

DISPLAY ACTION

IDLE PROMPT PRESS THE BLUE [F] KEY

ADMIN MENU 1 REPRINT 2 REVIEW

3 REPORT PRESS 6 KEY = SETUP

SETUP

ENTER PASSWORD KEY PASSWORD (1234)

PRESS [OK] KEY

SETUP 1 PRINTER 2 BACKLIGHT

3 CONTRAST PRESS 4 KEY = COMMS

HOSTS

1 COMMS TYPE 2 WIRELESS 3 DIAL-LIP

3 DIAL-UP PRESS 1 KEY = COMMS TYPE

COMMS TYPE [TYPE DISPLAYED] CHANGE ?

YES NO IF WIRELESS, PRESS YES KEY TO CHANGE TYPE TO "PHONE"

OR

IF PHONE ALREADY DISPLAYED, PRESS NO KEY

HOSTS

1 COMMS TYPE 2 WIRELESS

3 DIAL-UP PRESS 4 KEY = CONFIG

CONFIG HOST 1 HOST PHONE

2 TERMINAL ID PRESS 1 KEY = HOST PHONE

CONFIG PRIMARY [PHONE # DISPLAYED] CHANGE ?

YES NO IF NECESSARY, PRESS YES KEY AND ENTER CORRECT ZONTALK PHONE NUMBER

PRESS [OK] KEY

<u>OR</u>

PRESS NO KEY IF # CORRECT

CONFIG HOST 1 HOST PHONE

2 TERMINAL ID PRESS 2 KEY = TERMINAL ID

CONFIG TERM ID ID: [ZONTALK ID # DISPLAYED] CHANGE ?

YES NO IF NECESSARY, PRESS YES KEY AND ENTER CORRECT ZONTALK FILE NUMBER

PRESS [OK] KEY

<u>OR</u>

PRESS NO KEY IF # CORRECT

CONFIG HOST 1 HOST PHONE

2 TERMINAL ID PRESS ORANGE [CLR] KEY TWICE TO RETURN TO SETUP MENU

SETUP 1 PRINTER 2 BACKLIGHT

3 CONTRAST PRESS 5 KEY = CONFIG LOAD

CONFIG TERM ID ID: [# DISPLAYED]

CHANGE ?

YFS NO VERIFY ZONTALK ID

PRESS NO KEY IF ID # IS OK

CONFIG TERM ID START LOAD CONFIRM?

PRESS YES KEY TO START THE CONFIG LOAD

ZONTALK DOWNLOAD [DOWNLOAD INFO

DISPLAYED] IF PERFORMING A REMOTE DIAL-UP DOWNLOAD, WAIT FOR CONFIG LOAD TO

START

OR

IF PERFORMING A DIRECT PC-TO-TERMINAL DOWNLOAD, PRESS THE 0 KEY AT

THIS PROMPT; THEN WAIT FOR THE CONFIG LOAD TO START

CONFIG LOAD CONNECTING PLEASE WAIT...

CONFIG LOAD

PLEASE WAIT (TEN DASHES WILL DISPLAY: MAKE SURE ALL TEN DASHES ARE REPLACED BY

STARS AS THE DOWNLOAD FINISHES)

DISCONNECTING (WAIT UNTIL TERMINAL REBOOTS AND INITIALIZES)

IDLE PROMPT

Application Upgrade

This loads the latest versions of the application modules ("applets") into the terminal. This download requires a PC with Zontalk that has been set up with the files for the LP 9100 FDC Omaha application. For a remote application upgrade, a telephone cord must be plugged into the terminal. For a direct PC-toterminal download, a download cable must be connected from the Com 1 port on the PC to the RS-232 port on the back of the terminal.

Important! Always close an open batch before doing an application upgrade. Always do a configuration load after the application upgrade!

Important Note: If a new version of the Keymanager applet is loaded into a terminal during an application upgrade, it will disable debit and EBT in the terminal. If terminals in the field are being remotely upgraded, the Keymanager applet should not be included in the list in the master download file (K78_lp_s.dld) when upgrading terminals that currently support debit or EBT!

DISPLAY

IDLE PROMPT PRESS THE BLUE [F] KEY

ADMIN MENU 1 REPRINT 2 REVIEW

PRESS 6 KEY = SETUP 3 REPORT

SFTUP

ENTER PASSWORD KEY PASSWORD (1234)

PRESS OK KEY

SETUP 1 PRINTER 2 BACKLIGHT

PRESS 4 KEY = COMMS 3 CONTRAST

HOSTS

1 COMMS TYPE 2 WIRELESS

PRESS 1 KEY = COMMS TYPE 3 DIAI -UP

COMMS TYPE

[TYPE DISPLAYED] CHANGE ?

NO IF WIRELESS, PRESS YES KEY TO CHANGE TYPE TO "PHONE"

IF PHONE, PRESS NO KEY

HOSTS

1 COMMS TYPE 2 WIRELESS

3 DIAL-UP PRESS 4 KEY = CONFIG

CONFIG HOST 1 HOST PHONE

2 TERMINAL ID PRESS 1 KEY = HOST PHONE

CONFIG PRIMARY [PHONE # DISPLAYED] CHANGE ?

YES

NO IF NECESSARY, PRESS YES KEY AND ENTER CORRECT ZONTALK PHONE NUMBER

PRESS [OK] KEY

OR

PRESS NO KEY IF # CORRECT

CONFIG HOST 1 HOST PHONE

2 TERMINAL ID PRESS ORANGE [CLR] KEY TWICE TO RETURN TO SETUP MENU

SETUP 1 PRINTER 2 BACKLIGHT

3 CONTRAST PRESS 6 KEY = APP UPGRADE

APP UPGRADE START UPGRADE CONFIRM?

PRESS YES KEY TO START

ZONTALK DOWNLOAD IDOWNLOAD INFO DISPLAYED]

IF PERFORMING A REMOTE DIAL-UP DOWNLOAD, WAIT FOR DOWNLOAD TO

START OR

IF PERFORMING A DIRECT PC-TO-TERMINAL DOWNLOAD, PRESS THE 0 KEY AT

THIS PROMPT; THEN WAIT FOR THE DOWNLOAD TO START

SOFTWARE LOAD CONNECTING PLEASE WAIT...

SOFTWARE LOAD **RECEIVING**

PLEASE WAIT... (WAIT FOR DOWNLOAD TO COMPLETE)

Notes: After a brief initial download of the master download file, the terminal will dial Zontalk again for each "applet" that needs to be loaded.

If the terminal already has all the latest versions of "applets," the terminal will not dial Zontalk again after the initial download.

Wait until the terminal has finished loading all "applets." (When it is finished, it will automatically reboot and return to the idle prompt.)

Perform a configuration load to reload the merchant parameters!

DOWNLOAD PARAMETERS AND OPTIONS

Download parameters are used for programming or updating a terminal's profile. These parameters may be added or modified through the standard Zontalk Edit procedures. As mentioned in the previous section, merchant-specific information may be downloaded remotely into the terminal by means of a configuration download. The following list contains the available Zontalk parameters (sometimes referred to as memory locations) for the FDC Omaha Retail application.

The table is organized into five columns:

"Parameter" has the Terminal Definition File (TDF) field number. If a parameter field number is in **bold type** in the table below, this means it should probably be included in the individual merchants' Zontalk files.

Other fields which normally have the same value regardless of the individual merchant should probably *not* be included in the Zontalk files, because they would confuse the order processing personnel who have to build these files. These fields are shown in normal text (not bold type) in the tables below. An example of a field that would *not* need to be included in the individual files would be 1107, "Swipe Default Enabled on Idle Screen," because all merchants normally want to be able to swipe a card at the idle prompt. If a merchant does have an unusual need that requires changing one of these fields, it can always be added to the merchant's Zontalk file.

"Field Type" indicates whether the field is numeric, question, phone, etc., according to the Field Type Codes shown below:

```
N = numeric
Q = question, Y or N
P = phone number field (0-9, A-Z, -, *, #, semicolon, comma, and space)
X = alphanumeric
B = binary (0 = no, 1=yes)
S = custom characters (for example, hexadecimal only)
```

"Field Length" indicates the allowed number of characters. If the number is followed by a comma plus a second number, the second number indicates the minimum number of characters allowed in the field. For example, Field 1111, debit working key, has a length of "16, 16." This means that 16 characters are allowed, but no fewer than 16 characters.

"Description of Field and Comments" indicates the purpose of the field, with any comments in parentheses.

"Default Value" indicates the default setting of each field. This is the value that will be loaded into the terminal during a direct full download. Note that this is <u>not</u> necessarily what the value "should" be for practical purposes! It is only the value that will be stored in each field after a full direct download or after deleting the configuration parameters. Some of these "default" settings are <u>NOT</u> appropriate for use with live merchants (for example, see the default receipt header lines or the merchant ID). Before a

terminal is deployed to a merchant, these settings <u>MUST</u> be replaced with merchant-specific data by means of a configuration (parameter) download!

Note: In the table below the complete set of individual card range fields is listed only for the <u>first</u> card range (MasterCard Purchase Card). To save space, these fields are not listed for the remaining card ranges; they are only summarized. However, the fields for the remaining ranges all follow the same format as MasterCard Purchase Card, so the MasterCard Purchase Card fields can be used as a guide. To see the individual fields for all the other card ranges, please refer to the Terminal Definition File (TDF) in Zontalk.

The only card range fields that should normally be included in the individual merchants' Zontalk files are the "flags" to enable or disable each card type (for example, see Field 61005).

Important Note: Except for the receipt header and trailer line fields, fields must NOT be left blank in a Zontalk file, unless the table below shows that their default value is [Blank]. Including other fields in a Zontalk file and then leaving them blank will cause the terminal to lock up on an Application Error!

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
1102	Q	1	"Backlight Enabled" (Y or N)	Υ
1106	N	3,3	"Backlight Timeout Seconds (Max 255)"	030
1107	Q	1	"Swipe Default Enabled On Idle Screen" (Y or N; if set to Y, allows a card to be swiped to start a transaction from the idle prompt)	Y
1108	N	4,4	"Swipe Default Txn Tbl" (Credit sale = 2000; debit sale = 2160; EBT food sale = 2340. Determines the type of transaction initiated by a card swipe at the idle prompt.)	2000 [for credit sale]
1110	Q	1	"Key Clicks Enabled (Yes/No)" (Y or N; if enabled, keys "beep" when pressed)	Y
1111	S [Hex Chars]	16,16	"Encrypted Session Key" (debit working key; only hex characters are allowed: 0123456789ABCDEF)	[Blank]
1114	Q	1	"Enable Load New Session Key from Zontalk" (Y or N)	N
1131	X	14,14	"Idle Screen: Area B" (custom idle prompt for second line of display; this parameter can be changed to override the "SWIPE CARD" default display)	SWIPE CARD
1132	Х	21,21	"Idle Screen: Area A" (custom idle prompt for top line of display; this parameter overrides the date/time	[Blank]

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			display)	
1150	Q	1	"Enable Customer Code Prompt: Y or N" (When enabled, this flag serves as an override for all card types to the purchasing card option. It activates the Level 2 Purchasing Card prompt Customer Code. Note that the Sales Tax prompt must be activated separately, in Field 1166.)	N
1152	N	5	"Debit Surcharge Amt (Cents) 0 = No surcharge" (This applies to debit sale only OR to debit sale with cashback. Value is in cents, e.g., 50 = .50¢ / 1000 = \$10.00; max 99999 = \$999.99.)	000
1154	Q	1	"EBT Balance Inquiry Enabled" (Y or N)	Y
1156	Q	1	"Enable EBT Cash Sale Y or N"	Υ
1158	Q	1	"Debit Return Enabled" (Y or N)	Υ
1160	Q	1	"Credit Return Enabled" (Y or N)	Υ
1162	Q	1	"Military Time Format Enabled" (Y or N) (if Y, time displayed on idle prompt is in 24-hour military format)	N
1164	Q	1	"Invoice Number Prompts Enabled" (Y or N)	N
1166	Q	1	"Sales Tax Prompts Enabled" (Y or N)	N
1168	Q	1	"Order Number Prompt Enabled" (Y or N; direct marketing prompt)	N
1170	Q	1	"Cashback on Debit Enabled" (Y or N)	N
1172	Q	1	"PreSale Enabled" (Y or N; this is not a transaction—this feature allows printing of a presale receipt with gratuity line so customer can add a tip before the actual sale is done)	Y
1174	Q	1	"AVS Global Prompt Enabled" (Y or N. When enabled, this flag serves as an override for all card types to the AVS option within the account ranges options. It activates prompts for street address and zip code only.)	N
1176	Q	1	"Wireless Enabled on Power Up: Y or N" (if set to Y, terminal will always go into wireless mode after powering up; if set to N, terminal	N

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			will always go into dialup mode	
	_		after powering up)	
1178	Q	1	"PrePrint Receipt Enabled" (Y or N)	N
1180	S [DM]	1	"Dukpt or Master/Session Key Management (D or M)"	M
1182	Q	1	"Global Operator ID Prompt Enabled" (Y or N; max length of Operator ID is four numeric characters)	N
1184	Q	1	"Print Full Receipt during Offline Uploads" (Y or N; non-functional in current software)	N
1186	Q	1	"Global Tip Prompt Enabled" (Y or N)	N
1188	Q	1	"Global CVV2 Prompt Enabled" (Y or N; applies to VISA CVV2, MasterCard CVC2, and AMEX CID; if set to Y, will prompt for the Card Verification Value on every manually keyed Visa, MC and AMEX credit sale)	N
1190	N	3,3	"Idle -> Sleep Screen Timeout (in mins - 0=never" (from the "SWIPE CARD" prompt, time in minutes before terminal returns to the "LinkPoint" logo; 000 = never times out to the logo)	2
1192	N	4	"Inactivity PowerDown Timeout in Seconds, 0 = no auto power-down" (time before terminal turns itself off if no keys are pressed—in seconds; 1 to 299 is same as 300 seconds [5 minutes]; max 9999 seconds [167 minutes]; 0 = never powers down automatically) (Note: If a config download is performed to change this setting, the terminal must be hard-booted—powered down and up—after the download in order for the change to take effect.)	3600
1201	P	10	"Dial Prefix" (prefix such as a PABX access code; blank = no prefix)	[Blank]
1202	Q	1	"Wait for Dial Tone" (Y or N)	Υ
1203	S [TP]	1	"Tone or Pulse Dialing (T or P)"	T
1252	X	10,1	"Default Config Terminal ID" (for Zontalk parameter download;	00000001 [Must be changed

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			normally this will be the merchant's CAN file #)	before doing a config load]
1351	N	1	"Number of Duplicate Receipts" (number of customer copies of receipt: 0 minimum to 9 maximum; if set to 0, merchant copy will still print, but no customer copy will print)	1
1352	N	1	"Receipt Start Line Feeds"	2
1358	Х	29	"Receipt Header L1: Text"	RETAIL STORE [This and the other "default" receipt header lines MUST be changed in the individual merchant files]
1359	Х	29	"Receipt Header L2: Text"	CROSSROADS MEGA-MALL
1360	Χ	29	"Receipt Header L3: Text"	123 MAIN ST.
1361	X	29	"Receipt Header L4: Text"	ANYWHERE, USA 12345
1362	N	1	"Receipt Header: Line Feeds"	1
1366	N	1	"Gratuity: Line Feeds"	1
1370	N	1	"Signature: Line Feeds"	2
1371	X	29	"Receipt Trailer L1" (below flex lines)	Thanks for shopping here
1372	X	29	"Receipt Trailer L2" (below flex lines)	Please come again!
1373	Х	29	"Receipt Trailer L3" (below flex lines)	[Blank]
1374	X	29	"Receipt Trailer L4" (below flex lines)	[Blank]
1375	N	1	"Receipt End Line Feeds"	7
1379	Х	29	"Receipt Header L5: Text"	PHONE: (XXX) XXX- XXXX
1380	X	29	"Receipt Header L6: Text"	FAX: (XXX) XXX- XXXX
1381	X	29	"Customer Agreement L1" (flex agreement) (below signature line)	I agree to pay the above
1382	Х	29	"Customer Agreement L2" (flex agreement) (below signature line)	according to card issuer
1383	Х	29	"Customer Agreement L3" (flex agreement) (below signature line)	agreement
1384	Х	29	"Customer Agreement L4" (flex agreement) (below signature line)	(merch. agreement if return)
1462	N	8	"Menu Password" (manager password)	1234

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
1463	Q	1	"Hot Keys Enabled" (if set to Y,	Υ
			menu options can be accessed by	
			pressing the corresponding numeric	
1464	N	2	keys) "Idle Timeout Period (Seconds)"	60
1404	IN	2	(time before terminal returns to idle	00
			prompt when any menu is being	
			displayed, but no key is pressed;	
			minimum 1 second, maximum 99	
			seconds; if set to 00, terminal never	
			times out)	
1558	N	3	"Max Transactions in Batch (Max	300
			300)" (number of items in batch; 500	
			is the maximum for FDC Omaha	
			host, but the recommended limit for this application is 300)	
2015	S	1	"Credit Sale: Fraud Control 0:None	0
	[3210]	-	1:Last4 2:MSR 3:Both"	v
2055	S	1	"Ticket Only: Fraud Control 0:None	0
			1:Last4 2:MSR 3:Both"	
2075	S	1	"Credit Return: Fraud Control	0
			0:None	
2005	-		1:Last4 2:MSR 3:Both"	2
2095	S	1	"Auth Only: Fraud Control 0:None 1:Last4 2:MSR 3:Both"	0
2495	S	1	"Offline Sale: Fraud Control 0:None	0
2193	5	1	1:Last4 2:MSR 3:Both"	O
3221	Q	1	"CREDIT RETURN Password Y	
			Required" (Y or N)	
3231	Q	1	"VOID Password Required" (Y or N)	Υ
3241	Q	1	"AUTH ONLY Password Required"	N
2254	0	4	(Y or N)	N.T.
3251	Q	1	"TICKET ONLY Password Required" (Y or N)	N
3311	Q	1	"ONLINE CREDIT SALE Password	N
3311	Q	1	Required" (Y or N)	11
3321	Q	1	"OFFLINE CREDIT SALE Password	N
	~		Required" (Y or N)	
3411	Q	1	"DEBIT SALE Password Required"	N
			(Y or N)	
3421	Q	1	"DEBIT RETURN Password	Υ
0011			Required" (Y or N)	NT.
3611	Q	1	"EBT FOOD SALE Password	N
3621	Q	1	Required" (Y or N) "EBT FOOD RETURN Password	N
3021	Q	1	Required" (Y or N)	1 N
3631	Q	1	"EBT FOOD BALANCE Password	N

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			Required" (Y or N)	
3641	Q	1	"EBT CASH SALE Password Required" (Y or N)	N
3651	Q	1	"EBT CASH BALANCE Password Required" (Y or N)	N
3661	Q	1	"EBT VOUCHER SALE Password Required" (Y or N)	N
3671	Q	1	"EBT VOUCHER RETURN Password Required" (Y or N)	N
3811	Q	1	"BATCH CLOSE Password Required" (Y or N)	Y
3821	Q	1	"BATCH INQUIRY Password Required" (Y or N)	N
3831	Q	1	"BATCH UPDATE Password Required" (Y or N)	N
3911	Q	1	"UPLOAD ALL OFFLINE TRANSACTIONS Password Required" (Y or N)	Υ
3921	Q	1	"UPLOAD SINGLE OFFLINE TRANSACTION Password Required" (Y or N)	Υ
7001	Р	20	"Txn 1: Phone Number" (host primary authorization phone number)	18002289074
7002	Q	1	"Txn 1: PreDial Supported" (Y or N)	Y
7003	N	1	"Txn 1: Re-Dial Attempts" (transaction auth primary phone # re-dial attempts)	0
7004	N	3	"Txn 1: Connection Timeout Period, in Seconds" (primary auth connection timeout period)	
7011	S [12345 67890.]	15	"Wireless 1: IP ADDRESS" (wireless auth IP address; only characters allowed are 0 through nine and period [.]; this IP address also applies to wireless batch close and all other on-line wireless communication with the processing host)	255.001.150.002
7012	N	3	"Wireless 1: Connection Timeout" (in seconds)	60
7013	N	3	"Wireless 1: Inactivity Timeout" (in seconds)	30
7101	Р	20	"Config 1: Phone Number" (phone number for remote parameter, i.e., configuration, downloads and application upgrades)	94100651 [Not a valid number; must be changed before doing a config

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
				load]
7102	Q	1	"Config 1: PreDial Supported" (Y or N)	Y
7103	N	1	"Config 1: Re-dial Attempts"	2
7104	N	3	"Config 1: Connection Timeout Period, in Seconds"	30
7201	Р	20	"Txn 2: Phone Number" (host secondary authorization phone number)	18002289074
7202	Q	1	"Txn 2: PreDial Supported" (Y or N)	Υ
7203	N	1	"Txn 2: Re-Dial Attempts" (transaction auth secondary phone # re-dial attempts)	1
7204	N	3	"Txn 2: Connection Timeout Period, in Seconds" (secondary auth connection timeout period)	30
7501	Р	20	"Batch 1: Phone Number" (batch primary phone number)	18002289074
7502	Q	1	"Batch 1: PreDial Supported" (Y or N)	Y
7503	N	1	"Batch 1: Re-Dial Attempts" (batch primary phone # re-dial attempts)	0
7504	N	3	"Batch 1: Connection Timeout Period, in Seconds" (primary batch connection timeout period)	60
7701	Р	20	"Batch 2: Phone Number" (batch 18002289074 secondary phone number)	
7702	Q	1	"Batch 2: PreDial Supported" (Y or Y N)	
7703	N	1	"Batch 2: Re-Dial Attempts" (batch 0 secondary phone # re-dial attempts)	
7704	N	3	"Batch 2: Connection Timeout Period, in Seconds" (secondary batch connection timeout period)	60
9003	N	19	"Primary Proc: Merchant Number" (merchant ID number for dial-up transactions)	022009001234566 [This is a test number; must be changed in the merchant file]
9010	X	4,4	"Primary Proc: Device ID" (device ID for dial-up transactions)	DAY0
9023	N	19	"Wireless Proc: Merchant Number" (merchant ID for wireless transactions)	022009001234566 [This is a test number; must be changed in the merchant file]
9030	Х	4,4	"Wireless Proc: Device ID" (device ID for wireless transactions; <u>must</u> be different from primary proc device	DB01

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
20002	N	3,3	"Data Input Idle Timeout Period 0 (Seconds)" (time before terminal returns to idle if no key is pressed during data entry: 0 to 60 seconds; 0 = must press [CLEAR] to return to the idle prompt; 1–60 = terminal automatically returns to the idle prompt after the set number of seconds)	030
20008	X	19,19	"Zero Key Text Characters" (in any field in which alpha entry is permitted, repeatedly pressing the 0 key will access these characters in succession so they can be keyed into the field). (Note: Does not apply to the Dial Prefix field in Setup; in Dial Prefix, the zero key characters are hard-coded to the following selection: , / * #;).	.,'-:()!@#\$%&* +=/?
20586	N	8	"EBT Cash Only Amt: Min EBT Cash Only Amt Value, (in Cents)" (decimal point implied, e.g., 99999 = \$999.99; note that Cash Only is the same as Cash Sale)	00000
20590	N	7	"EBT Cash Only Amt: Max EBT Cash Only Amt Value, (in Cents)" (decimal point implied, e.g., 99999 = \$999.99; note that Cash Only is the same as Cash Sale)	99999
27816	N	5	"Cash Back Amt: Min CashBack Amt Value, (in Cents)" (decimal point implied, e.g., 99999 = \$999.99; applies to Debit CashBack)	00000
27820	N	5	"CashBack Amt: Max CashBack Amt Value, (in Cents)" (decimal point implied, e.g., 99999 = \$999.99; applies to Debit CashBack)	10000
60001	N	3,3	"Crd Range Cntrl Tbl: Number" (Card Range Control Table)	036
61000	N	8,8	"MC Purchase Card LR" (low range)	54050000
61001	N	8,8	"MC Purchase Card UR" (upper range)	54059999
61002	N	2	"MC Purchase Card Min. Length"	16
61003	N	2	"MC Purchase Card Max. Length"	19
61004	N	7,7	"MC Purchase Card Type Tbl"	0004060
61005	Q	1	"MC Purchase Card – Disable?" (Y or N; Y = card type is disabled; N =	N

DOWNLOAD PARAMETERS AND OPTIONS

Parameter	Field	Field	Description of Field and Comments	"Default" Value
(Field #s from TDF)	Type	Length		(SEE NOTE ABOVE!)
			card type is enabled)	
61006	N	7	"MC Purchase Card Wireless Type	0004560
			Table"	
61007	Q	1	"MC Purchase Card Customer Code	Y
(1000	0	1	Prompt" (Y or N)	NT.
61008	Q	1	"MC Purchase Card Order Number Prompt" (Y or N)	N
61009	Q	1	"MC Purchase Card Tax Prompt" (Y	Υ
01009	~	1	or N)	•
61010	Q	1	"MC Purchase Card AVS Only	N
			Prompts" (Y or N)	
61011	Q	1	"MC Purchase Card CVC2 Prompt"	Υ
			(Y or N)	
61020-			(Additional MasterCard and MC	
61211			purchase, business, business debit, and corporate fleet card ranges and	
			related fieldssee Fields 60001 to	
			61011 above for example of all the	
			fields for one card range).	
61220-			(Visa and Visa purchase and fleet	
61531			card ranges and related fields)	
61540- 61551			(AMEX "34" card range and related fields)	
61560-			(AMEX "37" card range and related	
61571			fields)	
61580-			(Discover (Novus) card range and	
61590			related fields)	
61600-			(JCB card range and related fields)	
61610				
61620- 61630			(Diners Club card range and related fields)	
61640-			(Carte Blanche card range and	
61650			related fields)	
61660-			(JAL card ranges and related fields)	
61690			,	
61700-			(FDC test card range and related	
61711			fields)	
61720-			("Unknown" card range and related	
61730			fieldsallows addition of one card type such as a private label card)	
			NOTE: The application also allows for	
			addition of 16 new card types in the	
			future, although these are not currently	
			defined in the TDF.	

The LinkPoint 9100 uses transaction menus instead of transaction keys. This makes operating the terminal simple, intuitive, and user-friendly. The main transaction menu can be accessed from the idle prompt or the LinkPoint logo simply by pressing either [OK], [C], or [CLR]. The main menu consists of the submenu options 1 Credit, 2 Debit, 3 EBT, and 4 Batch. Each of these submenus can be accessed by pressing the corresponding number on the keypad. Alternatively, the operator can use the up or down arrow key to scroll until the desired option is highlighted, then press [OK]. Each of these submenus can also be accessed from the idle prompt by pressing its corresponding number on the keypad.

The main menu and submenu options are as follows:

```
1 CREDIT
```

- 1 SALE
- 2 RETURN
- 3 VOID
- **4 AUTHORIZE ONLY**
- **5 TICKET ONLY**
- 6 PRE-SALE

2 DEBIT

- 1 SALE
- 2 RETURN

3 EBT

- 1 FOOD SALE
- 2 FOOD RETURN
- 3 FOOD BALANCE
- 4 CASH SALE
- 5 CASH BALANCE
- **6 VOUCHER SALE**
- 7 VOUCHER RETURN

4 BATCH

- 1 CLOSE
- 2 INQUIRY
- 3 UPDATE
- 4 UPLOAD

Reports, reviews, reprints and other local functions are accessed by pressing the [F] key to display the admin menu. These will be described later in this manual.

To initiate a card-swiped, online credit sale, simply swipe the card at either the LinkPoint logo or the SWIPE CARD idle screen. Then follow the remaining prompts on the display.

To initiate other transactions, follow these steps:

- 1. Check the display for the LinkPoint logo or the SWIPE CARD idle prompt. If it is not displayed, press the red [C] key to return to the idle prompt.
- 2. Press [OK], [C], or [CLR] at either the LinkPoint logo or the SWIPE CARD idle prompt.
- 3. Choose the desired transaction type from the appropriate menu and submenu as shown above.
- 4. Follow the instructions given by the prompts on the display panel to complete the transaction.
- 5. Press [C] to return to the idle prompt message when the transaction is completed (the terminal is programmed to return to idle in one minute if [C] is not pressed).

Using The Card Reader

- 1. Check the display for the LinkPoint logo or the SWIPE CARD idle prompt. If it is not displayed, press the red [C] key to return to the idle prompt.
- 2. For a card-swiped, online credit sale, simply swipe the card at the idle prompt. For other transactions, initiate the correct transaction type as indicated above.
- 3. When the terminal prompts Swipe Card or Key Account #, insert the credit or debit card into the rear of the card reader slot with the magnetic stripe facing up and away from the keypad (see Figure 8).
- 4. Slide the card through the slot without stopping. If the terminal displays BAD CARD SWIPE, press [CLR]. Check the position of the magnetic stripe and slide the card through the slot again. If the BAD CARD SWIPE message persists, the card may be damaged. At the prompt SWIPE CARD OR KEY ACCOUNT #, type the account number directly on the keypad, press [OK], and follow the remaining prompts for a manually entered transaction. (Note: If all card swipe attempts get the BAD CARD SWIPE message, the card reader may need cleaning. Card reader cleaners can be purchased at office supply stores for this purpose.
- 5. Complete the transaction by following the display messages.

Wireless or Dialup Mode

Before performing transactions, the operator must first choose the mode (wireless or phone) in which the transactions will be done. Please see the section in this manual entitled "Local Functions" for detailed information on choosing modes. The basic procedure for changing modes is as follows: Press the blue [F] key at the idle prompt. When the ADMIN MENU appears, press 6 = SETUP. Key the password (default = 1234), then press [OK]. At the SETUP MENU, press 4 = COMMS. At the HOSTS MENU, press 1 = COMMS TYPE. The comms type (Wireless or Phone) will be displayed. Press the left-most soft key under YES to change modes, or press the right-most soft key under NO to keep the mode the same.

When the terminal is in wireless mode, a "Y"-shaped icon will always be present in the upper left corner of the display, even if the terminal is out of wireless network coverage. When in dialup mode, *no* icon will be present.

Note that transactions performed in wireless mode *must* be closed in wireless mode and transactions performed in dialup mode *must* be closed in dialup mode. It is *not* permissible to run transactions in one mode and then close them in a different mode.

Standard Retail Transactions

Standard retail transactions are transactions that all personnel can perform. These transactions include online credit sale, offline credit sale, credit return, void, ticket only, authorization only, debit transactions, EBT transactions, and close batch. Standard retail direct marketing and purchasing card transactions can also be performed if these features have been enabled.

The LinkPoint 9100 can process up to 300 transactions in a single batch. When the batch is more than 90 percent full, the warning BATCH NEARLY FULL appears when another transaction is attempted. The operator can continue the transaction by pressing [OK] at this prompt.

When the memory is full, the screen displays SETTLEMENT REQUIRED and no further transactions can be stored until the batch is closed. This is a safety feature that advises the merchant to close when the batch is full.

The procedures for each transaction type include optional prompts. The options are designated with the note "(optional)" directly below the displayed message. Depending on the user's needs, they may be enabled or disabled.

Retail Gratuity Features

The FDC Omaha application includes functionality for non-restaurant businesses, such as beauty salons, etc., to accept and process gratuities (tips) with their credit card transactions. By downloading this application with the Zontalk parameter Field 1186 (Global Tip Prompt) enabled to "Y" (Yes), credit and debit sales will prompt for tip amount during the transaction. If the Zontalk parameter in Field 1172 (Pre-sale Gratuity) is set to "Y" (Yes), the operator can print a pre-sale receipt with a tip line that the customer can fill in. These features can also be enabled locally via terminal setup. When the actual sale is performed, the tip amount can then be added at the tip amount prompt. With the retail tip feature enabled, the terminal sends transactions to the FDR host in a retail format, but the receipts and reports incorporate the tip features.

Transaction Tables

The following tables summarize the steps required to perform the various credit, debit and EBT transactions. (Reviews, reports, reprints, close batch and other functions are described later in this manual.)

Detailed descriptions of each transaction type are given in the sections immediately following the tables.

General Instructions

- To choose a menu option, either press the number of that option, <u>OR</u> scroll with the up or down arrow key until the option is "highlighted" in reverse text. Then press the green [OK] key to select it. Make further selections from the sub-menus using the same method.
- If a password is requested, **the default password is [1][2][3][4].** If the merchant has changed the password and does not remember the new password, the help desk should be called for assistance.
- When in a sub-menu, **press the orange [CLR] key** to step back to the previous menu.
- When a field has a YES OR NO question, press the left-most yellow key for YES. Press the right-most yellow key for NO.
- When entering data in a field, **press the orange [CLR] key to backspace or to empty a field** if necessary.
- After entering data in a field, **press the green [OK] key** to save the entry.
- **Press the red [C] key** to exit a field or to exit a menu.
- **Use the tables below** to find the various transactions and Admin menu options.

CREDIT TRANSACTIONS

CREDIT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
CREDIT SALE - CARD SWIPED	Swipe the credit card	Enter last four digits of the account number from the card & press [OK]
		Enter any requested optional data such as Operator ID, Invoice Number, etc. & press [OK]
		Enter amount & press [OK]
		Wait for approval & receipt

CREDIT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
CREDIT SALE	Press 1 for Credit	Key account # & press [OK]
- ONLINE - MANUALLY ENTERED	Menu, then press 1 for Sale, then press 1 for Online	Key expiration date & press [OK]
	S.I.I.I.C	Enter CVC2 or CVV2 or CID number if prompted & press [OK] (This number is on the back of most cards; if number is not available, just press [OK] to bypass this prompt)
		Press Yes or No at the Phone Sale prompt
		Enter amount & press [OK]
		If prompted, enter the AVS Address (street # only) & press [OK] (AVS = Address Verification Service)
		If prompted, enter the AVS zip code & press [OK]
		Wait for approval & receipt
CREDIT SALE	Press 1 for Credit	Swipe card <u>or</u> key account # & exp. date manually
- OFFLINE (Use only where there is no phone line or wireless coverage available. Note that the offline sales are not approved until they are uploaded later. Some offline sales may be declined when they are uploaded for approval.)	Menu, then press 1 for Sale, then press 2 for Offline	Remaining prompts will be same as for an online sale, but you will not get an approval (Note: You must upload any offline sales at the end of the business day; see Batch Upload instructions in the Batch Transactions table below)
CREDIT RETURN	Press 1 for Credit	Enter password & press [OK]
(Use this to issue a refund to an account)	Menu, then press 2 for Return	Swipe card <u>or</u> key account number & exp. date manually
		Remaining prompts will be similar to those for a sale
VOID	D 41 0 ""	
VOID (Use this to cancel a	Press 1 for Credit Menu, then press 3 for	Enter password & press [OK]
transaction in the current open batch)	Void	Enter three-digit Item # from original transaction receipt
		If the correct item is displayed, press [OK]
		If the correct card number is displayed, press [OK]
		Press [OK] to confirm the void
		Wait for receipt

CREDIT TRANSACTION TYPE AUTHORIZE ONLY (This will pre-authorize an	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT Press 1 for Credit Menu, then press 4 for	STEPS TO COMPLETE THE TRANSACTION Swipe card <u>or</u> key account number & exp. date manually
amount but will <u>not</u> capture the sale or charge the customer's account)	Authorize	Remaining prompts will be same as those for a sale (If you want to charge the customer's account, you must perform a Ticket Only within about 8 days and use the approval you received from the Authorize Only transaction)
TICKET ONLY SALE (Perform this transaction after getting a voice approval for a sale, or if you wish to charge an account after an Authorize Only)	Press 1 for Credit Menu, then press 5 for Ticket	Swipe card <u>or</u> key account number & exp. date manually Remaining prompts will be same as those for a sale, except that the terminal will also prompt for an approval code; at this prompt, enter the code you received from the voice approval center or from the Authorize Only transaction For a manually entered Ticket Only, the terminal will also prompt for AVS Response Code, AVS ACI, and AVS TID; key these from the Authorize Only receipt. If this information is not known, press [OK] to bypass each of these prompts
PRE-SALE (This is <u>not</u> a sale; perform this function only if you want to give the customer a receipt so that he can write a tip amount. A credit sale must still be performed after this to actually charge the customer.)	Press 1 for Credit Menu, then press 6 for Pre-Sale	Enter the base amount of the sale & press [OK] Wait for the receipt to print; give the receipt to the customer to write in the tip; then perform a regular credit sale for the total amount of sale plus tip

<u>DEBIT TRANSACTIONS</u>
(Use <u>only</u> if the merchant account is set up to accept debit cards)

DEBIT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
DEBIT SALE	Press 2 for Debit Menu, then press 1 for Debit Sale	Swipe the debit card Enter any requested optional data such as Operator ID, Invoice Number, etc. & press [OK] Enter amount & press [OK] Give the terminal to the customer to enter the PIN & press [OK] Wait for approval & receipt

DEBIT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
DEBIT RETURN (Use this to issue a refund to a debit account.)	Press 2 for Debit Menu, then press 2 for Debit Return	Enter the password & press [OK] Swipe the debit card
		Enter any requested optional data such as Operator ID, Invoice Number, etc. & press [OK]
		Enter amount & press [OK]
		Give the terminal to the customer to enter the PIN & press [OK]
		Wait for approval & receipt

EBT TRANSACTIONS

(Use <u>only</u> if the merchant account is set up to accept Electronic Benefits Transfer cards)

EBT TRANSACTION	HOW TO START THE	STEPS TO COMPLETE THE TRANSACTION
TYPE	TRANSACTION FROM THE IDLE PROMPT	
EBT FOOD SALE	Press 3 for EBT Menu,	Swipe the EBT card <u>or</u> key account # & exp. date
	then press 1 for Food Sale	manually (if no expiration date on the card, press [OK] to bypass the Expiry prompt)
		Enter the Operator ID (required) & press [OK]
		Enter amount & press [OK]
		Give the terminal to the customer to enter the PIN & press [OK]
		Wait for approval & receipt
EBT FOOD RETURN (Use this to issue a refund on a food sale.)	Press 3 for EBT Menu, then press 2 for Food Return	Swipe the EBT card (manual entry not allowed on a return)
		Enter the Operator ID (required) & press [OK]
		Enter amount & press [OK]
		Give the terminal to the customer to enter the PIN & press [OK]
		Wait for approval & receipt
EBT FOOD BALANCE (Use this to verify the food	Press 3 for EBT Menu, then press 3 for	Swipe the EBT card <u>or</u> key account # & exp. date manually (if no expiration date on the card, press
stamp balance on the EBT account)	FoodStp Bal	[OK] to bypass the Expiry prompt)
,		Enter the Operator ID (required) & press [OK]
		Give the terminal to the customer to enter the PIN & press [OK]
		Wait for receipt

EBT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
EBT CASH SALE	Press 3 for EBT Menu, then press 4 for Cash Sale	Swipe the EBT card (Manual entry not allowed for a Cash Sale)
		Enter the Operator ID (required) & press [OK]
		Enter amount & press [OK]
		Give the terminal to the customer to enter the PIN & press [OK]
		Wait for approval & receipt
EBT CASH BALANCE	Press 3 for EBT Menu, then press 5 for Cash Bal	Swipe the EBT card <u>or</u> key account number & exp. date manually (If no expiration date, press [OK] to bypass this prompt)
		Enter the Operator ID (required) & press [OK]
		Give the terminal to the customer to enter the PIN & press [OK]
		Wait for balance to display & print
EBT VOUCHER SALE (Use this after getting a voice approval for an EBT sale)	Press 3 for EBT Menu, then press 6 for Vouch Sale	Swipe the EBT card <u>or</u> key account # & exp. date manually (if no expiration date on the card, press [OK] to bypass the Expiry prompt)
Sale)		Enter the Operator ID (required) & press [OK]
		Enter the Transaction Voucher Number from the electronic voucher & press [OK]
		Enter amount & press [OK]
		Enter approval code (obtained from voice center) & press [OK]
		Wait for approval & receipt
EBT VOUCHER RETURN (Use this after getting a voice approval for an EBT return)	Press 3 for EBT Menu, then press 7 for Vouch Rtrn	Swipe the EBT card <u>or</u> key account # & exp. date manually (if no expiration date on the card, press [OK] to bypass the Expiry prompt)
		Enter the Operator ID (required) & press [OK]
		Enter the Transaction Voucher Number from the electronic voucher & press [OK]
		Enter amount & press [OK]
		Enter approval code (obtained from voice center) & press [OK]
		Wait for approval & receipt

Credit Card Sale - Swiped

A sale is a monetary transaction that transfers funds from a cardholder's credit line to the merchant's bank account. This transaction is the normal procedure used to authorize and capture a credit card sale for later deposit.

The following prompts will appear if credit sale is selected from the menus by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [1] = SALE, then [1] = ONLINE. (A swiped credit card sale may also be started by simply swiping the card at the idle prompt or the LinkPoint logo).

Display Message

CREDIT SALE Enter Password

(optional)

CREDIT SALE
Swipe Card or
Key Account #

CREDIT SALE Enter Last 4 Digits

(optional)

CREDIT SALE
Swiped Card
Data
XXXXXXXXXXXXX

(optional)

Operator Action

If prompted, key in the merchant password, (1-6 digits) and press [OK].

Slide the card through the card reader.

Key the last 4 digits of the account and press [OK].

The swiped card number will appear. Press OK to continue.

CREDIT SALE Enter Operator Id

Key in the operator ID and press [OK], or simply press [OK] to skip this input.

(optional)

CREDIT SALE
Enter Sale
Amount
\$0.00

Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].

CREDIT SALE
Enter Tax
Amount
\$0.00

(optional)

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

CREDIT SALE
Enter Tip
Amount
\$0.00

Key in the tip amount (max 5 digits) without the decimal point then press [OK].

(optional)

CREDIT SALE

Sale \$xxxxx.xx

Tax \$xxx.xx

Tip \$xxx.xx

Total \$xxxxx.xx

(optional) (conditional)

If tip prompt is enabled, or if tax amount is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

CREDIT SALE Enter Invoice Number

(optional)

Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

CREDIT SALE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

CREDIT SALE
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

CREDIT SALE
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

CREDIT SALE
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Credit Card Sale—Manual Entry

A manually entered credit card sale should be performed if the card is not present or if the magnetic stripe on the card is unreadable.

To start a manually entered credit card sale from the idle prompt, press [OK]. Then select [1] Credit from the main menu, followed by [1] = SALE, then [1] = ONLINE. Then follow the remaining prompts shown below.

Note: A manually entered credit card sale will prompt for a Card Verification Value. The Card Verification Value is a number that appears on the back of the customer's Visa, MasterCard, or American Express card after the account number. Requiring this number to be entered during manual entry transactions provides an extra level of fraud protection. For Visa this number is called the CVV2. For MasterCard it is the CVC2, and for AMEX it is the CID number.

Display Message

Operator Action

CREDIT SALE Enter Password

If prompted, key in the merchant password (1-6 digits) and press [OK].

(optional)

CREDIT SALE Swipe Card or Key Account # Key the cardholder's account number (max 19 digits), and press [OK].

CREDIT SALE
Enter Expiry
Date MMYY

Key in the four-digit expiration date using two digits for the month and two for the year, the press [OK].

CREDIT SALE Enter 3-Digit CVV2 Number Key in the 3-digit Visa CVV2 number and press [OK].

(optional)

OR

CREDIT SALE Enter 4-Digit CID Number Key in the 4-digit AMEX CID number and press [OK].

(optional)

OR

CREDIT SALE Enter 3-Digit CVC2 Number Key in the 3-digit MasterCard CVC2 number and press [OK].

(optional)

CREDIT SALE
Phone Order
Transaction?
Yes No

Press the far left soft key under YES if the order was received by phone, or press the far right key under NO if it was not.

CREDIT SALE
Make Imprint
If Card Is
Present!

This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

(conditional)

CREDIT SALE Enter Operator Id

Key in the operator ID and press [OK], or simply press [OK] to skip this input.

(optional)

CREDIT SALE
Enter Sale
Amount
\$0.00

Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].

CREDIT SALE
Enter Tax
Amount
\$0.00

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

(optional)

CREDIT SALE
Enter Tip
Amount
\$0.00

Key in the tip amount (max 5 digits) without the decimal point. then press [OK].

(optional)

CREDIT SALE
Sale \$xxxxx.xx
Tax \$xxx.xx
Tip \$xxx.xx
Total \$xxxx.xx

If tip prompt is enabled, of if the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

(optional) (conditional)

CREDIT SALE Enter Invoice Number Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

CREDIT SALE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

CREDIT SALE AUTH/TKT XXXXXX Item#:nnn

The approval message is displayed. The terminal displays this message until the receipt is printed, assuming that the printer is available and enabled.

CREDIT SALE OK for Press customer copy

The terminal displays this message, waiting for acknowledgement before printing customer receipt, if second receipt is enabled.

(conditional)

CREDIT SALE AUTH/TKT XXXXXX Item#:nnn

screen.

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu

Credit Card Sale-Receipt

```
-Transaction type
 CREDIT SALE RECEIPT
    Custom Header Line 1
                                      -Custom header lines
    Custom Header Line 2
                                       (max 6)
    Custom Header Line 3
    Custom Header Line 4
    Custom Header Line 5
    Custom Header Line 6
-Merchant ID
Term ID:xxxx Item #:xxx
                                      -Terminal ID and Item #
VISA SALE:SWIPED
                                      -Card, tran type, entry method
Invoice : xxxxxxxx Op ID:xxxx
                                      -Invoice#, operator id
Acct:xxxxxxxxxxxxxxxx
                                      -Card number
Exp:mm/yy
                                      -Expiry Date
AMOUNT
               $xxxxx.xx
                                      -Purchase Amount
                                      -Tax Amount
TAX
               $xxxxx.xx
                                      -Tip Amount
TIP
               $xxxxx.xx
TOTAL
               Sxxxxx.xx
                                      -Total Amount
       JOHN DOE
                                      -Cardholder Signature
   Custom Agreement Line1
                                      -Cardholder name (if swiped)
   Custom Agreement Line2
                                      -Custom cardholder agreement
   Custom Agreement Line3
                                      lines (max 4)
   Custom Agreement Line4
   Custom Trailer Line 1
                                      -Custom trailer lines
   Custom Trailer Line 2
                                       (max 4)
   Custom Trailer Line 3
   Custom Trailer Line 4
Date: mm/dd/yy Time:hh:mmP
                                      -Transaction date & time
Response: AUTH/TKT XXXXXX
                                      -Host Response text
```

Credit Card Sale-Manual Entry With Direct Marketing/AVS

When the Direct Marketing and AVS prompts are enabled, a manually entered credit card sale will display these prompts.

To start a manually entered credit card sale with Direct Marketing and AVS, select Credit Sale from the menus by pressing [OK] at the idle prompt, followed by [1] = Credit, then [1] = Sale, then [1] = Online. Then follow the remaining prompts shown below.

Display Message

CREDIT SALE Enter Password

(optional)

CREDIT SALE Swipe Card or Key Account #

CREDIT SALE
Enter Expiry
Date MM/YY

CREDIT SALE
Enter 3-Digit
CVV2 Number

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

Key the cardholder's account number (max 19 digits) and press [OK].

Key in the four-digit expiration date using two digits for the month and two for the year. then press [OK].

Key in the 3-digit VISA CVV2 number and press [OK].

OR

CREDIT SALE
Enter 4-Digit
CID Number

Key in the 4-digit AMEX CID number and press [OK].

(optional)

OR

CREDIT SALE
Enter 3-Digit
CVC2 Number

(optional)

Key in the 3-digit MasterCard CVC2 number and press [OK].

CREDIT SALE
Phone Order
Transaction?
Yes No

Press the far left soft key under Yes if the order was received by phone, or press the far right key under No if it was not.

CREDIT SALE
Make Imprint
If Card Is
Present!

This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

CREDIT SALE
Enter Operator
Id

Key in the operator id and press [OK], or simply press [OK] to skip this input.

(optional)

CREDIT SALE

Enter

Sale

Amount

\$0.00

Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].

CREDIT SALE

Enter

Tax

Amount

\$0.00

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

CREDIT SALE

Enter

Tip

Amount

Key in the tip amount (max 5 digits) without the decimal point then press [OK].

(optional)

CREDIT SALE

 Sale
 \$xxxxx.xx

 Tax
 \$xxx.xx

 Tip
 \$xxx.xx

 Total
 \$xxxxx.xx

If tip prompt is enabled or if tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

CREDIT SALE
Enter AVS

Address

Key in the customer's numeric address (up to 5 digits) and press [OK].

(optional)

CREDIT SALE

Enter AVS ZIP Code

Key in the customer's 5- or 9-digit zip code and press [OK].

(optional)

CREDIT SALE
Enter Order
Number

Key in the order number (up to 25 alphanumeric characters) and press [OK].

(optional)

CREDIT SALE Enter Invoice Number Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

CREDIT SALE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

CREDIT SALE
AUTH/TKT
XXXXXXX Y
various text

The terminal displays the authorization response text and the AVS code. The bottom line will also display the text interpretation of the AVS code. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

CREDIT SALE
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

CREDIT SALE
AUTH/TKT
XXXXXX Y
various text

The terminal displays the authorization response text and the AVS code. The bottom line will also display the text interpretation of the AVS code.

Press [CLR] to return to either the idle or transaction menu screen.

AVS Response Code Definitions

The bottom line of the display (for the credit sale and auth only transactions with direct marketing/AVS) will be generated by the single character AVS response code as shown in the following table.

AVS	Terminal Display	Meaning
Code		
A	Adr Match Only	Address Match Only
Е	Not Eligible	Not Eligible for AVS
N	No Match	No Match
R	Retry	Retry, System Unavailable
S	Not Supported	Service Not Supported
U	Adr Not Avail	Address Information Not Available
W	Zip Code Ok	9-Digit Zip Code OK
Χ	Exact Match	Exact Match
Y	Exact Match	Exact Match
Z	Zip Code Ok	5-Digit Zip Code OK

Credit Card Sale-Direct Marketing/AVS Receipt

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```
-Transaction type
 CREDIT SALE RECEIPT
    Custom Header Line 1
                                -Custom header lines
    Custom Header Line 2
                                 (max 6)
    Custom Header Line 3
    Custom Header Line 4
    Custom Header Line 5
    Custom Header Line 6
                             -Merchant ID
-Terminal ID & Item #
-Card, tran type, entry method
Term ID:xxxx Item #:xxx
VISA AVS SALE:KEYED
VISA AVS SALE:KEYED
Invoice : xxxxxxxx Op ID:xxxx
                              -Invoice#, operator id
Order Number:
                                 -Order number
xxxxxxxxxxxxxxxxxxxxxxxx
AVS Address:xxxxx
                             -AVS numeric address info
-AVS zip code 5-9 digits
-If phone order
-Card number
AVS Zip Code:xxxxxxxxx
PHONE ORDER
Acct:xxxxxxxxxxxxxxxxx
Exp:mm/yy
                                 -Expiry Date
                             -Purchase Amount
          $xxxxx.xx
AMOUNT
                                -Tax Amount (optional)
              $xxxxx.xx
TAX
TIP
              $xxxxx.xx -Tip Amount (optional)
             ========
TOTAL $xxxx.xx -Total Amount (optional)
                                -Cardholder Signature
                               -Custom cardholder agreement
   Custom Agreement Line1
   Custom Agreement Line2
                                 lines (max 4)
   Custom Agreement Line3
   Custom Agreement Line4
   Custom Trailer Line 1
                               -Custom Trailer Lines
   Custom Trailer Line 2
   Custom Trailer Line 3
                                  (max 4)
   Custom Trailer Line 4
Date: mm/dd/yy Time: hh:mmP
                                -Transaction date & time
Response: AUTH/TKT XXXXXX Y
                                -Host Response text
                                -AVS response description
AVS: Exact Match
                                -Transaction ID, auth
TID:xxxxxxxxxxxxx ACI: V
                                  characteristic indicator
```

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Purchase Card Sale – Swiped

When the customer code and tax prompts are enabled, a swiped credit card sale will display these prompts.

To start a swiped purchase card sale, select credit sale from the menus by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [1] = SALE, then [1] = ONLINE. Then follow the remaining prompts shown below.

Display Message

CREDIT SALE Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

CREDIT SALE Swipe Card or Key Account # Slide the card through the card reader.

CREDIT SALE Enter Last 4 Digits

(optional)

Key the last 4 digits of the account and press [OK].

CREDIT SALE
Swiped Card
Data
XXXXXXXXXXXXXXX
(optional)

The swiped card number will appear. Press [OK] to continue.

CREDIT SALE Enter Operator Id

Key in the operator id (up to 4 numeric characters) and press [OK], or simply press [OK] to skip this input.

(optional)

CREDIT SALE
Enter Sale
Amount
\$0.00

Key in the amount (max 7 digits) of the sale without the decimal point, then press [OK].

CREDIT SALE
Enter Tax
Amount
\$0.00

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

CREDIT SALE
Enter Tip
Amount
\$0.00

Key in the tip amount (max 5 digits) without the decimal point, then press [OK].

(optional)

CREDIT SALE
Sale \$xxxxx.xx
Tax \$xxx.xx
Tip \$xxx.xx
Total \$xxxx.xx

If tip prompt is enabled, or the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

(optional) (conditional)

CREDIT SALE Enter Customer Code Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

(optional)

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CREDIT SALE
Enter Invoice
Number

(optional)

Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

CREDIT SALE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

CREDIT SALE
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed, assuming that the printer is available and enabled.

CREDIT SALE
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

CREDIT SALE
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Purchase Card Sale-Manual Entry

When the customer code and tax prompts are enabled, a manually entered credit card sale will display these prompts.

To start a manually entered purchase card sale, select credit sale from the menus by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [1] = SALE, then [1] = ONLINE. Then follow the remaining prompts shown below.

Display Message

CREDIT SALE Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

CREDIT SALE Swipe Card or Key Account # Key the cardholder's account number (maximum 19 digits) and press [OK].

CREDIT SALE
Enter Expiry
Date MM/YY

Key in the four-digit expiration date using two digits for the month and two for the year and press [OK].

CREDIT SALE Enter 3-Digit CVV2 Number

(optional)

Key in the 3-digit VISA CVV2 number and press [OK].

OR

CREDIT SALE Enter 4-Digit CID Number Key in the 4-digit AMEX CID number and press [OK].

(optional)

OR

CREDIT SALE Enter 3-Digit CVC2 Number Key in the 3-digit MasterCard CVC2 number and press [OK].

(optional)

CREDIT SALE
Phone Order
Transaction?
Yes No

Press the far left soft key under YES if the order was received by phone, or press the far right soft key under NO if it was not.

CREDIT SALE
Make Imprint
If Card Is
Present!

This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

CREDIT SALE Enter Operator Id

Key in the operator ID (up to four numeric characters) and press [OK], or simply press [OK] to skip this input.

(optional)

CREDIT SALE
Enter Sale
Amount
\$0.00

Key in the amount (maximum 7 digits) of the sale without the decimal point, then press [OK].

CREDIT SALE

Enter

Tax

Amount

\$0.00

(optional)

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

CREDIT SALE

Enter

Tip

Amount

\$0.00

(optional)

Key in the tip amount (max 5 digits) without the decimal point then press [OK].

CREDIT SALE

Sale Tax

\$xxxxx.xx \$xxx.xx

Tip Total

\$xxx.xx \$xxxxx.xx

(optional) (conditional)

If tip prompt is enabled, or the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

CREDIT SALE

Enter

Customer Code

Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

CREDIT SALE Enter

Number

Invoice

Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

CREDIT SALE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

CREDIT SALE
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed, assuming that the printer is available and enabled.

CREDIT SALE
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

CREDIT SALE
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Purchase Card Sale—Receipt

-Transaction type CREDIT SALE RECEIPT -Custom header lines Custom Header Line 1 (maximum 6) Custom Header Line 2 Custom Header Line 3 Custom Header Line 4 Custom Header Line 5 Custom Header Line 6 -Merchant ID -Terminal ID & Item # -Card, tran type, entry method VISA P/CARD SALE: KEYED -Invoice#, operator ID -Customer Code Invoice : xxxxxxxx Op ID:xxxx CC:xxxxxxxxxxxxxxx -If Phone Order PHONE ORDER -Card number -Expiry Date Exp:mm/yy AMOUNT \$xxxxx.xx -Purchase Amount (before tax) TAX \$xxxxx.xx -Tax Amount TIP \$xxxxx.xx -Tip Amount ======== TOTAL \$xxxxx.xx -Total purchase amount with tax -Cardholder Signature JOHN DOE -Cardholder name (if swiped) Custom Agreement Line1 -Custom cardholder agreement Custom Agreement Line2 lines (max 4) Custom Agreement Line3 Custom Agreement Line4 -Custom trailer lines Custom Trailer Line 1 (max 4) Custom Trailer Line 2 Custom Trailer Line 3 Custom Trailer Line 4 Date: mm/dd/yy Time: hh:mmP -Transaction date & time Response: AUTH/TKT XXXXXX -Host Response text

STANDARD TRANSACTIONS

Credit Card Return-Swiped

A credit card return should be performed to refund a sale that was performed in a batch that is now closed. (To reverse a sale in a batch that is still open, a void should be performed—see "Void Transaction" later in this manual.)

A credit card return is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [2] = RETURN.

The swiped credit card return transaction will have the same displays as a standard swiped credit card sale. However, the following changes will occur:

- 1. The top line of the display will be replaced with the words CREDIT RETURN.
- 2. Since the transaction is authorized offline the display indicating communications with the host will not appear.
- 3. There will be no tip entry screen.
- 4. The approval message screen will have the following form:

Display Message

CREDIT RETURN Accepted Item#:nnnn

Operator Action

The approval message is displayed. Press [CLR] to return to the transaction menu screen.

Credit Card Return-Manual Entry

A manual credit card return is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [2] = RETURN.

The remaining prompts will be the same as the standard keyed credit card sale, with the same changes as described above under credit card return.

Credit Card Return – Receipt

The keyed or swiped credit card return receipt will have the same format as the standard credit card sale receipt. However, the following modifications will be made:

- 1. The first line of the printed receipt will say credit return receipt.
- 2. The abbreviated transaction type printed adjacent to the card name will be RTRN.
- 3. The response code will be ACCEPTED.

Purchase Card Return – Swiped

A swiped purchase card return is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [2] = RETURN.

The swiped purchase card return transaction will have the same displays as a swiped purchase card sale. However, the following changes will occur:

- 1. The top line of the display will be replaced with the words CREDIT RETURN.
- 2. Since the transaction is authorized offline the display indicating communications with the host will not appear.
- 3. The approval message screen will take the following form:

Display Message

CREDIT RETURN Accepted Item#:nnnn

Operator Action

The approval message is displayed. Press [CLR] to return to the transaction menu screen.

Purchase Card Return—Manual Entry

A manually entered purchase card return is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [2] = RETURN.

The prompts will be the same as those for a keyed purchase card sale, with the changes described above for credit returns.

Purchase Card Return—Receipt

The keyed or swiped purchase card return receipt will have the same format at the purchase card sale receipt. However, the following modifications will be made:

- 1. The first line of the printed receipt will say Credit Return Receipt.
- 2. The abbreviated transaction type printed adjacent to the card name will be RTRN.

Return--Manual Entry with Direct Marketing/AVS

A manually entered credit card return with direct marketing and AVS is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [2] = RETURN. The remaining prompts will be the same as those for a standard keyed credit card return as described above.

Ticket Only—Swiped

A ticket only sale should be performed to capture a sale if a prior approval has been obtained from the voice center or by running an authorization only transaction.

A swiped ticket only is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [5] = TICKET. Then follow the prompts shown below.

Display Message

TICKET ONLY Enter Password

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

(optional)

TICKET ONLY Swipe Card or Key Account # Slide the card through the card reader.

TICKET ONLY
Enter Last 4
Digits

(optional)

TICKET ONLY
Swiped Card
Data
XXXXXXXXXXXXXX

Key the last 4 digits of the account and press [OK].

The swiped card number will appear. Press OK to continue.

TICKET ONLY Enter Operator Id

(optional)

Key in the operator ID (up to four alphanumeric characters) and press [OK], or simply press [OK] to skip this input.

TICKET ONLY
Enter Sale
Amount
\$0.00

Key in the amount of the sale (maximum 7 digits) without the decimal point, then press [OK].

TICKET ONLY
Enter Tax
Amount
\$0.00

(optional)

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

TICKET ONLY
Enter Tip
Amount
\$0.00

Key in the tip amount (max 5 digits) without the decimal point, then press [OK].

(optional)

TICKET ONLY
Sale \$xxxxx.xx
Tax \$xxx.xx
Tip \$xxx.xx
Total \$xxxx.xx

If tip prompt is enabled, or the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

(conditional)

TICKET ONLY Enter Order Number Key in the order number (up to 25 alphanumeric characters) and press [OK].

(optional)

TICKET ONLY Enter Customer Code Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

(optional)

TICKET ONLY Enter Invoice Number Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

TICKET ONLY Enter Approval Code Key in the approval code (6 alphanumeric) previously obtained via voice authorization or through auth only transaction and press [OK].

TICKET ONLY
Accepted
xxxxxx
ITEM#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

TICKET ONLY
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

TICKET ONLY
Accepted
xxxxxx
ITEM#:nnnn

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Ticket Only—Manual Entry

A manually entered ticket only is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [5] = TICKET. Then follow the prompts shown below.

Display Message

Operator Action

TICKET ONLY Enter Password If prompted, key in the merchant password (1-6 digits) and press [OK].

(optional)

TICKET ONLY Swipe Card or Key Account # Key the cardholder's account number and press [OK].

TICKET ONLY
Enter Expiry
Date MM/YY

Key in the four-digit expiration date using two digits for the month and two for the year.

TICKET ONLY
Phone Order
Transaction?
Yes No

Press the far left soft key under YES if the order was received by phone, or press the far right soft key under NO if it was not.

TICKET ONLY
Make Imprint
If Card Is
Present!

This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

(conditional)

TICKET ONLY Enter Operator Id Key in the operator ID and press [OK] or simply press [OK] to skip this input.

(optional)

TICKET ONLY
Enter Sale
Amount
\$0.00

Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].

TICKET ONLY
Enter Tax
Amount
\$0.00

(optional)

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

TICKET ONLY Enter Tip Amount

\$0.00

Key in the tip amount (max 5 digits) without the decimal point, then press [OK].

(optional)

TICKET ONLY
Sale \$xxxxx.xx
Tax \$xxx.xx
Tip \$xxx.xx
Total \$xxxxx.xx

(conditional)

If tip prompt is enabled, or the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

TICKET ONLY Enter Order Number Key in the order number (up to 25 alphanumeric characters) and press [OK].

(optional)

TICKET ONLY Enter Customer Code Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

(optional)

TICKET ONLY Enter Approval Code Key in the approval code (6 alphanumeric) previously obtained via voice authorization or through auth only transaction and press [OK].

TICKET ONLY Enter Invoice Number Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

TICKET ONLY
Accepted
xxxxxx
Item#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

TICKET ONLY
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

TICKET ONLY
Accepted
xxxxxx
Item#:nnnn

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Ticket Only—Receipt

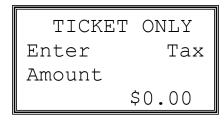
The standard ticket only receipt will be the same as the standard credit sale receipt, with the following differences:

- 1. The transaction name printed at the top of the receipt will be ticket only receipt.
- 2. Immediately below the INVOICE # and ITEM # line the 6 alphanumeric approval code entered during the transaction will be printed as follows: approval code: XXXXXX.
- 3. At the bottom of the receipt the final printed line will be response: accepted.

Purchase Card Ticket Only - Swiped

The swiped purchase card ticket only transaction will be similar to the standard swiped ticket only, as described above. However, the following prompts (which will occur after the amount input screen) will request additional information.

Display Message



TICKET ONLY Enter Customer Code

Operator Action

Key in the tax amount (max. 5 digits) without the decimal point, then press [OK].

This is a required field for purchase cards.

Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

Normal transaction flow resumes after this point.

Purchase Card Ticket Only—Manual Entry

This will be the same as the standard keyed ticket only transaction detailed above, with the insertion of the extra prompts described earlier under the purchase card ticket only—swiped section.

Purchase Card Ticket Only-Receipt

The purchase card ticket only receipt will be as described above for ticket only receipts, with the purchase card information added.

Ticket Only-Manual Entry with Direct Marketing/AVS

A manually entered ticket only with direct marketing and AVS is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [5] = TICKET. Then follow the prompts shown below.

Display Message

TICKET ONLY Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

TICKET ONLY
Swipe Card or
Key Account #

Key the cardholder's account number (maximum 19 digits) and press [OK].

TICKET ONLY
Enter Expiry
Date MM/YY

Key in the four-digit expiration date using two digits for the month and two for the year, then press [OK].

TICKET ONLY
Phone Order
Transaction?
Yes No

Press the far left soft key under YES if the order was received by phone, or press the far right key if it was not.

STANDARD TRANSACTIONS

TICKET ONLY
Make Imprint
If Card Is
Present!

This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

TICKET ONLY Enter Operator Id Key in the operator ID (up to four numeric characters) and press [OK], or simply press [OK] to skip this input.

(optional)

TICKET ONLY
Enter Sale
Amount
\$0.00

Key in the amount (maximum 7 digits) of the sale without the decimal point then press [OK].

TICKET ONLY
Enter Tax
Amount
\$0.00

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.

(optional)

TICKET ONLY
Enter Tip
Amount
\$0.00

Key in the tip amount (max 5 digits) without the decimal point, then press [OK]

(optional)

TICKET ONLY
Sale \$xxxxx.xx
Tax \$xxx.xx
Tip \$xxx.xx
Total \$xxxxx.xx

If tip prompt is enabled, or the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

(conditional)

TICKET ONLY
Enter AVS
Response Code

Key in the previously obtained AVS response code, one alphanumeric character, and press [OK].

TICKET ONLY Enter AVS ACI

Key in the one character alphanumeric authorization characteristic indicator and press [OK].

TICKET ONLY Enter AVS TID

Key in the transaction ID number (maximum 16 alphanumeric) and press [OK].

TICKET ONLY Enter Order Number Key in the order number (up to 25 alphanumeric characters) and press [OK].

TICKET ONLY Enter Customer Code Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

TICKET ONLY Enter Invoice Number Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

TICKET ONLY Enter Approval Code Key in the approval code (6 alphanumeric) previously obtained via voice authorization or through auth only transaction and press [OK].

TICKET ONLY
Accepted
xxxxxx
Item#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

TICKET ONLY
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

TICKET ONLY
Accepted
xxxxxx
Item#:nnnn

The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Ticket Only-Direct Marketing/AVS Receipt

The finished ticket only receipt with direct marketing/AVS will appear as described above for credit sale receipts with direct marketing and AVS, with the following differences:

- 1. The first printed line indicating the transaction type will now say ticket only receipt.
- 2. The abbreviated transaction type printed adjacent to the card name will say: tkto.

Authorize Only-Swiped

An authorize only transaction will obtain an approval and "freeze" the keyed amount of funds in the customer's account for a period that is usually eight to ten days. This transaction *only* obtains an authorization. Funds will *not* be credited to the merchant's account unless a ticket only (see above) is performed using the approval code obtained from the authorize only.

A swiped authorize only is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [4] = AUTHORIZE. The remaining prompts will be identical to those for a credit sale, with the following exceptions:

- 1. On all screens the top line will display AUTH ONLY.
- 2. The approval message screen will not show the item number.

Authorize Only-Manual Entry

A manually entered authorize only is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [4] = AUTHORIZE. The remaining prompts will be identical to those for a manually entered credit sale, with the following exceptions:

- 1. On all screens the top line will display AUTH ONLY.
- 2. The approval message screen will not show the item number.

Authorize Only-Receipt

The authorize only receipt will be the same as the receipt for a credit sale, with the following differences:

- 1. The first printed line indicating the transaction name will say: auth only receipt.
- 2. The item number will not be present.

Purchase Card Authorize Only-Swiped or Keyed

A purchase card authorize only will have the same prompts as a purchase card credit sale, except for the differences described above.

Authorize Only-Manual Entry with Direct Marketing/AVS

The keyed authorize only transaction with direct marketing/AVS will have the same prompts as a manual credit sale with direct marketing/AVS, except for the differences described above.

Void Transaction

A void should be performed if it is necessary to reverse a transaction that is in the current open batch.

A void is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [3] = VOID. Then follow the prompts shown below.

Display Message

VOID Enter Password

(optional)

VOID Enter Item #

VOID
xxx SALE
\$nnnnnn.nn
Prev Next

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

Key in the item number (maximum 3 digits) of the transaction to void and press [OK]. (The item number appears on the original receipt.)

The item number and transaction name are displayed on the second line followed by the dollar amount. If the transaction is already voided this is indicated. Press the far left soft key to view the previous item.

Press the far right soft key to view the next item.

Press [OK] to select the current item for voiding.

Press [CLR] to cancel the void transaction.

 Further details of the transaction are displayed including Card Type, Account Number, Expiry date and account entry method, i.e., Swiped or Keyed.

Press [OK] to select the current item for voiding.

Press [CLR] to exit.

VOID
Void Item xxx
Press OK to
Confirm!

Press [OK] to confirm the void.

VOID
Accepted
XXXXXX
Item#:nnn

The approval code is displayed along with the item number. The text "Accepted" appears only for voided credit return and ticket only transactions. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

VOID Press OK for customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

VOID
Accepted
XXXXXX
Item#:nnn

The approval code is displayed along with the item number. The text "Accepted" appears only for voided credit return and ticket only transactions. Press [CLR] to return to either the idle or transaction menu screen.

Void Transaction – *Receipt*

The printed void transaction receipt contains identical specific details to the receipt of the transaction that was voided. This means that the contents of the void transaction receipt depend on the contents of the receipt of the voided transaction.

An example of the void receipt is shown below:

```
-Transaction type
     VOID RECEIPT
    Custom Header Line 1
Custom Header Line 2
                                 -Custom header lines
                                  (max 6)
    Custom Header Line 3
    Custom Header Line 4
    Custom Header Line 5
    Custom Header Line 6
                                -Merchant ID
Merch ID:xxxxxxxxxxxxxxxxx
                              -Merchant ID
-Terminal ID & Item #
-Card, tran type, entry method
-Invoice#, operator id
VISA AVS VOID SALE: KEYED
Invoice : xxxxxxxx Op ID:xxxx
Order Number:
                                 -Purchase order number
-AVS numeric address info
-AVS zip code 5-9 digits
-If phone order
AVS Address:xxxxx
AVS Zip Code:xxxxxxxxx
PHONE ORDER
Acct:xxxxxxxxxxxxxxxx
                                  -Card number
Exp:mm/yy
                                  -Expiry Date
AMOUNT
               $xxxxx.xx
                                  -Purchase Amount
                                  -Tax Amount (optional)
TAX
               $xxxxx.xx
TIP
               $xxxxx.xx
                              -Tip Amount (optional)
             ========
TOTAL
               $xxxx.xx -Total Amount (optional)
                                  -Cardholder Signature
   Custom Agreement Line1
Custom Agreement Line2
                                  -Custom cardholder agreement
                                  lines (max 4)
   Custom Agreement Line3
   Custom Agreement Line4
   Custom Trailer Line 1
   Custom Trailer Line 2
                                 -Custom Trailer Lines
   Custom Trailer Line 3
                                  (max 4)
   Custom Trailer Line 4
Date: mm/dd/yy Time: hh:mmP
                                -Transaction date & time
Response: AUTH/TKT XXXXXX Y
                                 -Host Response text
AVS: Exact Match
                                 -AVS response description
TID:xxxxxxxxxxxxx ACI: V
                                -Transaction ID, auth
                                 characteristic indicator
```

ATM/Debit Sale

A debit sale should be performed only if the merchant account has been activated for debit.

A debit sale is started by pressing [OK] at the idle prompt, followed by [2] = DEBIT, then [1] = SALE. Then follow the prompts shown below.

Display Message

DEBIT SALE Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

DEBIT SALE Swipe Card Slide the card through the card reader. (Manual entry is not allowed.)

DEBIT SALE Enter Operator Id

(optional)

Key in the operator id (up to four numeric characters) and press [OK], or simply press [OK] to skip this input.

DEBIT SALE
Enter Sale
Amount
\$0.00

Key in the amount of the sale (max 7 digits) without the decimal point, then press [OK].

DEBIT SALE
Enter Tax
Amount
\$0.00

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

(optional)

DEBIT SALE

Enter

Tip

Amount

\$0.00

(optional)

Key in the tip amount (max 5 digits) without the decimal point then press [OK].

DEBIT SALE

Sale Tax Tip

\$xxxxx.xx \$xxx.xx

\$xxx.xx Total \$xxxxx.xx

If tip prompt is enabled or if tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

DEBIT SALE Enter Cashback Amount

\$0.00

(optional)

Key in the cashback amount of the sale (max \$999.99) without the decimal point then press [OK], or simply press [OK] to skip this field.

DEBIT SALE Amt \$xxxxxxx.xx Enter PIN

Key in the PIN number (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

DEBIT SALE Enter Invoice Number

Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

DEBIT SALE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

DEBIT SALE
AUTH/TKT
XXXXXX
Item#:nnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

DEBIT SALE Press OK for customer copy The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

DEBIT SALE
AUTH/TKT
XXXXXX
Item#:nnn

The approval message is displayed. Press [CLR] to return to transaction menu screen.

ATM/Debit Sale – Receipt

DEBIT SA	LE RECEIPT	-Transaction type
Custom He Custom He Custom He Custom He	eader Line 1 eader Line 2 eader Line 3 eader Line 4 eader Line 5 eader Line 6	-Custom header lines (max 6)
Merch ID:xxxxx Term ID:xxxx Invoice: xxxx Acct:xxxxxxxxx Exp:mm/yy	Item #:xxx xxxxx Op ID:xxxx	-Merchant ID -Terminal ID and Item # -Invoice#, operator id -Card number -Expiry Date
AMOUNT TAX	\$xxxxx.xx \$xxxxx.xx	-Purchase amount -Tax amount
TIP	\$xxxxx.xx	-Tip amount
CASHBACK FEE	\$xxxxx.xx \$xxxxx.xx	-Cash back amount(optional)
	========	-Txn fee(optional)
Custom Agr Custom Agr	\$xxxx.xx reement Line1 reement Line2 reement Line3 reement Line4	-Total Sale amount -Custom agreement lines (max 4)
Custom Tra Custom Tra Custom Tra	ailer Line 1 ailer Line 2 ailer Line 3 ailer Line 4	-Custom trailer lines (max 4)
Date: mm/dd/yy	y Time: hh:mmP	-Transaction date & time

Note that the merchant copy of the receipt will display the entire PAN.

ATM/Debit Return

This transaction should be performed if it is necessary to refund a debit sale.

An ATM/debit return is started by pressing [OK] at the idle prompt, followed by [2] = DEBIT, then [2] = RETURN.

Display Message

Operator Action

DEBIT RETURN
Enter Password

If prompted, key in the merchant password (1-6 digits) and press [OK].

DEBIT RETURN Swipe Card Slide the card through the card reader.

DEBIT RETURN
Enter Operator
Id

Key in the operator ID (up to four numeric characters) and press [OK], or simply press [OK] to skip this input.

(optional)

DEBIT RETURN
Enter Sale
Amount
\$0.00

Key in the amount of the return (max 7 digits) without the decimal point, then press [OK].

DEBIT RETURN
Enter Tax
Amount
\$0.00

Key in the tax amount (max 5 digits) without the decimal, then press [OK].

DEBIT RETURN
Amt \$xxxxxx.xx
Enter PIN

Key in the PIN (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

DEBIT RETURN Enter Invoice Number Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(optional)

DEBIT RETURN
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

DEBIT RETURN
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

DEBIT RETURN
AUTH/TKT
XXXXXX
Item#:nnnn

The approval message is displayed. Press [CLR] to return to transaction menu screen.

ATM/Debit Return – Receipt

DEBIT RETURN RECEIPT	-Transaction type
Custom Header Line 1 Custom Header Line 2 Custom Header Line 3 Custom Header Line 4 Custom Header Line 5 Custom Header Line 6	-Custom header lines (max 6)
Merch ID:xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	-Merchant ID -Terminal ID and Item # -Invoice#, operator id -Card number -Expiry Date
AMOUNT \$xxxxx.xx TAX \$xxxxx.xx	-Return amount -Tax amount
TOTAL \$xxxxx.xx	-Total Amount
Custom Agreement Line1 Custom Agreement Line2 Custom Agreement Line3 Custom Agreement Line4	-Custom agreement lines (max 4)
Custom Trailer Line 1 Custom Trailer Line 2 Custom Trailer Line 3 Custom Trailer Line 4	-Custom trailer lines (max 4)
Date: mm/dd/yy Time: hh:mmP	-Transaction date & time -Host Response text

Note that the merchant copy of the receipt will display the entire PAN.

EBT Food Sale

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

An EBT Food Sale is started by pressing [OK] at the idle prompt, followed by [3] = EBT, then [1] = FOOD SALE. Then follow the prompts shown below.

Display Message

FOOD SALE Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

FOOD SALE Swipe Card or Key Account # Slide the card through the card reader, or enter the number manually. (For manual entry the expiration date prompt may be bypassed by pressing [OK] if the card does not have an expiration date.)

FOOD SALE Enter Operator Id Key in the operator ID (up to four numeric characters) and press [OK]. This is a required prompt for EBT.

FOOD SALE
Enter Sale
Amount
\$0.00

Key in the sale amount (max 7 digits) without the decimal point, then press [OK].

FOOD SALE
Amt \$xxxxx.xx
Enter PIN

Key in the PIN number, (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

STANDARD TRANSACTIONS

FOOD SALE various text

The terminal displays several messages indicating it is communicating with the host. These are Dialing, Redialing, Sending, Receiving, and Disconnecting.

FOOD SALE
AUTH/TKT
XXXXXX
Item#:nnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

FOOD SALE
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

FOOD SALE AUTH/TKT XXXXXX

Item#:nnn

The approval message is displayed. Press [CLR] to return to transaction menu screen.

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EBT Food Sale—Receipt

..... -Transaction type FOOD SALE RECEIPT Custom Header Line 1 Custom Header Line 2 Custom Header Line 3 -Custom header lines (max 6) Custom Header Line 4 Custom Header Line 5 Custom Header Line 6 -Merchant ID -Terminal ID and Item #, Op ID:xxxx -Operator id Acct:xxxxxxxxxxxxxyyyy -Card number Exp:mm/yy -Expiry Date (if any) BAL xxx,xxx -Remaining EBT Balance as contained in response \$xxxxxx.xx CASH -Cash amount -Custom agreement lines Custom Agreement Line1 (max 4) Custom Agreement Line2 Custom Agreement Line3 Custom Agreement Line4 Custom Trailer Line 1 -Custom trailer lines (max 4) Custom Trailer Line 2 Custom Trailer Line 3 Custom Trailer Line 4 Date: mm/dd/yy Time: hh:mmP Response: AUTH/TKT XXXXXX -Transaction date & time -Host Response text

Note that the merchant copy of the receipt will display the entire PAN.

EBT Food Return

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

Use an EBT food return to issue a refund for an EBT food sale.

An EBT food return is started by pressing [OK] at the idle prompt, followed by [3] = EBT, then [2] = FOOD RETURN. Then follow the prompts shown below.

Display Message

Operator Action

FOOD RETURN Enter Password

If prompted, key in the merchant password (1-6 digits) and press [OK].

(optional)

FOOD RETURN Swipe Card Slide the card through the card reader. (Manual entry is not allowed.)

FOOD RETURN Enter Operator Id Key in the operator ID (up to four numeric characters) and press [OK]. This is a required prompt for EBT.

FOOD RETURN
Enter Sale
Amount
\$0.00

Key in the sale amount (max 7 digits) without the decimal point, then press [OK].

FOOD RETURN
Amt \$xxxxx.xx
Enter PIN

Key in the PIN number (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

FOOD RETURN various text

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

FOOD RETURN
AUTH/TKT
XXXXXX
Item#:nnn

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

FOOD RETURN Press OK for customer copy

(conditional)

FOOD RETURN
AUTH/TKT
XXXXXX

Item#:nnn

The approval message is displayed. Press [CLR] to return to transaction menu screen.

EBT Food Return – Receipt

..... -Transaction type FOOD RETURN RECEIPT Custom Header Line 1 Custom Header Line 2 -Custom header lines Custom Header Line 3 (max 6) Custom Header Line 4 Custom Header Line 5 Custom Header Line 6 Merch ID:xxxxxxxxxxxxxxxxx -Merchant ID -Terminal ID and Item # Op ID:xxxx -Operator id Acct:xxxxxxxxxxxxxxyyyy -Card number Exp:mm/yy -Expiry Date (if any) BAL xxx,xxx.xx -Remaining EBT Balance as contained in response \$xxxxxx.xx **AMOUNT** -Sale amount -Custom agreement lines Custom Agreement Line1 (max 4) Custom Agreement Line2 Custom Agreement Line3 Custom Agreement Line4 Custom Trailer Line 1 -Custom trailer lines (max 4) Custom Trailer Line 2 Custom Trailer Line 3 Custom Trailer Line 4 -Transaction date & time Date: mm/dd/yy Time: hh:mmP -Host Response text Response: AUTH/TKT XXXXXX

Note that the merchant copy of the receipt will display the entire PAN.

;

EBT Food Stamp Balance Inquiry

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

Use an EBT food stamp balance inquiry to obtain the food balance on the customer's account.

An EBT food stamp balance inquiry is started by pressing [OK] at the idle prompt, followed by [3] = EBT, then [3] = FOODSTP BAL. Then follow the prompts shown below.

Display Message

FOOD ST BAL Enter Password

(optional)

FOOD ST BAL Swipe Card or Key Account #

FOOD ST BAL Enter Operator Id

FOOD ST BAL Enter PIN

FOOD ST BAL various text

Operator Action

If prompted, key in the merchant password (1-6 digits), and press [OK].

Slide the card through the card reader, or enter the number manually. (For manual entry the expiration date prompt may be bypassed by pressing [OK] if the card does not have an expiration date.)

Key in the operator ID (up to four numeric characters) and press [OK]. This is a required prompt for EBT.

Key in the PIN number (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

FOOD ST BAL Please Wait Printing The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

(conditional)

FOOD ST BAL

BAL nnn, nnn.nn

The EBT food balance is displayed. Press [CLR] to return to transaction menu screen.

EBT Food Stamp Balance-Receipt

FOOD ST BAL RECEIPT

Custom Header Line 1 Custom Header Line 2 Custom Header Line 3 Custom Header Line 4 Custom Header Line 5 Custom Header Line 6

Acct:xxxxxxxxxxxxxxyyyy Exp:mm/yy

BAL xx,xxx.xx

Custom Trailer Line 1 Custom Trailer Line 2 Custom Trailer Line 3 Custom Trailer Line 4

Date: mm/dd/yy Time: hh:mmP

Response: XXXXXX

-Transaction type

-Custom header lines (max 6)

-Merchant ID

-Terminal ID

-Operator id

-Card number

-Expiry Date

-Remaining EBT Balance as contained in response

-Custom trailer lines (max 4)

-Transaction date & time

-Host Response text

EBT Cash Sale

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

An EBT cash sale is started by pressing [OK] at the idle prompt, followed by [3] = EBT, then [4] = CASH SALE. Then follow the prompts shown below.

Display Message

Operator Action

EBT CASH Enter Password

(optional)

If prompted, key in the merchant password (1-6 digits) and press [OK].

EBT CASH Swipe Card Slide the card through the card reader. (Manual entry is not allowed.)

EBT CASH Enter Operator Id Key in the operator ID (up to four numeric characters) and press [OK]. This is a required prompt for EBT.

EBT CASH
Enter Cash
Amount
\$0.00

Key in the cash sale amount (max 7 digits) without the decimal point, then press [OK].

EBT CASH
Amt \$xxxxx.xx
Enter PIN

Key in the PIN number (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

EBT CASH various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

EBT CASH
AUTH/TKT
XXXXXX
Item#:nnn

The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

EBT CASH
Press OK for
customer copy

The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)

EBT CASH AUTH/TKT XXXXXX The approval message is displayed. Press [CLR] to return to transaction menu screen.

Item#:nnn

EBT Cash Sale – Receipt

..... -Transaction type EBT CASH RECEIPT Custom Header Line 1 Custom Header Line 2 -Custom header lines Custom Header Line 3 (max 6) Custom Header Line 4 Custom Header Line 5 Custom Header Line 6 -Merchant ID -Terminal ID and Item # Op ID:xxxx -Operator id Acct:xxxxxxxxxxxxxxyyyy -Card number Exp:mm/yy -Expiry Date (if any) BAL xxx,xxx -Remaining EBT Balance as contained in response \$xxxxxx.xx CASH -Cash amount -Custom agreement lines Custom Agreement Line1 (max 4) Custom Agreement Line2 Custom Agreement Line3 Custom Agreement Line4 -Custom trailer lines Custom Trailer Line 1 (max 4) Custom Trailer Line 2 Custom Trailer Line 3 Custom Trailer Line 4 Date: mm/dd/yy Time: hh:mmP -Transaction date & time -Host Response text Response: AUTH/TKT XXXXXX

Note that the merchant copy of the receipt will display the entire PAN.

STANDARD TRANSACTIONS

EBT Cash Balance

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

Use an EBT cash balance inquiry to obtain the cash balance on the customer's account.

An EBT cash balance inquiry is started by pressing [OK] at the idle prompt, followed by [3] = EBT, then [5] = CASH BAL. The remaining prompts will be the same as for a food stamp balance inquiry (please see procedure on page 96), except that the display and receipt will display cash bal instead of food st bal.

EBT Voucher Sale

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

Use an EBT voucher sale if a prior approval was obtained from the voice center, and a voucher was completed with the customer.

An EBT voucher sale is started by pressing [OK] at the idle prompt, followed by 3 = EBT, then 6 = VOUCH SALE.

The remaining prompts will be the same as those for an EBT food sale (please see above), except that the display will show VOUCHER SALE. Additionally, the transaction will prompt for the VOUCHER NUMBER (obtained from the voucher) and the APPROVAL CODE (obtained from the voice center). It will not prompt for a PIN, however, because the customer is not required to be present after the paper voucher form has been completed.

The receipt will be the same as for a food sale, except it will print voucher sale receipt at the top.

EBT Voucher Return

EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

Use an EBT Voucher Return if a prior approval was obtained from the voice center, and a voucher was completed with the customer.

An EBT Voucher Return is started by pressing [OK] at the idle prompt, followed by [3] = EBT, then [7] = Vouch Rtrn. The remaining prompts will be the same as for an EBT Voucher Sale, except that the display will show "Voucher Rtn."

The receipt will be the same as for a Voucher Sale, except it will print "Voucher Rtn Receipt" at the top.

OFFLINE TRANSACTIONS

In an area in which there is no access to a telephone line and there is no wireless coverage, offline "store and forward" sale transactions may be performed. However, it is important to realize three things when performing these transactions:

- 1. At the time the offline sale is performed, it does *not* receive an approval. When it is uploaded later, it may be declined. Therefore, these transactions are performed at the merchant's own risk.
- 2. Later when the merchant has access to a telephone line or to wireless coverage, the offline transactions *must* be uploaded to obtain approvals and to capture in the regular transaction batch. The batch must then be closed at the end of the business day or the merchant will not receive credit for the transactions.
- 3. Any offlines that are repeatedly declined during uploads must be deleted from the offline batch. See the section in this manual titled Delete Offline Transactions in the Local Functions chapter for details.

An offline sale is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [1] = SALE, then [2] = OFFLINE. The remaining prompts will be identical to those for online credit card sales, with the following exceptions:

- 1. The transaction displays will show OFFLINE SALE at the top.
- 2. Receipts will not print an approval code, since no approval has been obtained at the time of sale.

If offline sale transactions are present in the device, the following screen will appear on power up of the terminal:

Display Message



Operator Action

Press the far left hand soft key to upload the transactions to the host. Press the far right hand soft key to proceed without uploading offline transactions.

Offline Transaction Operation

When offline sale transactions are performed, they are placed in an offline sale transaction batch and assigned a temporary item number. This item number is printed on the offline credit sale receipt. The item number is reassigned to a host-recognized item number only after the offline sales are uploaded to the processor. The fraud control screens are displayed for offline transactions according to their settings.

Offline Sale Transaction Receipt

```
-Transaction type
 OFFLINE SALE RECEIPT
    Custom Header Line 1
                                      -Custom header lines
    Custom Header Line 2
                                       (max 6)
    Custom Header Line 3
    Custom Header Line 4
    Custom Header Line 5
    Custom Header Line 6
-Merchant ID
Term Id: Item #:xxx
                                      -Terminal ID and Item #
VISA OFFLINE: SWIPED
                                      -Card, tran type, entry method
Invoice : xxxxxxxx Op ID:xxxx
                                      -Invoice#, operator id
-Card number
Exp:mm/yy
                                      -Expiry Date
AMOUNT
              $xxxxxx.xx
                                      -Purchase Amount
                                      -Tax Amount (Optional)
TAX
              $xxxxxx.xx
                                      -Tip Amount (Optional)
TIP
              $xxxxxx.xx
TOTAL
              Sxxxxxx.xx
                                      -Total Amount
        JOHN DOE
                                      -Card Holder Signature
   Custom Agreement Line1
                                      -Cardholder name (if swiped)
   Custom Agreement Line2
                                      -Custom cardholder agreement
   Custom Agreement Line3
                                      lines (max 4)
   Custom Agreement Line4
   Custom Trailer Line 1
                                      -Custom trailer lines
   Custom Trailer Line 2
                                       (max 4)
   Custom Trailer Line 3
   Custom Trailer Line 4
              Time:hh:mmP
Date: mm/dd/yy
                                      -Transaction date & time
Response: OFFLINE
                                      -Host Response text
```

Uploading Offline Transactions

The merchant is able to upload transactions either one at a time or all at once. Whether the original offline sales were done in dial-up or wireless mode makes no difference; the transactions can be uploaded in a different mode. For example, offlines done while the terminal was in wireless mode can be uploaded in either wireless or dial-up mode. If the terminal is in dial-up mode when the upload is initiated, offline transactions will be uploaded to the dial-up host. Once a transaction has been successfully uploaded, the transaction is deleted from the offline batch. If a transaction is declined, the transaction will remain in the offline batch until it is either successfully uploaded or manually deleted. (As noted above, offlines that are repeatedly declined must be deleted from the offline batch.)

An offline upload is started by pressing [OK] at the idle prompt, followed by [4] = BATCH, then [4] = UPLOAD. When the display prompts 1 ALL TXNS or 2 SINGLE TXN, the operator can make the desired selection.

If 1 ALL TXNS is selected, the operator then presses the left-most soft key under YES to start the upload.

If 2 SINGLE TXN is selected, the display will prompt for the offline item number. When the correct transaction is displayed, the operator presses [OK]. Additional transaction information will be displayed (card type, account number, expiration date, and method of entry (swiped or keyed). If the operator presses [OK] again, the offline transaction will be sent to the processing network for approval.

When offline sales are uploaded, a report will print out as shown below. If 1 ALL TXNS was selected, the terminal will re-dial the processing network for an individual approval for each offline transaction.

Upload Offline Transactions Report

The offline upload transactions report will look like this:

```
-Report type
      OFFLINE UPLOAD
            REPORT
     Custom Header Line 1
Custom Header Line 2
Custom Header Line 3
                                            -Custom header lines
                                             (max 6)
     Custom Header Line 4
     Custom Header Line 5
     Custom Header Line 6
-Merchant ID
Term ID:xxxx
                                             -Terminal ID and Item #
Date: mm/dd/yy Time:hh:mmP
                                             -Report date & time
-Item#, card type & entry method
Item#:nnn VISA SALE:SWIPED
Ac:xxxxxxxxxxxxxxxx mm/yy
Invoice#:xxxxxxxxx OpID:nnnn
Date:mm/dd/yy Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount Tax
-Item#, card type
-Account number
-Invoice number, operator id
-Transaction date & time
-Host response
Amount Tax
$xxxxxx.xx $xxxxxx.xx -Purchase amount, optional tax amt.
-Optional total
                                           -End of report marker
```

For more information about uploading offline sales, please see the section in this manual entitled Offline Batch Upload.

Local Reports, Reprints, and Reviews of Offline Transactions

The merchant will be able to perform all the current reporting, reprinting and reviewing functions (see later in this manual) for the offline transactions. If offline transactions are present, the merchant will be asked to select the batch for reporting when any of the reporting, reprinting or reviewing functions is selected. Offline reports will have the word OFFLINE printed above the title. Offline reports will not show any response code as they have been approved offline.

Offline Item Number

The offline item number will start at 1 and increment for each transaction. The number will be reset to 1 when all transactions are uploaded, i.e., there are no transactions in the offline batch. There is a maximum of 300 offline transactions allowed in the terminal. The merchant will have to perform an upload if this maximum is reached.

PRE-SALE GRATUITY

This function is not a financial transaction. It will not be stored in the terminal's memory and will not affect totals. Its purpose it to allow businesses to offer a tip option to their customers by printing a pre-sale receipt. This is not a restaurant transaction.

A normal purchase must still be performed after the tip amount has been determined.

To start a pre-sale gratuity, select pre-sale from the menus by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [6] = PRE-SALE. Then follow the remaining prompts shown below.

Display Message

PRE-SALE

Not A Sale!

PRE-SALE

Enter

Sale

Amount

\$0.00

PRE-SALE Processing

Please Wait

(conditional)

Operator Action

This message is displayed for 2 seconds.

Enter the sale amount and press [OK].

The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

The transaction menu will then be displayed.

Pre-Sale Gratuity — Receipt

PRE-SALE RECEIPT

······

Custom Header Line 1 Custom Header Line 2 Custom Header Line 3 Custom Header Line 4 Custom Header Line 5 Custom Header Line 6

AMOUNT \$xxxxxx.xx

TIP \$_____

TOTAL \$

THIS IS NOT A CREDIT CARD RECEIPT

- -Transaction type
- -Custom header lines (max 6)
- -Merchant ID
- -Terminal ID
- -Purchase amount
- -To be supplied by customer
- -Sum of Tip and Purchase

ERROR TRANSACTIONS

If authorization of the transaction does not occur due to a communications error then the reason for this will be displayed. The table below lists some error messages and their meanings. For more information about some of these error messages, see Appendix—Troubleshooting Guidelines at the end of this manual.

Display Message

Operator Action

The comms error will be displayed until the user presses [CLR], at which point the transaction menu or the idle screen will be displayed.

The bottom two lines will contain the specific communications error message.

Error Message	Meaning			
No Dial tone	Dial tone cannot be detected. Check the phone line connections.			
Connect	Make sure the phone line has a dial tone.			
Line!	1			
Host Busy	The host is busy and cannot answer the incoming call. Try the			
Try Again	transaction again.			
No Answer	The host did not pick up the incoming call. Try again.			
No Response	A connection was established but the remote host did not sen			
From Host	ENQs. Try again.			
Line Lost	A connection was established but then an unexpected disconnect			
	occurred. Check the connections or the wireless signal and try			
	again.			
Out Of	Wireless modem could not detect network signal. Make sure the			
Network	antenna is extended & terminal is vertical. Move to another location			
Coverage	& try again.			
Modem Has No	Wireless modem has not been configured on the wireless network.			
Assigned	Call the help desk.			
Hosts Host Not	Windows modern is not configured to connect to the visualoss			
Assigned	Wireless modem is not configured to connect to the wireless			
Host	gateway. Call the help desk.			
Inaccessible	Wireless network could not connect to the wireless gateway. Try			
Host Is	again. If the problem persists, call the help desk.			
Undefined	Wireless modem is not configured to connect to the host. Call the help desk.			
Host Is	Access to the wireless gateway has been denied by the wireless			
Blocked	network. Call the help desk.			
Invalid	The wireless gateway address is not recognized by the wireless			
Host Address	network. Call the help desk.			
Rejected	The transaction was sent but was discarded by the wireless			
By Network	network. Try again.			
Network	Error code <i>nnn</i> returned by the wireless network. Try again. If the			
Error nnn	problem persists, call the help desk.			
Signal	The wireless network signal was lost before the transaction was			
Lost	completed. Try again.			
Modem Error	The wireless modem was unable to send the transaction. Try again.			
Please Retry	The second secon			
Hardware	There may be an internal connection or other hardware problem.			
Error	Try the transaction again. If the problem persists, call the help desk.			
Call Help				
Desk				

ERROR TRANSACTIONS

Error Message Comms. Error Fault Id: NNNN	Meaning A general communications fault, identified by a 4-digit number, occurred. Try again. If the problem persists, call the help desk.			
Host Timeout	In wireless mode, terminal has not received response from host within particular time. Try again.			
Application Error (followed by three lines of variable text)	This usually occurs only if erroneous values have been entered in the merchant's Zontalk file, or if certain fields in the file have been left blank. Reboot the terminal. If possible, close any open batches in the terminal. Then reset the CDS (see how to do this under "Special Setup Functions" in this manual). Rebuild the Zontalk file with the correct values (see the table under "Download Parameters and Options" for guidance). Perform a configuration download to reload the parameters.			

REVIEW

Several local review operations allow the totals and detailed transaction information to be display on the terminal screen for appraisal by the merchant.

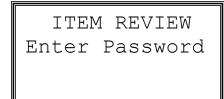
(Note: After a batch has been successfully closed, it can still be viewed in the Reviews until a new batch is started.)

Review-Item Number

The item number review displays the detailed components of any transaction in the batch.

An item number review is started by pressing the blue [F] key at the idle prompt, followed by [2] = REVIEW, then [1] = ITEM NUMBER. Then follow the remaining prompts shown below.

Display Message



(optional)



ITEM REVIEW
Enter Item #

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

If offline transactions are present, this screen will appear. Press the far left soft key under Yes to act on transactions in the offline batch only. Press the far right soft key under No to act on transactions except the offline batch transactions.

Key in the item number of the transaction to review and press [OK].

ITEM REVIEW

xxx SALE

yyyy\$nnnnn.nn

Prev Next

yyyy = VOID for the voided items

The item number and transaction name are displayed on the second line followed by the dollar amount.

Press the far left soft key under Prev to view the previous item.

Press the far right soft key under Next to view the next item.

Press [OK] to select the transaction for further detailed reviewing.

Press [CLR] to return to the review menu.

ITEM REVIEW <transaction information>

Press the [OK] key to scroll forward through the available transaction data.

Press the [CLR] key to exit at any time.

The information relating to the transaction will be displayed on the 3 lines of the display. This includes card name, account number, expiry date, entry method.

Review-Totals

This review will allow the user to view the totals for an individual card type or the combined totals for all cards. A totals review is started by pressing the blue [F] key at the idle prompt, followed by [2] = REVIEW, then [2] = TOTALS. Then follow the remaining prompts shown below.

Display Message

Operator Action

TOTALS REVIEW Enter Password

(optional)

If prompted, key in the merchant password (1-6 digits) and press [OK].

A sub-menu listing all the possible card types will be present for the user to choose from. This will also include an "ALL" option for a grand total of all card totals.

Select Offline Batch?

Yes

(conditional)

Nο

If offline transactions are present, this screen will appear.

Press the far left soft key under YES to act on transactions in the offline batch only.

Press the far right soft key under NO to act on transactions except the offline batch transactions.

TOTALS REVIEW <Card Name>
Txns:nnn
\$nnnnnn.nn

OR

For any particular card type the card name, number of transactions and the total are displayed. Press [CLR] to return to the menu.

TOTALS REVIEW
Batch Totals
Txns:nnn
\$xxxxxx.xx

If the ALL card option is chosen, the total number of txns and the batch grand total will be displayed.

Review – Operator ID

This review allows the totals to be displayed for an individual or for all operators. This assumes that the configurable terminal operating parameter is enabled for operator ID prompting during a transaction. An operator ID review is started by pressing the blue [F] key at the idle prompt, followed by [2] = Review, then [3] = Operator ID. Then follow the remaining prompts shown below.

Display Message

OPERATOR TOTAL Enter Password

(optional)

Select Offline
Batch?

(conditional)

OPERATOR TOTAL Enter Operator Id

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

If offline transactions are present, this screen will appear.

Press the far left soft key to act on transactions in the offline batch only.

Press the far right soft key to act on transactions except the offline batch transactions.

Key in the operator ID required then press [OK] or just press [OK] to select all operators.

OPERATOR TOTAL
Op Id: nnnn
\$xxxxxxx.xx
Prev Next

OR

OPERATOR TOTAL All Operators

\$xxxxxx.xx

The totals for a particular operator are displayed.

Press the far left soft key under PREV to view the previous operators totals. Press the far right soft key under NEXT to view next operator's totals.

Press [CLR] key to return to the menu.

The total for all operators is displayed. Press [CLR] to return to the menu.

REPORTS

Several reports on the current open batch are available via the 9100 printer. These include: item detail, card type detail, transaction type detail, summary and operator ID.

(Note: After a batch has been successfully closed, reports for that batch can still be printed until a new batch is started.)

Reports – Item Detail, Card Detail, and Transaction Type Detail

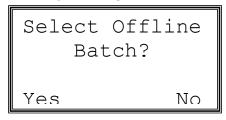
On all detail reports displaying transaction types, the following abbreviations are used:

Sale Transactions	SALE
Ticket Only Transactions	TKTO
Return Transactions	RTRN

Report - Item Detail

This prints a detail report of all transactions in the current open batch, ordered by Item Number. An item detail report is started by pressing the blue [F] key at the idle prompt, followed by [3] = REPORT, then [1] = DETAILS, then [1] = ITEM NUMBER. Then follow the remaining prompts shown below.

Display Message



(conditional)

ITEM DETAIL Report Printing Please Wait

(conditional)

Operator Action

If offline transactions are present, this screen will appear.

Press the far left soft key to print a report on transactions in the offline batch only.

Press the far right soft key to print a report on transactions except the offline batch transactions.

This display will appear while the report is printing. The DETAILS REPORT menu will then reappear. Press [CLR] to exit.

The transaction detail report will look like this:

```
.....
                                 -Report type
  ITEM DETAIL REPORT
Custom Header Line 1
                                 -Custom header lines
Custom Header Line 2
                                 (max 6)
Custom Header Line 3
Custom Header Line 4
Custom Header Line 5
Custom Header Line 6
-Merchant ID
Term ID:xxxx
                                 -Terminal ID and Item #
Date: mm/dd/yy Time:hh:mmP
                                 -Report date & time
Item#:nnn VISA SALE:SWIPED
                                 -Item#, card type, tran type & entry method
-Account number and expiry date
                                -Invoice number, operator id
Date:mm/dd/yy Time:hh:mmP
                                -Transaction date & time
-Host response
Amount Tax $xxxxxx.xx
                                -Purchase amount, optional tax
                                -Optional total
    TOTAL: $xxxxxxx.xx
Item#:nnn DEBIT SALE
                                -Item#, card type, trans type
Ac:xxxxxxxxxxxxxxxxx
                                -Account number
CC:xxxxxxxxxxxxxxxx
                                 -Customer Code
Order Number:
                                 -Order number
Invoice#:xxxxxxxx      OpID:nnnn
Date:mm/dd/yy      Time:hh:mmP
                                -Invoice number, operator id
                                -Transaction date & time
Resp: xxxxxxxxxxxxxxxx Amount Tax
                                -Host response
Amount $xxxxxx $xx
                                -Purchase amount, optional tax
               $xxxxx.xx
    Cashback:$xxxxxx.xx
                                 -Optional cashback
      Tip:$xxxxx.xx
                                 -Optional tip
    Surcharge: $xxxxxx.xx
                                 -Optional txn fee surcharge
      TOTAL: $xxxxxx.xx
                                 -Optional total
      END OF BATCH
                                 -End of report marker
```

NOTE: Voided transactions *will* be displayed in the item detail report.

Report -Card Detail

This prints a detail report of all transactions in the current open batch, ordered by Card Type. A card detail report is started by pressing the blue [F] key at the idle prompt, followed by [3] = REPORT, then [1] = DETAILS, then [2] = CARD TYPE. Then follow the remaining prompts shown below.

Display Message

Select Off	fline		
Batch?			
Yes	No		

(conditional)

CARD DETAIL Printing Please Wait

(conditional)

Operator Action

If offline transactions are present, this screen will appear.

Press the far left soft key to print a report on transactions in the offline batch only.

Press the far right soft key to print a report on transactions except the offline batch transactions.

This display will appear while the report is printing. The DETAILS REPORT menu will then reappear. Press [CLR] to exit.

Note that the detail report will contain all data collected during the transaction from prompts if the data is non-zero.

NOTE: Voided transactions will be displayed in the card detail report.

The transaction detail report will look like this:

```
·······
                                  -Report type
  CARD DETAIL REPORT
 Custom Header Line 1
                                 -Custom header lines
 Custom Header Line 2
                                  (max 6)
 Custom Header Line 3
 Custom Header Line 4
 Custom Header Line 5
 Custom Header Line 6
                                 -Merchant ID
-Terminal ID and Item #
Term ID:xxxx
                                  -Report date & time
 Date: mm/dd/yy Time:hh:mmP
   MasterCard TRANSACTIONS
NONE
                                  -Card Type
      VISA TRANSACTIONS
                                 -Item#, card type & entry method
 Item#:nnn VISA SALE:SWIPED
                                  -Account number and expiry date
 Ac:xxxxxxxxxxxxxxxx mm/yy
                                  -Order Number
 Order Number:
 -Invoice number, operator id
 -Transaction date & time
-Host response
 Amount Tax $xxxxxx.xx $xxxxxx.xx
                                 -Purchase amount, optional tax
                                 -Optional total
     TOTAL: $xxxxxx.xx
                                 -Card Type
 DEBIT TRANSACTIONS
                                 -Item#, card type
 Item#:nnn DEBIT SALE
                             -Account number
-Customer Code
-Invoice number, operator ID
-Transaction date & time
-Host response
-Host response
 Resp: xxxxxxxxxxxxxxx Amount Tax
                                 -Purchase amount, optional tax
 Amount Tax $xxxxxx.xx $xxxxx.xx
                             -Optional cashback
-Optional tip
-Optional txn fee surcharge
-Optional total
     Cashback: $xxxxxx.xx
        Tip:$xxxxx.xx
     Surcharge: $xxxxxx.xx
                                 -Optional total
      TOTAL: $xxxxxxx.xx
באט טב באשטה
```

NOTE: If no transactions are present for a particular card type, the card type will not be displayed in the report.

Report - Transaction Type Detail Report

This prints a detail report of all transactions in the current open batch, ordered by Transaction Type. A transaction detail report is started by pressing the blue [F] key at the idle prompt, followed by [3] = REPORT, then [1] = DETAILS, then [3] = TXN TYPE. Then follow the remaining prompts shown below.

Display Message



(conditional)

TXN DETAIL Printing Please Wait

(conditional)

Operator Action

If offline transactions are present, this screen will appear.

Press the far left soft key to print report on transactions in the offline batch only.

Press the far right soft key to print report on transactions except the offline batch transactions.

This display will appear while the report is printing. The details report menu will then reappear. Press [CLR] to exit.

The transaction detail report will look like this:

```
.....
                                 -Report type
  TXN DETAIL REPORT
Custom Header Line 1
                                 -Custom header lines
Custom Header Line 2
                                  (max 6)
Custom Header Line 3
Custom Header Line 4
Custom Header Line 5
Custom Header Line 6
-Merchant ID
Term ID:xxxx
                                 -Terminal ID and Item #,
Date: mm/dd/yy Time:hh:mmP
                                 -Report date & time
    CREDIT TRANSACTIONS
                                 -Category
Item#:nnn VISA SALE:SWIPED
                                 -Item#, card type & entry method
Ac:xxxxxxxxxxxxxxxxx mm/yy
                                 -Account number and expiry date
Order Number:
                                 -Order Number
Invoice#:xxxxxxxx OpID:nnnn
                                 -Invoice number, operator id
Date:mm/dd/yy Time:hh:mmP
                                 -Transaction date & time
-Host response
Amount Tax $xxxxxx.xx $xxxxxxxx
                                 -Purchase amount, optional tax
    TOTAL: $xxxxxx.xx
                                 -Optional total
    DEBIT TRANSACTIONS
                                 -Category
                            -Item#, card type
-Account number
-Customer Code
-Invoice number, operator id
-Transaction date & time
-Host response
Item#:nnn DEBIT SALE
CC:xxxxxxxxxxxxxxxx
Invoice#:xxxxxxxxx OpID:nnnn
Date:mm/dd/yy Time:hh:mmP
-Purchase amount, optional tax
    Cashback: $xxxxxx.xx
                             -Optional cashback
-Optional tip
-Optional txn fee surcharge
       Tip:$xxxxx.xx
    Surcharge:$xxxxxx.xx
      TOTAL: $xxxxxx.xx
                                 -Optional total
      END OF BATCH
                                 -End of report marker
.....;
```

Note: The report will be ordered by credit, debit and EBT transaction categories and within these ordered by item number. The detail report will contain all data collected during the transaction from prompts if the data is non-zero. Voided transactions will be displayed in the transaction detail report. If no transactions are present for a transaction type, this type will not be displayed on the report.

Report-Summary

The summary report provides totals for credit, debit and EBT transactions. If a particular card type does not have any activity in the batch, that card type will not be included in the summary report. A summary report is started by pressing the blue [F] key at the idle prompt, followed by [3] = REPORT, then [2] = SUMMARY. Then follow the remaining prompts shown below.

Display Message



Operator Action

If offline transactions are present, this screen will appear.

Press the far left soft key to print a report on transactions in the offline batch only.

Press the far right soft key to print report on transactions except the offline batch transactions.

The standard "Printing Please Wait" screen will be displayed while the report is printing. The Report menu will then reappear. Press [CLR] to exit.

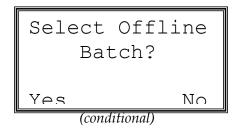
The summary report will look like this:

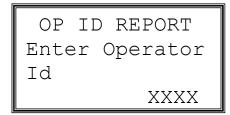
BATCH SUN	MAR:	Y REPORT	-Report Type
Custom Header Line 1 Custom Header Line 2 Custom Header Line 3 Custom Header Line 4 Custom Header Line 5 Custom Header Line 6			-Custom header lines (max 6)
<pre>Merch ID:xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</pre>			-Merchant ID -Terminal ID and Item # -Batch number -Report date & time
CREDIT TRANSACTIONS		ACTIONS	-Category
SALE RETURN TICKET VOID =======	TXN nnn nnn nnn nnn	\$xxxxxx.xx \$xxxxxx.xx \$xxxxxx.xx	-No of sales and total amount -No of returns and total amount -No of tickets and total amount -No of voids and total amount
SUB-TOTAL	nnn	\$xxxxxx.xx	-Total for all credit txns
DEBIT TRANSACTIONS		ACTIONS	-Category
SALE RETURN ======	TXN nnn nnn ===	\$xxxxxx.xx \$xxxxxx.xx	-No of sales and total amount -No of returns and total amount
SUB-TOTAL	nnn	\$xxxxxx.xx	-Total for all debit txns
EBT I	'RANSA	CTIONS	
SUB-TOTAL	nnn	\$xxxxxx.xx	-Total for all EBT txns
ALL TRANSACTIONS		TIONS	
CREDIT DEBIT EBT ======	nnn nnn nnn ===	:	-Credit sub total -Debit sub total -EBT sub total
GRAND TOTAL	nnn	\$xxxxxx.xx	-Grand total for open batch
İ			The of manage manages

Report - Operator ID

The operator ID report lists the transactions performed for a single operator or for all operators. This assumes that the configurable operator id prompt is enabled during transaction processing. An operator ID report is started by pressing the blue [F] key at the idle prompt, followed by [3] = REPORT, then [3] = OPERATOR ID. Then follow the remaining prompts shown below.

Display Message





Operator Action

If offline transactions are present, this screen will appear.

Press the far left soft key to print report on transactions in the offline batch only.

Press the far right soft key to print report on transactions except the offline batch transactions.

Key in the operator ID required then press [OK], or just press [OK] to select all operators.

The standard PRINTING PLEASE WAIT screen will be displayed while the report is printing. The Report menu will then reappear. Press [CLR] to exit.

The operator ID report will look like this:

```
-Report Type and op id
OPERATOR XXXX REPORT
                             -Custom header lines
Custom Header Line 1
                               (max 6)
Custom Header Line 2
Custom Header Line 3
Custom Header Line 4
Custom Header Line 5
Custom Header Line 6
-Merchant ID
-Terminal ID and Item #
Term ID:xxxx
                              -Report date & time
Date: mm/dd/yy Time:hh:mmP
ITEM CARD TRANS
                 TOTAL
                             -Item#, card/txn type & amount
001 MC SALE $xxxxxx.xx
008 VISA RETRN $xxxxxx.xx
                ========
                             -Total value for operator
               $xxxxxx.xx
SUB-TOTAL
                              -End of report marker
     END OF OPERATORS
!.....
```

If a report for all operators is requested, an ordered report will be generated with the operator ID printed above the Item/Card/Trans total heading. This section will then be repeated for each unique operator ID.

Aborting Reports

During the printing of the item detail, card detail, transaction detail, or operator ID report the printing may be aborted by pressing the [C] (Cancel) key. The printout of the aborted report will end with the text, report aborted. On pressing the cancel key the following screen will appear:

Display Message



Operator Action

Press the far right hand soft key or the [CLR] key to continue the report printing.

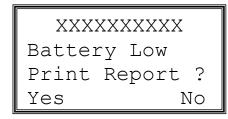
Press the far left hand soft key to abort the report.

XXXXXXXXX represents the report type

Low Battery Indication When Printing Reports

If a low battery level is detected when a report starts to print, then the following screen will appear:

Display Message



Operator Action

Press the far right hand soft key to stop the report printing.

Press the far left hand soft key or the [CLR] key to print the report.

XXXXXXXXX represents the report type.

REPRINT

This function prints a duplicate receipt of any transaction in the open batch. A reprint is started by pressing the blue [F] key at the idle prompt, followed by [1] = REPRINT. Then follow the remaining prompts shown below.

Display Message

REPRINT Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

REPRINT

- 1 Merchant
- 2 Customer
- 3 Both

(conditional)

The terminal requests the merchant to select either merchant or customer receipt reprint, or both.

Select Offline Batch?

Yes

(conditional)

No

If offline transactions are present, this screen will appear.

Press the far left soft key to act on transactions in the offline Batch only.

Press the far right soft key to act on transactions except the offline batch transactions.

REPRINT
Enter Item #

Key in the item number of the transaction for which a duplicate receipt is required and press [OK], or just press [OK] to reprint the last transaction.

(optional)

REPRINT Reprinting Please Wait While the receipt is reprinting, this display will be shown.

(conditional)

The reprinted receipt will be identical to the original receipt except the words **DUPLICATE** will appear immediately below the six custom receipt header lines.

CLOSE AND OTHER BATCH FUNCTIONS

Batch close, batch inquiry, batch update, and offline upload transactions are supported.

Batch Close

Important Note: At the end of each business day the batch <u>must</u> be closed and receive a CLOSED OK response, or the merchant will <u>not</u> be credited for the transactions in that day's batch.

Important Note: A batch that was done in wireless mode <u>must</u> be closed in wireless mode! A batch that was done in dial-up mode <u>must</u> be closed in dial-up mode! You <u>cannot</u> perform transactions in one mode and then close them in the other mode.

A batch close is started by pressing the [OK] key at the idle prompt, followed by [4] = BATCH, then [1] = CLOSE. Then follow the remaining prompts shown below.

Display Message

BATCH CLOSE Enter Password

(optional)

BATCH CLOSE
Print Report?
Yes
No

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

Press the far left hand soft key to print a summary report and item detail report. Press the far right hand soft key to print only a close receipt.

The batch credit amount, batch debit and EBT amount, and the batch total amount are displayed.

Press [OK] to confirm the close.

BATCH CLOSE Credit \$xxx.xx Debit/EBT \$xxx.xx Total \$xxx.xx Press OK to Cont.

BATCH CLOSE various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

BATCH CLOSE Please Wait Printing

The terminal displays this message until the batch close receipt is printed assuming that the printer is available and enabled.

(conditional)

BATCH CLOSE Closed Ok After printing the batch close receipt, the successful close message is displayed. Press [CLR] to return back to the transaction menu screen.

If there is a discrepancy between the terminal and the host during the batch close, then the error type and amount will be displayed instead of the CLOSED OK message, for example, INVLD xxx.xx or FORCE xxx.xx. PLEASE CALL HELP DESK will also be displayed on detection of a discrepancy.

Note: The amount displayed in the event of a force or invalid close will include <u>only</u> credit transactions. It will <u>not</u> include debit or EBT totals.

Batch Close-Receipt

BATCH CLOSE RECEIPT

Custom Header Line 1 Custom Header Line 2 Custom Header Line 3 Custom Header Line 4 Custom Header Line 5 Custom Header Line 6

Term ID:xxxx
Batch #: n
#Items:nnn

TOTAL \$xxxxxx.xx

Date: mm/dd/yy Time: hh:mmP

-Merchant header

-Merchant ID

-Terminal

-Batch number (0 through 9)
-Number of items in batch

-Batch Credit total -Batch Debit total -Batch EBT total

-Batch Total

-Transaction date & time

CLOSE AND OTHER BATCH FUNCTIONS

Batch Inquiry

The batch inquiry transaction returns the settled total amount from the previous day's closed batches.

A batch inquiry is started by pressing the [OK] key at the idle prompt, followed by [4] = BATCH, then [2] = INQUIRY. Then follow the remaining prompts shown below.

Display Message

BATCH INQUIRY
Start Inquiry?
Yes No

Operator Action

Press the far left hand soft key to contact the host or press the far right hand soft key to exit and return to the batch menu.

BATCH INQUIRY various text

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

BATCH INQUIRY
Last Deposit
xxxxxxxxxxxx

The last deposit message returned from the host will be displayed.

Press [CLR] to return to the batch menu screen.

Batch Update

This transaction updates the host with any off-line transactions in the open batch. (Note: These are *not* Offline Sales, but transactions such as Ticket Only, Void and Credit Return that are stored "off-line" in the terminal's batch because they do not need an on-line approval.)

A batch update is started by pressing the [OK] key at the idle prompt, followed by [4] = BATCH, then [3] = UPDATE. Then follow the remaining prompts shown below.

Display Message

BATCH UPDATE
Start Update?
Yes No

BATCH UPDATE various text

BATCH UPDATE Completed Ok

Operator Action

Press the far left hand soft key to contact the host, or press the far right hand soft key to exit and return the batch menu.

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

Press [CLR] to return to the batch menu screen.

CLOSE AND OTHER BATCH FUNCTIONS

Offline Batch Upload

This transaction uploads offline credit sale transactions to the host. (For more information about offlines, please see the section in this manual entitled Offline Transactions.)

An offline batch upload is started by pressing the [OK] key at the idle prompt, followed by [4] = BATCH, then [4] = UPLOAD. Then follow the remaining prompts shown below.

Display Message

BATCH UPLOAD

1 All Txns

2 Single Txn

Operator Action

Select either all offline transactions to be uploaded or single transaction.

Offline Upload – Single Transaction

Display Message

BATCH UPLOAD Enter Password

(optional)

BATCH UPLOAD Enter Item Number

(optional)

BATCH UPLOAD

1 OFFLINE SALE
\$XX.XX

PREV NEXT

BATCH UPLOAD
XXXXXXXXXX
CCCCCCCCCCCCC
XX/XX Swiped

(optional)

BATCH UPLOAD various text

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

Enter the item number of the offline transaction to be uploaded to the host.

Press [OK] to display the detailed transaction information. Press [CLR] key to cancel the operation.

The detailed transaction information including card type, card number, expiry date and entry method is displayed. Press [OK] to continue. Press [CLR] to cancel the operation.

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

BATCH UPLOAD
Enter Item

Number

The next item number can now be entered for upload.

Press [CLR] to return to the batch menu screen.

BATCH UPLOAD

Upload Ended
Approved xxx
Declined xxx
Not compl. xxx

Press [CLR] to return to the batch menu screen.

The results of the upload will be printed on the upload report.

Batch Upload—All Transactions

Display Message

BATCH UPLOAD Enter Password

(optional)

BATCH UPLOAD

UPLOAD ALL OFFLINE

TRANS VIA WIRELESS

(OR DIAL UP)

Yes No

(optional)

BATCH UPLOAD various text

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

Press the far left hand soft key to contact the host or press the far right hand soft key to exit and return the batch menu screen.

The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

CLOSE AND OTHER BATCH FUNCTIONS

BATCH UPLOAD

Upload Ended
Approved xxx
Declined xxx
Not compl. xxx

Press [CLR] to return to the batch menu screen.

The results of the upload will be printed on the upload report.

LOCAL FUNCTIONS

In addition to Reviews, Reports and Reprints described earlier in this manual, there are a number of other local functions. All of these are accessed by pressing the blue [F] key, then scrolling through the admin menu. These functions include response (view last responses), batch, setup, date and time, password, demo mode and diagnostics. Each of these functions is summarized in the table below, then explained in detail in the sections that follow the table.

Table of Local Functions

General Instructions

- To access the administrative functions, **press the blue [F] key**.
- To choose a menu option, either press the number of that option, <u>OR</u> scroll with the up or down arrow key until the option is "highlighted" in reverse text. Then press the green [OK] key to select it. Make further selections from the sub-menus using the same method.
- If a password is requested, the default password is [1] [2] [3] [4]. If merchant has changed the password and does not remember new password, see instructions at end of table below.
- When in a sub-menu, **press the orange** [CLR] **key** to step back to the previous menu.
- When a field has a yes or no question, **press the left-most yellow key for YES**. **Press the right-most yellow key for NO**.
- When entering data in a field, press the orange [CLR] key to backspace or to empty a field if necessary.
- After entering data in a field, **press the green [OK] key** to save the entry.
- **Press the red [C] key** to exit a field or to exit the admin menu.
- **Use the table below** to find the various admin menu and sub-menu options.

ADMIN MAIN	FIRST SUB-	2 ND SUB-MENU	3 ^{KD} SUB-MENU	EXPLANATION
MENU OPTIONS	MENU OPTIONS	OPTIONS	OPTIONS	
1 Reprint	1 Merchant			Reprint merchant copy of receipt
	2 Customer			Reprint customer copy of receipt
	3 Both			Reprint both copies of receipt
2 Review	1 Item Number			Review individual transaction
	2 Totals	1 MasterCard, 2 Visa, 3 AmEx, etc.		Review card type totals & grand total (0 = AII)
	3 Operator ID			Review totals by operator ID (press OK key for all operators)
3 Report	1 Details	1 Item Number		Print details by item number
		2 Card Type		Print details by card type
		3 Txn Type		Print details by transaction type
	2 Summary			Print batch summary
	3 Operator ID			Print totals by operator ID (press OK key for all operators)
4 Response	-	-		Displays last five terminal responses (press OK to go back from most recent to earliest)
5 Detah	4 History			Diambaya laat fiya
5 Batch	1 History			Displays last five batch close amounts (press OK to go back from most recent to earliest)
	2 Number			Displays current batch number and allows number to be changed
	3 Clear			Deletes the current batch—USE WITH CAUTION!
	4 Del Offline	1 Single Txn		Allows a single offline transaction to be deleted
		2 All Txns		Deletes all offline sales—USE WITH CAUTION!
6 Setup	1 Printer	1 On\Off		Turns printer on or off

ADMIN MAIN MENU OPTIONS	FIRST SUB- MENU OPTIONS	2 ND SUB-MENU OPTIONS	3 ^{KU} SUB-MENU OPTIONS	EXPLANATION
MENO OF HONO	MENS OF HONE	2 Receipt		Sets number of customer copies
		3 Format	1 Header	Sets up receipt header lines text
			2 Trailer	Sets up receipt
			3 Flex	trailer lines text Sets up agreement lines text
	2 Backlight			Sets backlight timeout time
	3 Contrast			Sets display contrast
	4 Comms	1 Comms Type		Displays current comms type (dialup or wireless) and allows type to be changed (recommend do NOT change with transactions in the
		2 Wireless	1 Auth IP	batch) Sets wireless IP
			2 Close Ph.	address (N/A—dialup close of wireless batch not yet available)
			3 Terminal ID	Sets wireless terminal ID (FDR 4-digit device ID—do NOT set same as dialup terminal ID)
		3 Dial-up	1 Auth 1 Ph.	Sets primary auth phone number
			2 Auth 2 Ph.	Sets secondary auth phone no.
			3 Close 1 Ph.	Sets primary close phone number
			4 Close 2 Ph.	Sets secondary close phone no.
			5 Terminal ID	Sets dialup terminal ID (FDR 4-digit device ID—do NOT set same as wireless terminal ID)
		4 Config	1 Host Phone	Sets Zontalk config phone no.
			2 Terminal ID	Sets Zontalk config load terminal ID
		5 Dial Prefix		Sets dial prefix for all phone numbers (use Clr key to delete an existing prefix if no prefix needed)
	5 Config Load			Loads merchant's Zontalk parameters (in dialup mode only)

ADMIN MAIN MENU OPTIONS	FIRST SUB- MENU OPTIONS	2 ND SUB-MENU OPTIONS	3 RD SUB-MENU OPTIONS	EXPLANATION
mens or none	6 App Upgrade			Loads new versions of software (in dialup mode only) - Always
				close
				batch
				before
				app
				upgrade.
				- Always do a config load after app upgrade.
	7 Prompts	1 Sales Tax		Enables/disables tax
				prompt
		2 Order No.		Enables/disables order # prompt
		3 Invoice No.		Enables/disables invoice # prompt
		4 AVS Only		Enables/disables AVS prompts (street address and zip code)
		5 Cust Code		Enables/disables customer code prompt (for purchasing cards)
		6 Last 4 No.		Enables/disables "Last 4" fraud control prompt
		7 Echo Card		Enables/disables "Display MSR" fraud control prompt
		8 Operator ID		Enables/disables operator ID prompt
		9 Idle Prompt	1 Idle Top	Sets up idle prompt top line
			2 Idle Main	Sets up idle prompt main line
		0 Tip		Enables/disables retail tip prompt
	8 Enable Txns	1 EBT Inquiry		Enables/disables EBT balance inquiry
		2 EBT Cash		Enables/disables EBT cash sale
		3 DB Cashback		Enables/disables debit cashback
		4 DB Return		Enables/disables debit return
		5 CR Return		Enables/disables credit return
		6 Pre-Sale		Enables/disables pre-sale

ADMIN MAIN MENU OPTIONS	FIRST SUB- MENU OPTIONS	2 ND SUB-MENU OPTIONS	3 RD SUB-MENU OPTIONS	EXPLANATION
	9 Key Mgmt		-	Selects key management type (Master Session vs. DUKPT)
	0 Merchant ID			Sets merchant ID (can NOT change when transacs in batch; requires secret code from a password generator supplied by terminal manufacturer)
7 Date & Time	1 Data			Sets terminal's date
7 Date & Time	1 Date 2 Time			Sets terminal's time (must be set in 24-hour military time)
	3 24hr Format			Sets time display on idle prompt to 12-hour or 24-hour format
8 Password				Sets merchant password (if old password not known see special instructions in note at the bottom of this table*)
0.0				
9 Demo Mode				Changes between live and demo mode (can NOT enter demo mode until live batch has been closed)
0 Diagnostic	1 Version			Dianlova
0 Diagnostic				Displays current software version
	2 Display			Tests terminal's display
	3 Printer			Performs print test
	4 Keypad			Allows keys to be tested (press OK key to exit this test)
	5 Card Swipe	1. Track 1		Tests card reader's track 1
		2. Track 2		Tests card reader's track 2
	6 Dialer			Tests dialup modem (not available in wireless mode)
	7 Serial			Tests serial port connection (Requires a special loopback connector)
	8 Memory			Tests terminal's RAM

ADMIN MAIN	FIRST SUB-	2 ND SUB-MENU	3 RD SUB-MENU	EXPLANATION
MENU OPTIONS	MENU OPTIONS	OPTIONS	OPTIONS	
	9 Wireless			Tests wireless modem connection and displays signal strength (RSSI) (not available in dialup mode)

^{*}If the terminal password is unknown, calculate the master override password as follows:

- (1) Using only the last two digits of the year, write down terminal's date in the format: $y^1 y^2 m^1 m^2 d^1 d^2$.
- (2) Rearrange the date as: $y^1 m^1 d^1 y^2 m^2 d^2$. The resulting number is the override password.

For example, write the date 12/30/2098 in the format: $9^1 \ 8^2 \ 1^1 \ 2^2 \ 3^1 \ 0^2$. Rearrange this date as: $9^1 \ 1^1 \ 3^1 \ 8^2 \ 2^2 \ 0^2$. In this example, the password would be 913820.

Since Review, Reports and Reprint have already been described in detail elsewhere in this manual, the detailed Local Function information below will start with Response.

Response (View Last Responses)

This local function allows the last five terminal responses to be reviewed on the 9100 display. They appear in chronological order, with response one being the most recent and response five being the oldest.

The response review is started by pressing the blue [F] key at the idle prompt, followed by [4] = RESPONSE. Then follow the remaining prompts shown below.

Display Message

HOST RESPONSE Enter Password

(optional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

The most recent response is displayed first. For example, this could be an approval code or a close message. Press [OK] to review the next response, or press [CLR] to exit to the menus.

The above display format will be repeated for all 5 responses. The only difference will be the response number and response message.

Batch Functions

Local batch functions allow the following operations:

- Review the last five batch close totals.
- Reset the current batch number (used when communicating with the host).
- Delete all transactions in the current open batch.
- Delete offline transactions.

The batch menu will always prompt for a password when the menu option is selected.

The batch menu is accessed by pressing the blue [F] key at the idle prompt, followed by [5] = BATCH. Then follow the remaining prompts shown below.

Display Message

BATCH Enter Password

Operator Action

Key in the merchant password (1-6 digits) and press [OK].

BATCH 1 History 2 Number 3 Clear Choose the desired batch function: 1 = HISTORY, 2 = NUMBER, 3 = CLEAR, or 4 = DELETE OFFLINES. Follow the remaining prompts shown below for each function.

Batch History

Information on the last five batch closes is available with this local function. Data on the most recent batch close will always be displayed first. The batch data displayed for each batch are:

- The batch number
- Total close amount
- The number of transactions in the batch
- The date and time of the batch close

Batch history is accessed by pressing the blue [F] key at the idle prompt, followed by 5 = BATCH, then the password, then 1 = HISTORY. Then follow the remaining prompts shown below.

Display Message

BATCH HISTORY
Batch#:nnn
\$xxxxxxx.xx/nnn
MM/DD/YY HH:MM

(optional)

Operator Action

The second line will display the batch number, and third line the close amount along with the number of items. The fourth line will include the date and time of the batch close.

Press [OK] to view information on the next batch close or press [CLR] to quit.

Batch Number

Batch number is accessed by pressing the blue [F] key at the idle prompt, followed by [5] = BATCH, then the password, then [2] = NUMBER. Then follow the remaining prompts shown below.

Display Message

BATCH NUMBER
Current:n
Change?
Yes
No

Operator Action

The current batch number is displayed.

Press the far left-hand soft key to change the current setting.

Press the far right-hand soft key or the [CLR] key to leave the setting unchanged.

BATCH NUMBER
Enter New
Batch Number

Enter the batch number (one digit), and press [OK].

BATCH NUMBER Change Confirmed! The confirmation message will be displayed before returning to the menus.

Batch Clear

Caution: The Batch Clear operation deletes all transactions from the batch and should be used only under extreme situations.

Important note: Batch Clear will delete *only* the batch for the terminal's current mode. For example, if transactions have been run in both dialup and wireless modes and the terminal is currently in wireless mode, *only* the wireless batch will be deleted. To delete the dialup transactions, it would be necessary to go into dialup mode.

This procedure will *not* delete a batch of offline sales. See the section entitled Delete Offline Transactions later in this manual for the procedure to delete offline sales.

Batch Clear is accessed by pressing the blue [F] key at the idle prompt, followed by [5] = BATCH, then the password, then [3] = CLEAR. Then follow the remaining prompts shown below.

Display Message

BATCH CLEAR Confirm Clear? Yes No

BATCH CLEAR Change Confirmed!

Operator Action

Press the far left-hand soft key under Yes to clear the current batch.

Press the far right-hand soft key or the [CLR] key to leave the batch unchanged.

The confirmation message will be displayed and the terminal will return to the Batch menu.

Delete Offline Transactions

The delete offline transactions operation deletes either all or single transactions from the open offline batch. If offline sales are repeatedly declined during offline uploads, it will be necessary to delete them so they do not accumulate in the offline batch.

Delete Single Offline

Delete single offline is accessed by pressing the blue [F] key at the idle prompt, followed by [5] = BATCH, then the password, then [4] = DEL OFFLINE, then [1] = SINGLE TXN. Then follow the remaining prompts shown below.

Display Message

DEL OFFLINE Enter Item #:

Operator Action

Enter the item number of the offline transaction to be deleted.

DEL OFFLINE
n OFFLINE SALE
\$XX.X
PREV NEXT

Press [OK] to display the detailed transaction information (n = offline item number). Press [CLR] key to cancel the operation.

DEL OFFLINE (Card Type) (Card Number) XX/XX Swiped The detailed transaction information including card type, card number, expiry date and entry method is displayed.

Press [OK] to proceed to the confirmation screen.

Press [CLR] to cancel the operation.

DEL OFFLINE
Del Item n
Press OK to
Confirm

Press [OK] to delete the transaction.

Press [CLR] to cancel the operation.

DEL OFFLINE

Deleted! Item#: n

Press [CLR] or [OK] to return to the del offline menu. Press [CLR] again to exit.

Delete All Offlines

Delete all offlines is accessed by pressing the blue [F] key at the idle prompt, followed by [5] = BATCH, then the password, then [4] = DEL OFFLINE, then [2] = ALL TXNS. Then follow the remaining prompts shown below.

Display Message

DEL OFFLINE Del All Txns Press OK to Confirm

Operator Action

Press [OK] to confirm deletion of all offline sale transactions in the offline batch. Press [CLR] key to cancel the operation

DEL OFFLINE Deleted! All Txns Press [OK] or [CLR] key to return to the del offline menu. Press [CLR] again to exit.

Setup Functions

Setup is accessed by pressing the blue [F] key at the idle prompt, followed by 6 = setup, then the password. The desired setup function may be selected by scrolling through the setup menu. The available setup functions are: printer, backlight, contrast, comms, config load, app upgrade, prompts, enable transactions, key management, and merchant ID.

Note that the various settings in setup can also be changed remotely by configuring them in the merchant's Zontalk file and then performing a configuration download (see the sections earlier in this manual entitled Configuration [Parameter] Download and Download Parameters and Options). In some cases (for example, when configuring receipt header lines) it is much easier to make the changes via a configuration download than to change them locally in setup.

Printer Setup

The printer may be enabled or disabled locally. Additionally, the number of copies of the customers receipt may be configured.

Printer Enable

This local function allows the printer to be enabled or disabled.

From the idle prompt, PRINTER ENABLE is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [1] = PRINTER, then [1] = ON\OFF. Then follow the prompts shown below:

Display Message

PRINTER
Mode: Off
Change?
Yes No

OR

PRINTER
Mode: On
Change?
Yes No

(conditional)

Operator Action

Press the far left soft key to change the status of the printer.

Press the far right-hand soft key to keep the current setting.

PRINTER Change Confirmed!

The confirmation message will be displayed before returning to the menus.

The number of copies of the customer's receipt (printed at the end of a transaction) is configurable. A value of zero will not print a customer receipt. The maximum number of customer copies is 9. The merchant's receipt is always printed unless the printer is disabled.

From the idle prompt, receipt is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [1] = PRINTER, then [2] = RECEIPT. Then follow the prompts shown below:

Display Message

RECEIPT COPIES Current:1 Change? Yes No

RECEIPT COPIES
Enter Number
Of Copies

Operator Action

The current customer receipt copies setting is displayed.

Press the far left-hand soft key to change the current setting.

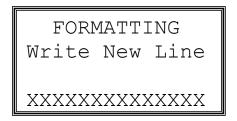
Press the far right-hand soft key or the [CLR] key to leave the setting unchanged and return to the menus.

Enter the number of customer receipt copies required (single numeric digit) and press [OK]. The terminal will then return to the menus.

Editing Printer Receipt Formats

When editing the printer receipt formats (header, trailer, and flex), on selecting a particular line of receipt to edit the following screen will be displayed. From the idle prompt, format is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [1] = PRINTER, then [3] = FORMAT, then HEADER, TRAILER or FLEX, then the desired line number. Then follow the prompts shown below. (Note: It is easier to make these changes in the merchant's Zontalk file and then perform a configuration download, rather than locally in setup.)

Display Message



Operator Action

Key in the desired receipt line and press [OK]. The terminal will return to the menus.

Backlight Timeout Period

This is the period of inactivity before the backlight is switched off, specified in seconds. If the backlight is not needed, battery power can be saved by setting the timeout time to 0 (zero) so that the backlight will not come on. From the idle prompt, backlight is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [2] = BACKLIGHT. Then follow the prompts shown below:

Display Message

BACKLIGHT
Current:030
Change?
Yes No

BACKLIGHT Enter Timeout

BACKLIGHT Change Confirmed!

Operator Action

The current backlight timeout period is displayed on the second line.

Press the far left hand soft key to change the current setting.

Press the far right hand soft key or the [CLR] key to leave the setting unchanged and return to the menus.

Enter the new backlight timeout period, (max 3 numeric digits), and press [OK].

The confirmation message will be displayed before returning to the menus.

LCD Contrast

The contrast control allows the terminal's LCD display to be adjusted.

From the idle prompt, contrast is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [3] = CONTRAST. Then follow the prompts shown below:

Display Message

CONTRAST
Press "OK" To
Save Setting
Up Down

CONTRAST Change Confirmed!

Operator Action

Press the far right-hand soft key to adjust the setting downward.

Press the far left-hand soft key to change the contrast upward.

Press [CLR] to quit without saving change

Press [OK] to save the setting.

The confirmation message will be displayed before returning to the menus.

Comms Setup

This Setup menu will allow the configuration of the communications parameters for:

- 1. Communications type, i.e., set to dialup mode or wireless mode
- 2. Wireless communication parameters
- 3. Dialup communication parameters
- 4. Configuration host communication parameters
- 5. Dial prefix for all dialup communications (transaction, settlement and configuration)

Communications Type

This allows selection of wireless or dialup mode.

From the idle prompt, communications type is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [1] = COMMS TYPE. Then follow the prompts shown below:

Display Message

COMMS TYPE
Phone
Change ?
Yes
No

OR

COMMS TYPE
Wireless
Change ?
Yes
No

COMMS TYPE
Please Wait
Disconnecting

Operator Action

Press the far left-hand soft key to switch communications method to the Motient wireless mode.

Press the far right key or the [CLR] key to leave the status unchanged and return to the menus.

Press the far left-hand soft key to switch communications method to the PSTN (dialup) modem.

Press the far right or the [CLR] key to leave the status unchanged and return to the menus.

If changing from wireless to dial-up mode, this screen will be displayed during the wireless disconnection.

COMMS TYPE Change Confirmed! The confirmation message will be displayed for two seconds before returning to the menus.

Wireless Communications Parameters

The configurable wireless communications parameters are:

- 1. Primary IP Address: this address is used for both authorization and settlement.
- 2. Terminal ID: the terminal ID used to identify the terminal to FDC Omaha.
- 3. Close phone number: this is included for future support of dialup settlement of wireless transactions. This feature is currently not supported by the terminal as it is not yet supported by FDC Omaha.

IP Address

The IP Address used for wireless communications is configured with this option.

From the idle prompt, Auth IP is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [2] = WIRELESS, then [1] = AUTH IP. Then follow the prompts shown below:

Display Message

IP ADDRESS
nnn.nnn.nnn
Change?
Yes No

IP ADDRESS
Enter New IP
Address
nnn.nnn.nnn

IP ADDRESS
Changed
Confirmed!

Operator Action

Press the far left-hand soft key to change the primary authorization IP destination address.

Press the far right-hand soft key or the [CLR] key to leave the status unchanged and return to the menus.

Enter the new IP address (12 digits) and press [OK]. (Note: Decimal points will be inserted automatically.)

The confirmation message will be displayed for two seconds before returning to the menus.

Wireless Terminal ID

Terminal ID is the same as the four-character FDC Omaha device ID. Important: The wireless terminal ID must be set to a different value from the dialup TID (see below under dialup terminal ID).

From the idle prompt, wireless terminal ID is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [2] = WIRELESS, then [3] = TERMINAL ID. Then follow the remaining prompts shown below:

Display Message

TERMINAL ID
Wireless:xxxx
Change ?
Yes No

TERMINAL ID
Enter New
Terminal ID
XXXX

TERMINAL ID Changed Confirmed!

Operator Action

Press the far left-hand soft key to change the terminal ID.

Press the far right or the [CLR] key to leave the terminal ID unchanged and return to the menus.

Enter the new terminal ID and press OK.

The terminal ID field is alphanumeric.

The confirmation message will be displayed before returning to the menus.

Dial-Up Communications Parameters

The following dial-up communications parameters are configurable and effective when the terminal is in dial-up mode:

- 1. Authorization host phone number 1 (primary)
- 2. Authorization host phone number 2 (secondary)
- 3. Close host phone number 1 (primary)
- 4. Close host phone number 2 (secondary)
- 5. Terminal ID—used to identify the terminal to FDC Omaha

Primary Authorization Number

The PSTN phone number is configured with this option.

From the idle prompt, Primary Authorization Number is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [3] = DIAL-UP, then [1] = AUTH 1 PH. Then follow the prompts shown below:

Display Message

AUTH PRIMARY

xxxxxxxxxxxxx

Change ?

Yes No

AUTH PRIMARY Changed Confirmed!

Operator Action

Press the far left-hand soft key change the primary authorization phone number.

Press the far right or the [CLR] key to leave the status unchanged and return to the menus.

The confirmation message will be displayed before returning to the menus

Secondary Authorization Number

From the idle prompt, secondary authorization number is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [3] = DIAL-UP, then [2] = AUTH 2 PH. The remaining prompts will be the same as for the primary number, except the top line heading will read auth secondary.

Primary Transaction Close Host Number

From the idle prompt, primary close number is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [3] = DIAL-UP, then [3] = CLOSE 1 PH. The remaining prompts will be the same as for the primary auth number, except the top line heading will read close primary.

Secondary Transaction Close Host

From the idle prompt, secondary close number is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [3] = DIAL-UP, then [4] = CLOSE 2 PH. The remaining prompts will be the same as for the primary auth number, except the top line heading will read close secondary.

Dialup Terminal ID

Terminal ID is the same as the four-character FDC Omaha device ID. Important: The dialup terminal ID must be set to a different value from the wireless TID (see above under Wireless Terminal ID).

From the idle prompt, dialup terminal ID is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [3] = DIAL-UP, then [5] = TERMINAL ID. Then follow the remaining prompts shown below:

Display Message

TERMINAL ID
Dial-Up:xxxx
Change ?
Yes No

TERMINAL ID Changed Confirmed!

Operator Action

Press the far left-hand soft key change the terminal ID.

Press the far right or the [CLR] key to leave the terminal ID unchanged and return to the menus.

The confirmation message will be displayed before returning to the menus

Configuration Host Parameters

The following dialup communications parameters are used for configuring communications with the configuration host (used for parameter downloads and application upgrades):

- 1. Configuration host phone number
- 2. Terminal ID used to identify the terminal to the configuration host

Configuration Host Phone Number

From the idle prompt, configuration host phone number is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [4] = CONFIG, then [1] = HOST PHONE. The remaining prompts will be the same as for the Auth and Close Host numbers, except that the top line of the displays will read config host.

Configuration Terminal ID

From the idle prompt, configuration terminal ID is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [4] = CONFIG, then [2] = TERMINAL ID. Then follow the remaining prompts shown below:

Display Message

CONFIG TERM ID
Id:nnnnnnnnn
Change?
Yes No

CONFIG TERM ID
Enter New
Terminal ID
nnnnnnnnnn

CONFIG TERM ID Change Confirmed!

Operator Action

The current terminal ID will be displayed on the second line.

Press the far left-hand soft key to change the current setting.

Press the far right-hand soft key or the [CLR] key to leave the setting unchanged and return to the menus.

Enter the new terminal ID (max 10 alphanumeric characters) and press [OK].

The confirmation message will be displayed before returning to the menus.

Dial Prefix

This option will allow the dial prefix (only used when communicating via the PSTN phone dialup connection, not wireless Motient) to be configured.

From the idle prompt, dial prefix is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [5] = DIAL PREFIX. Then follow the remaining prompts shown below:

Display Message

DIAL PREFIX
nnnnnnnnnnn
Change?
Yes No

DIAL PREFIX Enter New Dial Prefix

DIAL PREFIX Change Confirmed!

Operator Action

The current dial prefix will be displayed on the second line.

Press the far left-hand soft key to change the current setting.

Press the far right-hand soft key or the [CLR] key to leave the setting unchanged and return to the menus.

Enter the new dial prefix, (max 10 alpha numeric characters) and press [OK].

To remove an existing prefix, press [CLR] until field is empty and then press [OK].

The confirmation message will be displayed before returning to the menus.

Configuration (Parameter) Download

This menu option will initiate a configuration data load. The terminal's internal operating parameters will be changed.

From the idle prompt, configuration download is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [5] = CONFIG LOAD. Then follow the remaining prompts shown below.

Note: The batch must be closed before the download can be performed.

Note: The configuration phone number must be set correctly (see above under Configuration Host Phone Number) before attempting the configuration download.

Display Message

CONFIG TERM ID Id:nnnnnnnnn Change? Yes No

CONFIG TERM ID
Start Load
Confirm?
Yes No

(Download information is displayed)

Operator Action

Press the far left-hand soft key to change the config ID used for the config download.

Press the far right-hand soft key to continue with the download.

Press the [CLR] key to cancel the operation.

Press the far left-hand soft key to start the config download.

Press the far right-hand soft key to cancel the download.

Wait until the download completes and the terminal reboots to the idle prompt.

For more information about the configuration download, see the section in this manual entitled Configuration (Parameter) Download.

Application Upgrade

This menu option will initiate a software application upgrade. The terminal's executable code will be modified.

From the idle prompt, application upgrade is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [6] = APP UPGRADE. Then follow the remaining prompts shown below.

Note: The batch must be closed before the download can be performed.

Note: The configuration phone number must be set correctly (see above under Configuration Host Phone Number) before attempting the application upgrade.

Important Note: After the upgrade is completed, a configuration download (see above) *must* be performed to re-load the merchant's parameters!

Display Message

APP UPGRADE
Start Upgrade
Confirm?
Yes No

(Download information is displayed)

Operator Action

Press the far left-hand soft key to initiate an application upgrade.

Press the far right-hand soft key or the [CLR] key to quit and return to the menus.

Wait until the download completes and the terminal reboots to the idle prompt. Note that the terminal may re-dial the download host several times in the course of the upgrade.

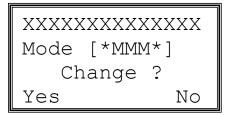
For more information about the configuration download, see the section in this manual entitled Application Upgrade.

Enabling Prompts

The prompts function allows the merchant to enable or disable several of the data entry and information displays that appear during the gathering of data associated with a new transaction. The prompts that can be controlled are: sales tax, order number, invoice number, AVS details, customer code, entry of last four PAN digits, echo PAN, operator ID and tip value. The prompts function also allows the setting of the text that appears on the top and main lines of the Idle screen. (Note that these prompts can also be selectively enabled or disabled in the merchant's Zontalk file.)

Setting Transaction Prompts

Display Message

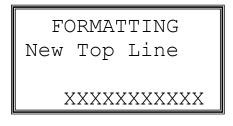


XXXXXXXXXXXXXX Change Confirmed!

Setting Idle Prompt Top Line

On selecting the idle top prompt the following screen appears:

Display Message



Operator Action

The current mode will be displayed (MMM) as either On or Off, and the user prompted to change if required.

Press NO to exit, or YES to change the current mode.

The prompt type will appear on the top line (XXXXXXXXXXXXXXX).

The confirmation message will be displayed before returning to the menus.

The prompt type will appear on the top line (XXXXXXXXXXXXXXX).

Operator Action

Enter the new top line of the idle screen (max 21 characters) and press [OK]. The terminal will return to the idle prompts menu.

Setting Idle screen Main Line

On selecting the Idle Main prompt the following screen appears:

Display Message



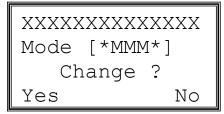
Operator Action

Enter the new main line of the idle screen (max 14 characters) and press [OK]. The terminal will return to the idle prompts menu.

Enabling Transactions

The enable transactions function allows the merchant to enable or disable several of the financial transaction types. The transactions that can be controlled are: EBT inquiry, EBT cash, debit cashback, debit return, credit return, and pre-sale gratuity. (Note: These can also be selectively enabled or disabled in the merchant's Zontalk file.)

Display Message



Operator Action

The current mode will be displayed (MMM) as either ON or OFF, and the user is prompted to change if required.

Press NO to exit, or YES to change the current mode.

The transaction type will appear on the top line (XXXXXXXXXXXXXX).

The confirmation message will be displayed before returning to the menus.

The transaction type will appear on the top line (XXXXXXXXXXXXXX).

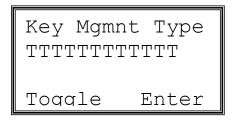
XXXXXXXXXXXXX Change Confirmed!

Key Management

The key management function changes the key management type between Master/Session and DUKPT.

From the idle prompt, key management is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [9] = KEY MGMT. The remaining prompt is as shown below:

Display Message



Operator Action

TTTTTTTT will be Master/Session or DUKPT.

Press the left-hand soft key under Toggle to change the type.

Press the right-hand soft key under Enter to set the type and return to the Setup menu.

Press [CLR] to return to the Setup menu.

Merchant ID

The merchant ID setup function allows the merchant to change the merchant ID of the terminal.

The merchant ID cannot be changed while there are transactions in the wireless, dialup or offline batch. If transactions are present, a screen will appear warning the operator to close the batch.

During the process to change the merchant ID, a secret code will be requested. This secret code is a variable code and the merchant will need to contact the help desk to determine the appropriate code each time this task is performed.

From the idle prompt, merchant ID is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [0] = MERCHANT ID. The remaining prompts are as shown below:

Display Message

MERCHANT ID
nnnnnnnnnnnnnnnn
Change?
Yes No

MERCHANT ID Enter Secret Code

MERCHANT ID Change Confirmed!

Operator Action

The current merchant ID will be displayed on the second line.

Press the far left-hand soft key to change the current setting.

Press the far right-hand soft key or the [CLR] key to leave the setting unchanged and return to the menus.

The secret code for changing the merchant ID should be entered to continue. This is a variable code and the merchant will need to contact the help desk to determine the appropriate code each time this task is performed.

Press [CLR] key to exit the operation and return to the menus.

Enter the new merchant ID (max 19 numeric) and press [OK].

The confirmation message will be displayed before returning to the menus

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Date And Time

The LinkPoint 9100 real time clock controlling the date and time is configurable from these menu options.

Set Date

From the idle prompt, date is accessed by pressing the blue [F] key, followed by [7] = DATE & TIME, then the password and [OK], then [1] = DATE. The remaining prompts are as shown below:

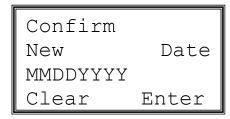
Display Message

SETUP DATE Enter New Date MMDDYYYY XXXXXXXX

Operator Action

Enter the new date as eight digits (two for the month, two for the day and four for the year).

Press [OK].



The confirmation message will be displayed. The operator should press [OK] to confirm the new date. The terminal will then return to the date and time menu.

Set Time

The time is always entered in 24-hour military format.

From the idle prompt, time is accessed by pressing the blue [F] key, followed by [7] = DATE & TIME, then the password and [OK], then [2] = TIME. The remaining prompts are as shown below:

Display Message



Operator Action

Enter the new time as four digits (two digits for the hour and two for the minutes). Use 24-hour military time.

Press [OK].

Confirm

HH:MM

Clear Enter

The confirmation message will be displayed. The operator should press OK or the enter key to confirm the new time. The terminal will then return to the date & time menu.

Set Time Format

This option allows for the format to be changed from 12-hour to 24-hour military format on the idle prompt display. (Note that, even though the time is always set as 24-hour time in SETUP, it can be displayed on the idle prompt as either 12-hour or 24-hour time.)

From the idle prompt, 24 Hr Format is accessed by pressing the blue [F] key, followed by [7] = DATE & TIME, then the password and [OK], then [3] = 24 HR FORMAT. The remaining prompts are as shown below:

Display Message

24 HOUR CLOCK
Mode [*Off*]
Change ?
Yes No

24 HOUR CLOCK Change Confirmed!

Operator Action

The current mode will be displayed and the user prompted to change if required.

Press NO to exit, or YES to change the current format.

The change will be confirmed. The terminal will return to the date & time menu.

Password

The current merchant password may be changed by this option. The default merchant password is [1] [2] [3] [4].

From the idle prompt, Password is accessed by pressing the blue [F] key, followed by [8] = PASSWORD. The remaining prompts are as shown below:

Display Message

PASSWORD SETUP Enter Password

PASSWORD SETUP Enter New Password

PASSWORD SETUP Confirm New Password

PASSWORD SETUP Change Confirmed!

Operator Action

Key in the merchant password (1-6 digits) and press [OK]. *This prompt will always appear*. If the current password is unknown, key the master override password (see end of Table of Local Functions in this manual).

Key in the new merchant password (1-6 digits) and press [OK].

As confirmation, key in the new merchant password again and press [OK].

The confirmation message will be displayed before returning to the menus.

Demo Mode

Demo (training) mode allows all transactions, reports, and reviews to be performed in a "fake" training mode. Demo mode may only be entered when there are no transactions in the batch. When demo mode is exited, all demo transactions will be deleted.

In demo mode, all receipts will print the following message at the top of the receipt:

DEMO MODE RECEIPT INVALID

The authorization code will always be DEMO.

From the idle prompt, demo mode is accessed by pressing the blue [F] key, followed by [9] = DEMO MODE. The remaining prompts are as shown below:

Display Message

DEMO MODE Enter Password

(optional)

DEMO MODE
Mode:Off
Change ?
Yes
No

DEMO MODE
Txns Present!
Close Batch
First

(conditional)

Operator Action

If prompted, key in the merchant password (1-6 digits) and press [OK].

Press the far left-hand soft key to enable demo mode and go to the confirmation screen.

Press the far right-hand or the [CLR] key to leave the status unchanged and exit to the menus.

If there are any transactions in the open batch, then this message will be displayed. Pressing [OK] or [CLR] will return to the menu.

(If terminal is in Demo Mode:)

DEMO MODE
Mode:On
Change ?
Yes
No

(conditional)

Press the far left-hand soft key to exit demo mode and go to the confirmation screen.

Press the far right-hand or the [CLR] to leave the status unchanged and exit to the menus.

DEMO MODE Exiting Demo Mode Initializing

The confirmation message will be displayed before returning to the menus

Diagnostics

The diagnostic functions allow testing of the different hardware components of the 9100 terminal.

Version Name and Number

This option will display the terminal's application version name and number.

From the idle prompt, version is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [1] = VERSION.

Display Message

VERSION LinkPoint Retail App. Vn.nn

Operator Action

Press the [OK] key to return to the menu.

Display Test

This option will test the 9100 screen by generating visible information.

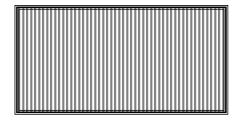
From the idle prompt, display is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [2] = DISPLAY.

Display Message

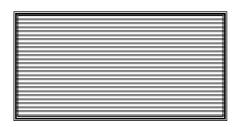
ABCDEFGHIJKLMN
OPQRSTUVWXYZ#*
1234567890*[]@
abcdefghiiklmn



The ASCII character set will be displayed on the display. The next display test is automatically displayed after 2 seconds or on pressing [OK].



A series of vertical lines (allowing testing of individual pixels) will occur next. Once again the [OK] key can be used to display the next screen.



A series of horizontal lines (allowing testing of individual pixels) will occur next.

The terminal will return to the diagnostic menu at the end of this test.

Printer Test

From the idle prompt, printer test is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [3] = PRINTER. The printer test generates the following test receipt:

```
*----*

*-----*

*-----*

12345678901234567890123456789

abcdefghijklmonpqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

~!@#$%^&*()+|}{:?><`-=\][;,./

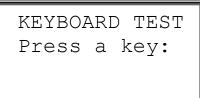
*------*
```

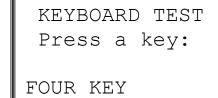
Keypad (Keyboard) Test

The keypad (keyboard) test prompts the user to press any key, then displays the key name on the screen.

From the idle prompt, keypad is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [4] = KEYPAD.

Display Message





Operator Action

User is prompted to press a key.

Press any key except [OK]. For example, if the [4] key is pressed, the display shown below will appear.

Key name is displayed on the screen until the next key is pressed. The [OK] key will end the test and return the terminal to the diagnostics menu.

Card Swipe (Card Reader) Test

The card reader test allows the user to select either track 1 or track 2 to test, waits for a card swipe, and displays the data from the track on the card.

From the idle prompt, card swipe is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [5] = CARD SWIPE.

Display Message

Operator Action

CARD READER

- 1. Track 1
- 2. Track 2

The user is prompted to select the track to test.

Press [CLR] to return to the menu.

CARD READER Track x Test Swipe Card The user is prompted to swipe a card with data on the selected track.

If a card swipe is detected and data from the relevant track are read, then the track information will be displayed.

Press [OK] to return to the diagnostics menu.

Dialer Test

This test attempts to obtain a connection with the transaction authorization host and waits for an ENQ character before disconnecting.

From the idle prompt, dialer test is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [6] = DIALER.

Display Message

DIALER TEST
Cannot Test
Dial when in
Wireless mode

Operator Action

If the terminal is in wireless mode, this screen is displayed. Press any key to return to the diagnostic menu.

DIALER TEST Please Wait.

The user is informed that the dial test is in progress.

DIALER TEST Test Passed!

The user is informed that the test passed. Press [OK] to return to the menu.

OR

DIALER TEST Test Failed! reason The user is informed that the test failed with the reason on the bottom line.

Serial Port Test

This test will transmit a series of messages via the RS-232 auxiliary serial port. If a valid response is received then the test is deemed to have passed. A special loopback connector is required for this test. This connector is available from the manufacturer.

From the idle prompt, the serial port test is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [7] = SERIAL.

Display Message

Operator Action

SERIAL TEST Please Wait.

The user is informed that the serial test is in progress.

SERIAL TEST Test Passed!

The user is informed that the test passed. Press [OK] to return to the diagnostics menu.

OR

SERIAL TEST Test Failed!

If a valid response is not received within 10 seconds, the test will fail.

Press [OK] to return to the diagnostics menu.

Memory Test

This test performs a series of write and read operations to the application's RAM and checks for heap and stack overflows.

From the idle prompt, the memory test is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [8] = MEMORY.

Display Message

MEMORY TEST Please Wait.

Operator Action

The user is informed that the memory test is in progress. (This should take no longer than 10 seconds)

MEMORY TEST Test Passed!

The user is informed that the test passed. Press [OK] to return to the menu.

OR

MEMORY TEST Test Failed! reason The user is informed that the test failed. The reason could be:

- Stack overflow
- Heap overflow
- Write/Read failure

Press [OK] to return to the menu.

Wireless Test

The wireless test displays the LLI and the current received signal strength of the wireless modem. This test cannot be performed in dialup mode.

From the idle prompt, the Wireless Test is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [9] = WIRELESS.

WIRELESS TEST

LLI: XXXXXXXX
ESN NNN/NN/NNNNN
Version NN.NN
RSSI: nn uVdBm

The LLI, RSSI (signal strength), ESN and version number of the modem are displayed.

Press the [OK] or [CLR] key to return to the diagnostics menu.

The last line will display mode not enabled if the test is performed when in dialup mode.

SPECIAL SETUP FUNCTIONS

The special setup menu is a separate menu from Admin. It includes the following options:

- 1 AppMan (Application Manager)
- 2 Delete Batch
- 3 Delete Parameters
- 4 Stack/Heap
- 5 Reset CDS
- 6 Read CDS
- 7 Transaction Generator

Each of these is described in the sections below.

To access Special Setup from the idle prompt, press [1] = CREDIT MENU, then [1] = SALE, then [1] = ONLINE (same procedure as that required to start a manual credit sale). Then follow the prompts shown below. (Note: The first option, AppMan, can also be accessed directly by powering the terminal down, then powering it up while holding down the orange [CLR] key. For more information about this, please see the sections in this manual entitled Master/Session Key Encryption and DUKPT Key Encryption. However, this method accesses AppMan *only*; it does *not* access the other functions on the special setup menu.)

Display Message

CREDIT SALE Swipe Card or Key Account

SPECIAL SETUP Enter Password

SPECIAL

1 AppMan

2 Delete Batch

3 Delete Para

Operator Action

Key the code number 00123455432100 and press [OK].

Key the merchant password (default is [1][2][3][4]) and press [OK].

Make a selection from the special menu. See the detailed instructions below for each menu option.

Application Manager

Application manager (AppMan) is a supervisory application that allows more than one application or application module (applet) to operate in the terminal. The application modules work cooperatively under the supervision of AppMan. AppMan provides the following features:

- loading or upgrading of individual applets without affecting other resident applets
- control of application launch
- integration of applets when sharing of data and resources is needed
- power-down functions for the terminal
- a means of configuring the terminal
- storage of environment settings

The Application Manager (AppMan) menu is accessed by pressing [1] = APPMAN ON THE SPECIAL menu. The following AppMan menu will appear:

APPMAN Vx.xxx

- 1. TERMINAL SETUP
- 2. S/W MAINTENANCE
- 3. APPLICATION SETUP
- 4. VERSION NUMBERS

Terminal Setup

When terminal setup is selected from the AppMan menu, the following submenu will appear:

- 1. SET DATE
- 2. SET TIME
- 3. CHANGE PASSWORD
- 4. BACKLIGHT TIMER
- 5. ACTIVITY TIMER
- 6. DISABLE BACKLIGHT
- 7. POWER MANAGEMENT
- 8. SET DATE FORMAT

Normally it should not be necessary to change any of these setup settings via AppMan. Most of them can be changed more easily through the admin menu (see earlier sections of this manual under Setup). Additionally, the settings in Admin/Setup will override most of AppMan's setup settings when the application is running.

SPECIAL SETUP FUNCTIONS

Note: Activity Timer should <u>not</u> be changed via AppMan. It should only be changed by changing Zontalk Field 1192, performing a configuration download, then powering the terminal down and up to "hard boot" it.

S/W Maintenance

When S/W maintenance is selected from the AppMan menu, the following prompt will appear:

ENTER MASTER PASSWORD & PRESS OK

At this prompt, key 29009415 and press [OK]. The following submenu will then appear:

SOFTWARE MAINTENANCE

- 1. SOFTWARE UPGRADE
- 2. CHANGE APP STATUS

Software Upgrade

The first option, software upgrade, allows an individual application module ("applet") to be loaded into the terminal directly via the serial port.

Note that this is a different procedure from the Application Upgrade described earlier in this manual. Normally it will *not* be necessary to perform a software upgrade in this manner. The following procedure should be performed only under the guidance of a software engineer.

A direct PC-to-terminal software upgrade is performed as follows:

Press [1] = Software Upgrade. The following submenu will appear:

SELECT LOADER

- 1. ZONTALK
- 2. SERIAL LOADER

(Do not choose [1] = Zontalk.)

Press [2] = Serial Loader. The following display will appear:

- Upgrade KfmsAplt
- Upgrade DsApplet
- 3. Upgrade K78COMLP
- 4. Upgrade ta781nk
- 5. Upgrade GfxApp
- 6. Upgrade KeyMangr
- 7. Upgrade NIM

Use the down arrow key to scroll down to display more software components. Press any selection to download an upgrade of the software component. The terminal will display a screen in the following format

About to Load [Filesystem]

Press OK to Continue

Press OK to confirm, and load the software from a PC using a standard loader application.

Change App Status

The second option under software maintenance, change app status, allows the various application modules ("applets") to be selectively disabled or enabled. It is normally not necessary to change these settings. **Disabling any of the applets will disrupt the operation of the application.**

To verify that all applets are enabled, follow this procedure:

Select option 2, CHANGE APP STATUS, from the software maintenance menu. The following display will appear:

- Disable KfmsAplt
- Disable DsApplet
- 3. Disable K78COMLP
- 4. Disable ta781nk
- 5. Disable GfxApp
- Disable KeyMangr
- 7. Disable NIM

You can scroll down to display more software components. If any software component displays ENABLE plus the name of the component, this indicates it is currently disabled. Press the number of that component to re-enable it. Before exiting this menu, make sure all the components display DISABLE plus the component names. This indicates they are all currently enabled.

Application Setup

When application setup is selected from the AppMan menu, the following submenu will appear:

- 1. FILE SYSTEM
- 2. SRVTRN78LINKPOINT
- 3. KEY MANAGEMENT

The first option, FILE SYSTEM, re-formats all data and should normally *never* be used. It is intended for use only by software development engineers.

The second option, SRVTRN78LINKPOINT, is also for use only by software engineers.

The third option, KEY MANAGEMENT, allows the terminal's internal PIN pad to be encrypted. For instructions on how to do this, see the section in this manual entitled Download and Encryption Procedures.

Version Numbers; Name and Function of Each Applet

When VERSION NUMBERS option is selected from the AppMan menu, a list of the various application "applets" with their respective version numbers will appear. The following list is only an example. The actual version numbers will vary depending on the software release. Press the down arrow key to see additional version numbers.

Example of version numbers list:

Application Versions

S/N: 123456789 (the terminal serial number, entered when the application was downloaded)

BIOS: K78 V3.13 Appman: 2.13c KfmsAplt: 1.00 DsApplet: 2.08 K78COMLP: 1.03 ta78lnk: 1.00d GfxApp: 1.01 KeyMangr: 1.02 NIM: 1.51b Pos lp: 1.04

APMENGLISH: 2.10

Zontalk: 1.01

(Continue to press the down arrow key until all version numbers have been displayed.)

(Note: This list does *not* include the terminal's "boot" program version or the modem firmware version. The "boot" version number may be viewed for a few seconds when the terminal is powering up after being turned off. The modem firmware version may be viewed when the regular application is running, by pressing the blue [F] key for the ADMIN MENU, then [0] for DIAGNOSTICS, then [9] for WIRELESS TEST.)

The meaning of each "applet" or application module on the above list is as follows:

Appman is responsible for control of loading and maintenance of the other applets. It is like a simple OS.

KfmsAplt contains the code for the FLASH file system. In the LinkPoint 9100 there are only three files in this system, corresponding to the three different batches (wireless, dialup, and offline). The actual storage area is at the end of available FLASH (i.e., it is not included in the actual applet area).

DsApplet is the configuration database. The terminal's UI (user interface) is controlled from here. Default values are set up for every parameter, and those parameters that are included in the Terminal Definition File (TDF) may be updated via a Zontalk configuration download.

K78COMLP is the communications applet. All dial-up and wireless communications protocols are held here.

Ta78lnk is the transaction manager. This is an interface between the application and the file system, which facilitates file access via individual records. This applet contains the code for searching through the batches to build reports, retrieve or delete transactions, etc.

SPECIAL SETUP FUNCTIONS

GfxApp is the graphics applet, which contains the code for the different font styles used on the graphics display (and also runs the menus, although the menu data are held in DsApplet).

KeyMangr holds all the DUKPT and Master Session Key loading, handling and encryption code.

NIM is the applet that holds all the code for building, parsing and processing the specific host/processor requirements in relation to authorizing financial transactions.

Pos_lp holds the generic routines for the user interface, receipt printing and Admin functions. The template for transaction flow is held in the DsApplet configuration database, but the code for the actual actions that take place is held here.

APMENGLISH is a library for Appman display features.

Zontalk contains the high-level code necessary for the Zontalk-specific TMS.

To exit any submenu in AppMan, press the orange [CLR] key. To exit Appman and reboot the terminal, press [CLR] or [C] at the AppMan main menu.

Delete Batch

Delete batch is accessed by pressing [2] = DELETE BATCH on the special menu. (Delete batch can also be accessed more easily via the admin menu. Please see the section Batch Clear under Local Functions earlier in this manual.)

Caution: The Delete Batch operation deletes all transactions in the batch and should be used only under extreme situations.

Important note: Delete Batch will delete *only* the batch for the terminal's current mode. For example, if transactions have been run in both dialup and wireless modes and the terminal is currently in wireless mode, *only* the wireless batch will be deleted. To delete the dialup transactions, it would be necessary to go into dialup mode.

This procedure will *not* delete a batch of offline sales. See the section entitled Delete Offline Transactions earlier in this manual for the procedure to delete offline sales.

When the DELETE BATCH option is selected, the following display will appear:

Display Message

BATCH CLEAR Confirm Clear? Yes No

BATCH CLEAR Change Confirmed!

Operator Action

Press the far left-hand soft key under Yes to clear the current batch.

Press the far right-hand soft key or the [CLR] key to leave the batch unchanged.

The confirmation message will be displayed and the terminal will return to the Special menu.

Delete Parameters

Delete parameters is accessed by pressing [3] = DELETE PARA on the special menu.

Caution: This operation will delete all merchant parameters in the terminal and reset them to the generic "default" parameters!

When DELETE PARAMETERS is selected, the following display will appear:

Display Message

DELETE PARAM
Erase Params ?
Yes No

Operator Action

Press the far left-hand soft key under Yes to erase the merchant parameters.

Press the far right-hand soft key or the [CLR] key to leave the parameters unchanged.

DELETE PARAM

DELETING

The parameters will be deleted and the terminal will reboot to the idle prompt. The terminal is now reset to the "generic" default parameters.

A configuration load must now be performed to re-load the merchant parameters!

Stack/Heap

Stack/Heap is accessed by pressing [4] = STACK/HEAP on the special menu. This option will display the amount of stack/heap memory currently in use. When this option is selected, the following display will appear:

Display Message

Operator Action

SPECIAL SETUP STACK&HEAP USE StackUse:####

StackUse:####
HeapUse: #####

Press the [CLR] key to return to the special menu.

Reset CDS

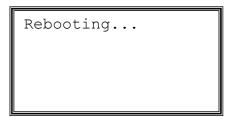
Reset CDS is accessed by pressing [5] = RESET CDS on the special menu.

Caution: This operation will delete all merchant parameters in the terminal and reset them to the generic default parameters! (Reset CDS performs essentially the same function as Delete Parameters above.)

When RESET CDS is selected, the following display will appear:

Display Message

Operator Action



The parameters will be deleted and the terminal will reboot to the idle prompt. The terminal is now reset to the generic default parameters.

A configuration load must now be performed to re-load the merchant parameters!

Read CDS

Read CDS is accessed by pressing [6] = READ CDS on the special menu. This allows the operator to view the current value in any Zontalk field in the terminal's memory.

When READ CDS is selected, the following display will appear:

Display Message

READ CDS TABLE Key Table ID

READ CDS TABLE
Key Table ID
7001
18002289074

Operator Action

Key the number of the Zontalk field to be viewed and press [OK].

For example, key 7001 and [OK] to view the primary authorization phone number in Field 7001.

In this example, the primary auth phone number is displayed.

Press [CLR] to return to the special menu.

Transaction Generator

Transaction Generator is accessed by pressing [7] = TXN GEN on the special menu.

When a special test application is loaded into the terminal, this function will fill the batch with test transactions so that the operation of the terminal can be tested with a maximum batch. This allows testing at maximum batch size without first having to enter 300 transactions one by one. However, transaction generator will *only* work when the special test version of software is loaded into the terminal. With the regular production version of software in the terminal, the application will not respond when [7] = TXN GEN is pressed.

Exit Special Setup

To exit the special setup menu, press [CLR] or [C] while the special main menu is displayed. The terminal will display SPECIAL SETUP / TRANSACTION CANCELLED. Press [CLR] or [C] again and the terminal will return to the CREDIT SALE menu.

Normally there will be no problems using the LinkPoint 9100 terminal. However, on the rare occasions when problems or questions do arise, this guide can be used to find a quick answer. The questions/problems described below are listed in alphabetical order. For each one, first try the solution in point (a). If this doesn't work, go to point (b), and so on.

APPLICATION ERROR appears on the display, followed by three lines of variable text: This usually occurs only if erroneous values have been entered in the merchant's Zontalk file, especially if certain fields in the file have been left blank. Reboot the terminal. If possible, close any open batches in the terminal. Then reset the CDS (see how to do this under Special Setup Functions in this manual). Rebuild the Zontalk file with the correct values (see the table under Download Parameters and Options for guidance). Perform a configuration download to re-load the parameters.

BAD CARD SWIPE is displayed when a card is swiped: (a) Make sure the magnetic stripe on the card is fully in the card reader slot and facing toward the top of the terminal. Slide the card quickly through the card reader (can slide either right to left, or left to right). Try again several times if necessary. (b) Is this message displayed for every card, or just a few cards? Some cards have defective magnetic stripes. If it is displayed for every card, the card reader may be defective and a terminal swap may be required. If it happens only on some cards, the merchant should explain to these customers that their cards may be unreadable, and ask for another form of payment. (c) Transactions can be entered manually if necessary, by pressing the OK key at the idle prompt, choosing the desired transaction type from the menus, and then keying the account number. (Note: Debit sales, debit returns, EBT cash sales, and EBT food returns cannot be entered manually.)

Batch is out of balance on batch close: If the batch is out of balance when it is closed (i.e., the processing network's close total response is different from the total on the batch report), the merchant should call the help desk for assistance. Note: Debit and EBT transactions are *not* included in the final batch total from the processing network.

Battery frequently runs down: (a) If the merchant is doing a large volume of transactions, it is normal for the battery to run down after a few hours. (A fully charged and conditioned battery will normally support up to about 120 transactions.) The battery should be fully recharged (for at least five hours) at the end of each day, with the terminal turned off. (b) The battery may need to be conditioned. Do this by fully charging it, then using the terminal until the battery is fully discharged, then fully recharging it. (c) If the merchant is doing a small volume of transactions, but the battery still only lasts a few hours after a full recharge, the battery may need to be replaced. The merchant should call the help desk for assistance. Note: The manufacturer recommends that the battery not be charged on a car or truck inverter, because this can drain or damage the battery. For charging in a car or truck, contact LinkPoint International to obtain an approved car charger (for 12-volt systems only; not for use in 24-volt truck systems). Note: In an emergency, the terminal can be powered up and transactions can be run while the charger is plugged in, but normally this should not be done. Normally

the terminal should be powered *off* during charging. (d) Charging a discharged battery for only a few minutes and then removing the charger will cause three bars to appear in the battery icon, but this does *not* mean the battery is charged. It only means the voltage has gone up, but not the battery capacity. The merchant should be instructed to leave the charger in for several hours, until the battery icon stops flashing.

BATTERY LEVEL IS TOO LOW TO CONTINUE – CHARGE NOW is displayed when a transaction is attempted: battery power is too low to complete the current transaction. If there is immediate access to an electrical power outlet, the battery should be charged for five minutes, then transactions can be run with the charger attached. Otherwise, the battery must be charged later for at least five hours before attempting to use the terminal again.

Battery needs to be charged: When the LOW BATTERY warning starts to appear, about 10 or 20 more transactions can be run, but the battery should be recharged at the earliest opportunity. To do this, first turn off the power on the terminal. (You can charge with the terminal turned on, but this is *not* the preferred method.) Plug the charger cord into the port on the right side of the terminal. Make sure all connections are secure. The battery icon in the upper right corner should flash continuously, indicating the battery is accepting the charge. Charge it for at least four or five hours. When the battery is fully charged, the icon will stop flashing and will have three solid dark bars in it. The charger can then be disconnected. When the charger is not in use, disconnect it from the electrical wall outlet. Do not leave the charger attached to the terminal continuously when the battery is fully charged. Note: The manufacturer recommends that the battery not be charged on a car or truck inverter, because this can drain or damage the battery. For charging in a car or truck, contact LinkPoint International to obtain an approved car charger (for 12-volt systems only; not for use in 24-volt truck systems). Note: In an emergency, the terminal can be powered up and transactions can be run while the charger is plugged in, but normally this should not be done. Normally the terminal should be powered off during charging. Note: Charging a discharged battery for only a few minutes and then removing the charger will cause three bars to appear in the battery icon, but this does *not* mean the battery is charged. It only means the voltage has gone up, but not the battery capacity. The merchant should be instructed to leave the charger in for several hours, until the battery icon stops flashing.

Battery requires replacement: Use only a battery designed specifically for the LinkPoint 9100 terminal. The merchant should call the terminal help desk for information on ordering these batteries. To replace the battery in the 9100, open the battery door on the right side of the unit. Use the tab to pull out the battery. Install the new battery in the same position as the old one, with the tab on the outer end, toward the battery compartment door (the battery will only go in one way).

Battery will not accept a charge: (a) Make sure the ambient temperature is between 40 and 104 degrees Fahrenheit (5 and 40 degrees Celsius). If the ambient temperature is above or below this range, the battery may not accept a charge. (b) The battery may be too old to accept a charge. Normal lifetime of a battery is about one year. In this case, the merchant should call the help desk to order a new battery.

CODE nn (Code plus a two-digit number) appears on the display: The terminal has a hardware problem. The merchant should call the help desk for assistance.

COMMS. ERROR / FAULT ID: nnnn is displayed during a transaction: A general communications fault, indicated by a four-digit number ("nnnn") occurred. Try the transaction again. If the problem persists, the merchant should call the help desk.

Debit cards do not get approvals: (a) Make sure the debit transactions are being started correctly, by selecting the transaction menu for debit. If a debit card sale is run as a credit-card sale, the terminal will display Card Type Not Accepted. (b) If these transactions are being run correctly but they still do not get approvals, the merchant should call the terminal help desk for assistance. Also see Declined – invalid PIN below.

Declined—invalid PIN when a debit or EBT transaction is attempted: The customer entered the wrong PIN. The transaction should be tried again, and the customer should re-enter the PIN.

DECLINED on any transaction: (a) There may be a problem with the customer's account; the merchant should request an alternative form of payment. (b) If all cards are declined, or all cards of a particular type such as debit or EBT are declined, there may be a problem with the merchant's setup on the processing network. In this case the merchant should call the help desk.

Display is black when terminal is powered up: (a) If the terminal has been left in a hot place such as the dashboard of a car, the LCD may become dark. Put the terminal in a cool place and see if the display returns to normal. If the display remains dark, the terminal may need to be swapped. Note: If the terminal is exposed to extreme heat, it may be permanently damaged. (b) If the display is dark even under normal temperature conditions, the merchant should call the help desk for assistance.

Display is blank: (a) Press the power button (to the right of the red [C] key) to make sure the terminal is turned on. (b) Check for the battery icon in the upper right corner of the display. If there is no icon, press the red [C] key to find out if the terminal beeps. If the terminal does not beep, the battery may be dead. Recharge it and test again. (c) If the terminal beeps but the display is blank, the contrast control may have been lost. The terminal may need to be swapped. (d) If the terminal has been in a very cold place (near freezing), the display will be light or blank. Put the terminal in a warmer location and wait for the display to return to normal. (e) If the back light comes on but the display is otherwise blank, a tamper event may have occurred (i.e., a secure tamper switch inside the terminal may have opened as a result of the terminal being dropped). In this case the terminal must be swapped.

Display is not visible because the ambient light is too dim: Press the red [C] key. The backlight will come on for 20 seconds and then go out. The backlight will come on whenever any key is pressed.

EBT cards do not get approvals: (a) Make sure the EBT transactions are being started correctly, selecting the transaction menu for EBT. If an EBT card sale is run as a credit-

card sale, the terminal will display Card Type Not Accepted. (b) If these transactions are being started correctly but they still do not get approvals, the merchant should call the help desk for assistance. Also see Declined—invalid PIN above.

FORCE is displayed on batch close: The processing network closed the batch for a different amount than the amount in the terminal's batch. The merchant should call the help desk for assistance.

FORMATTING ERROR is displayed instead of the normal idle prompt: The terminal has lost its application and must be swapped.

HARDWARE ERROR / CALL HELP desk is displayed during a transaction attempt: There may be a problem with the internal hardware connections, or some other hardware problem. Try the transaction again. If the problem persists, the merchant should call the help desk.

HOST BUSY / TRY AGAIN is displayed during a transaction attempt: The processing network is busy and cannot answer the incoming call. Try the transaction again.

HOST INACCESSIBLE is displayed on wireless transaction attempts: The wireless network was unable to connect to the wireless gateway. Try the transaction again. If the problem persists, the merchant should call the help desk.

HOST TIMEOUT is displayed during a wireless transaction attempt: The terminal did not receive a response from the network within the allowed time. Try the transaction again.

INVALID is displayed on batch close: There is an invalid transaction in the batch that was not accepted when the batch closed. The merchant should call the help desk for assistance.

INVALID / LOAD KEYS is displayed when an EBT or debit sale is attempted: This means the EBT/debit encryption keys are not correctly loaded in the terminal, or the terminal is not programmed for EBT or debit. If the merchant has been approved to take debit or EBT, the help desk should be called for assistance.

INVALID MERCH # is displayed when a transaction is attempted: The merchant's account may not be set up correctly on the processing network. The merchant should call the help desk.

KEYMANAGER 1.2—**KEYLOAD ERROR appears on the display after a configuration download:** This indicates that a working key was downloaded into the terminal during the configuration download, but the terminal was not previously encrypted for debit. The terminal must be returned for encryption. Before it can be encrypted, the keymangr applet must be re-enabled by going into AppMan, 2 S/W Maintenance, entering the password 29009415, then choosing 2 Change App Status, then 6 Enable KeyMangr. For more information about this procedure, see the section of this manual entitled Special Setup Functions / Application Manager.

Keys do not respond: (a) Make sure the terminal is turned on. Make sure the keys are being pressed hard enough to get a response (keys should beep when pressed). (b) If the terminal is turned on but the keys do not seem to respond, press the red [C] key to find out if it beeps. (c) If the [C] key does not beep, the terminal may be "locked up." Power the terminal down and up to reboot it. If the keys still do not respond, the merchant should call the terminal help desk.

LINE LOST is displayed during a transaction: A connection was established but then an unexpected disconnect occurred. If in dialup mode, make sure the phone line is securely connected to the terminal and to the wall jack. Make sure no other phone equipment is using the same line. Try the transaction again. If in wireless mode, make sure the terminal has an adequate signal (at least two bars showing next to the "Y"-shaped icon in the upper left corner of the display. Try the transaction again.

LOW BATTERY is displayed during a transaction: When this message starts to appear, about 10 or 20 more transactions can be done before the battery becomes fully discharged. If there is no time to recharge the battery, continue to use the terminal until it starts displaying BATTERY LEVEL IS TOO LOW TO CONTINUE—CHARGE NOW, or until the terminal automatically shuts down while printing a transaction receipt (it is preferable to recharge the battery before this happens!). Then recharge the battery.

MODEM ERROR / PLEASE RETRY is displayed during a transaction attempt: The terminal's modem probably did not connect with the wireless network. (a) Follow the directions under "Terminal is not getting a signal" below, to make sure the terminal is getting an adequate signal. (b) Sometimes this message appears when a transaction is attempted right after the terminal has been powered up. Wait a minute, then try again. (c) Make sure the whip antenna is fully extended and is not loose or broken.

MOUNT FAIL / LIKELY CAUSE UNFORMATTED DEVICE is displayed instead of the normal idle prompt: The terminal has lost its application and must be swapped. This problem can occur if the terminal is shut down while it is initializing. The user should be advised not to power off the terminal during initialization.

NETWORK ERROR 0 (or other error number) is displayed when a batch close is attempted: The wireless network was unable to connect with the wireless gateway. Try the transaction again. If the error persists, the merchant should call the terminal help desk.

NO ANSWER is displayed during a transaction attempt: The processing network did not pick up the incoming call. Try the transaction again. The merchant should call the help desk if the problem persists.

NO DIALTONE / CONNECT line is displayed when a dialup transaction is attempted: The terminal cannot detect a dial tone. (a) Make sure the phone cord is securely plugged into the terminal and the wall jack. (b) If the connections are secure, check the wall jack with a telephone to make sure it has a dial tone. (c) The phone line voltage may be too weak for the terminal to sense it. Unplug other phone equipment

(such as telephones, fax machines, and computer modems) that is on the same line and try again.

NO RESPONSE FROM HOST is displayed during a transaction attempt: The transaction response from the processing network did not get back to the terminal. Follow the directions under "Terminal is not getting a signal" below, to make sure the terminal is getting an adequate signal. Try the transaction again. If this problem persists, the merchant should call the help desk. At the end of the day, the merchant should carefully check the batch close total. Sometimes a transaction that gets NO RESPONSE FROM HOST does actually capture at the processing host. If the network's batch close total is different from the sum of the receipts or the totals on the local reports, the merchant should call the help desk. (Note that debit and EBT transactions are *not* included in the close total from the processing network.)

OUT OF NETWORK COVERAGE is displayed during a transaction attempt: (a) The terminal's modem may have temporarily lost its wireless signal. Make sure the terminal is held almost vertically and not horizontally. Make sure the whip antenna is fully extended. Try moving the terminal a few feet or turning it in a different direction to get a better signal. For more information about this, see "Terminal is not getting a signal" below. (b) If the problem persists, this may mean the terminal is not connecting with the modem. Power the terminal down and up to reset it. If the error persists, power the terminal down and remove the battery. Replace the battery and power the terminal up again. (Note: It is normal for this to occur sometimes after a full download.)

Paper roll requires replacement: The printer uses standard long-life thermal paper that is 2 ¼" wide by up to 1 7/8" in diameter. This paper can be purchased in any office supply store. The merchant should be sure to buy the long-life paper that is approved for financial transactions. LinkPoint recommends Appleton 1012 paper. To install a new roll, first open the printer by pulling up evenly on both sides of the printer door. Remove the core of the old roll. Install the new roll so that the thermal (outer side) of the roll is facing toward the front (keyboard side) of the terminal. Otherwise the receipts will not print. Make sure the roll turns freely and is not dragging or binding up. Pull the paper out several inches. Close the printer door. Note: When a red stripe appears on the paper, this indicates the roll is almost used up and should be replaced.

Printer will not print: (a) Make sure there is paper in the printer. (b) At the idle prompt, press and hold down the 0 (zero) key to see if the printer will feed paper. If it will not feed paper, open the printer and make sure the roll is able to turn freely. (c) If the roll of paper is installed "backward" (wrong side facing up), it will feed but will not print, because the thermal paper only prints on one side. Open the paper compartment and make sure the roll is installed with the outer side of the paper toward the front (keyboard side) of the terminal. (d) If the receipt starts to print but then the terminal shuts off while printing, the battery may be low. See Battery needs to be charged for more information. (e) Make sure the paper is the correct type (high-grade thermal; LinkPoint recommends Appleton 1012). (f) If everything appears to be in order but the printer still will not print receipts, the merchant should call the help desk for assistance.

PRINTING ERROR / CHECK PAPER: Load a new roll of paper into the printer, following the instructions under "Paper roll requires replacement" below. Then do a reprint to print the receipt. (To reprint a receipt, press the blue "F" key, then press 1 for Reprint. Choose the desired copy –1 Merchant, 2 Customer, or 3 Both. At the "Enter Item #" prompt, key the item number or just press OK to reprint the last transaction.)

RECEIVING INACCESSIBLE is displayed during a transaction attempt: The wireless network was unable to connect with the wireless gateway. Try the transaction again. If the problem persists, the merchant should call the help desk.

SENDING ERROR is displayed during a transaction attempt: (a) The terminal's modem may have temporarily lost its wireless signal. See below under "Signal lost" and "Terminal is not getting a signal." (b) If this error persists even when the terminal has a strong signal, there may be a problem with the Motient network or the wireless gateway. The merchant should call the help desk.

SIGNAL LOST is displayed during a transaction attempt: The terminal's modem may have temporarily lost its wireless signal. Make sure the terminal is held almost vertically and not horizontally. Make sure the whip antenna is fully extended. Try moving the terminal a few feet and changing the direction the antenna is pointing, to get a better signal. For more information about this, see Terminal is not getting a signal below.

Sys Error 0x67B2 appears during a configuration (parameter) download: This error message indicates that there is a field in the merchant's Zontalk file that the terminal's application does not support. For example, after Version 1.03 of the software was deployed, Field 1192 (Inactivity PowerDown Timeout) was created as a new field supported by Version 1.04. But, if an attempt is made to load this field into a terminal with 1.03, the configuration download will fail with "Sys Error 0x67B2." To resolve this problem, upgrade the terminal to the latest software version. If this is not possible, the field that is causing the error must be identified and removed from the merchant's Zontalk file.

Terminal is not getting a signal, or the signal is weak: If the terminal is not getting a wireless signal, the "Y"-shaped icon will still display in the upper left corner of the screen but there will be no black bars next to it. (One black bar = less than RSSI 10 [signal strength]; two bars = 10 to 24; three bars = 25 and above. If possible, perform transactions only when at least two bars are displayed.) (a) Try moving the terminal around a couple of feet and changing the direction the antenna is pointing, to get a better signal. The terminal should normally be held almost vertically to get the best signal. (b) Make sure the whip antenna is fully extended and is not loose or broken. If it is loose or broken, the merchant should call the help desk for assistance. (c) If the terminal is inside a building, try taking it outdoors. If it gets a signal outdoors, the building was interfering with the signal. (d) Even outdoors, walls can interfere with the signal. Move away from any nearby walls. (e) If it still does not get a signal outdoors, it may be in an area where there is no wireless coverage. To further check for coverage, press the blue F key on the terminal. Then press 0 for Diagnostics followed by 9 for Wireless. The bottom line of the Wireless Test display should show an RSSI (signal

strength) of at least 10 uVdBm. While looking at this display, also note the LLI number on the second line. Make sure it matches the LLI number on the "RIM" sticker on the back of the terminal. If it does not match, the help desk must be called. If the LLI number is all zeros, the terminal has lost connection with the modem. Power the terminal down and up to reset it. See "Unsuccessful / no comms" below for more information about this. (f) Even if the LLI is correct, it may be necessary to power the terminal down and up to reset it. (g) If the merchant can't get a signal after trying all of the above, the help desk should be called for further assistance.

Terminal will not power down: (a) Make sure the power button is held down for at least seven seconds to turn off the terminal. (b) If the terminal continues to stay on even when the power button is held down for some time, remove and replace the battery. (c) If the problem still persists, the merchant should call the terminal help desk.

Terminal will not power up: (a) Make sure the power button is being fully depressed. But do not hold down the button for more than a second, or the terminal may power down again. (b) The battery may be dead. Charge the battery for at least five hours. Note: If the terminal has not been used for some time, the battery may have self-discharged. (c) If the battery will not charge, replace the battery with a new one. Note: The normal lifetime of a battery is about one year. (d) If the terminal powers up but will not stay powered up, the tamper switch inside the terminal may have opened. This can happen if someone tried to open up the terminal's case, or if the terminal has been dropped. The merchant should call the help desk for assistance.

Transactions take too long to process in wireless mode: (a) Occasionally a transaction may take a couple of minutes to complete. This could be due to a temporary fluctuation in the wireless signal. If transactions usually take a minute or two, the terminal may be in an area with poor wireless coverage. See "Terminal is not getting a signal" above. (b) If the terminal cannot get a better signal, there may be a problem with the wireless network in the area in which the terminal is being used. The merchant should call the help desk for assistance.

UNOBTAINABLE / CHECK PHONE # is displayed during a transaction attempt in dialup mode: This means the terminal is not connecting with the modem. Power the terminal down and up to reset it. If the error persists, power the terminal down and up again. If it still occurs, power the terminal down and momentarily remove the battery. Put the battery back and power the terminal up again. (Note: It is normal for this to occur sometimes after a full download.)

UNSUCCESSFUL / NO COMMS is displayed during a transaction attempt in wireless mode: This means the terminal is not connecting with the modem. Power the terminal down and up to reset it. If the error persists, power the terminal down and up again. If it still occurs, power the terminal down and remove the battery. Replace the battery and power the terminal up again. (Note: It is normal for this to occur sometimes after a full download.)

UNSUCCESSFUL / NOT RESPONDING is displayed during a transaction attempt in dialup mode: This means the terminal is not connecting with the modem. Power the terminal down and up to reset it. If the error persists, power the terminal down and up again. If it still occurs, power the terminal down and momentarily remove the battery. Put the battery back and power the terminal up again. (Note: It is normal for this to occur sometimes after a full download.)

Water condenses on terminal's display: If the ambient humidity is high, this may be evidenced by moisture condensation on the terminal's display. In this case, the terminal must be kept in a cool, dry place.

GLOSSARY

AC Alternating Current is used as a primary source of power by AC adapters and power supplies. The LinkPoint 9100 battery charger receives AC input and converts it to DC (Direct Current) output.

AC Adapter A device that converts AC electrical current to a different DC current so that it can be used by a particular device.

Account Number (1) A unique series or group of digits used to numerically identify each cardholder. (2) The unique identification number assigned to the account of a specific party, within a given institution.

Alphanumeric Capable of using both alphabetic and numeric characters, as in a display panel, keypad, or a computer keypad.

Application A software program designed with special codes, stored in the memory for a specific purpose or customer.

ATM/Debit A monetary function that transfers funds from the cardholder's ATM/debit account.

Authorization The process used by card issuers to approve or decline a transaction request.

Authorize Only A non-monetary function that verifies the availability of the cardholder's credit and reserves the authorized amount for a period of time (usually eight to ten days, but this varies somewhat depending on the issuer).

Baud Signaling speed equal to the number of signal events per second.

Card Reader The slot on the terminal that automatically reads the magnetic stripe or bar code on the back of an encoded card (bankcard or credit card).

Carrier A frequency signal or tone sent over the telephone or communication line and modulated by the modem to transmit or receive data.

Cash Back Maximum Downloaded feature to establish the maximum amount of cash back allowed by the merchant.

Cash Back Minimum Downloaded feature to establish the minimum amount of cash back allowed by the merchant.

Close Batch A monetary transaction used to summarize the day's transactions for electronic deposit to the merchant's bank account.

Close (Host Response)

The batch was sent to the processing (host) computer. If the close message is "Closed OK," the close occurred with no problems. If the close message is "Invalid," the batch contained one or more invalid transactions that were rejected by the host, but the other transactions closed successfully. In this case the merchant should call the help desk. (See below under "Invalid.") If the close message is "Force," the batch closed for a different amount than the amount in the terminal's memory. The merchant should call the help desk. (See below under "Force.")

CPU Central Processing Unit. The brain of the computer or terminal that controls either directly or indirectly every function and device associated with the computer or terminal.

Customer ID Number A number used by merchants to identify themselves to the host computer at their bank or financial institution.

> Information prepared in a particular format for use by the terminal or host computer for a specific transaction or operation.

Display The small screen on the terminal that displays messages to guide users through different operations and to alert users when errors or problems occur.

EPROM Erasable Programmable Read-Only Memory. A type of memory chip permanently stored in the terminal. Contains the standard application, operating system, and fixed prompts.

File A collection of related data (for example, a batch of transactions is a file).

Force (Close Response)

This host response indicates that there was a discrepancy between the transactions sent to the host by the terminal, and the transactions stored in the host computer. The terminal forced closure, the batch was successfully closed, and the transactions were sent to the host computer. However, the merchant should call the help desk to find out the reason for the discrepancy.

Fraud Control Measures taken to prevent unauthorized use of a credit or debit card.

Host Computer A computer used by the processing network to process credit card, debit card, and EBT transactions.

Invalid (Close Response)

One or more credit card numbers sent to the host computer were invalid. The terminal forced closure, the batch was successfully closed, and the information was sent to the host computer. However, the merchant should call the help desk to find out which transactions were rejected so that they can be re-entered if necessary.

Keypad

The key panel used for entering data and performing operations.

Manual Transaction

Transaction using account information entered from the keypad rather than by means of an automatic reading device such as the card reader.

PIN Personal Identification Number. A four- to sixteen-digit confidential code or electronic signature used by the card holder to identify himself to the host computer as the proper user of a credit, debit or EBT card.

Reprint

A non-monetary transaction used to print a duplicate copy of a captured transaction before the batch is closed.

Return A monetary transaction used to refund a sale transaction in a closed batch. This transaction credits the cardholder's account.

Review

A non-monetary function used to review and print individual items and batch totals as an aid in reconciling a given day's transactions.

Sale A monetary transaction that initiates the transfer of funds. A sale can be transacted either by card swipe (magnetic card reader) or by manual entry of the information.

Scroll To move text across a display screen.

Serial Port A connector used to communicate with host computers, other terminals, printers, or other peripheral devices such as check readers or bar code readers.

Swipe The action of sliding a card through a terminal's card reader.

Telephone Line Cord A type of cord with modular plugs for connecting a device to another device or outlet.

Terminal A device used to perform transactions. The transactions are processed by the terminal itself or by a host computer. These devices have a display panel, keypad, card reader and modem, and are used to enter transaction information.

Ticket Only A monetary transaction used to initiate a deposit in two situations: (1) following an authorize-only transaction, and (2) to complete a transaction initiated by voice authorization. A Ticket Only is also known by a variety of other names including "force," "post-authorization," "pre-authorized sale," etc.

Track 1 Data The information stored on Track 1 of a card's magnetic stripe includes the cardholder's name, account number, expiration date, and security data.

Track 2 Data American Bankers Association information stored on Track 2 of a card's magnetic stripe. It includes the cardholder's account number, expiration date, and security data.

Void A monetary transaction used to eliminate a transaction in the current open batch. If the printer is enabled, a void receipt will be generated to be included with that batch's drafts and tickets.

Wireless

A processing mode in which transaction data are transmitted via radio frequency signals instead of via a dialup telephone connection. Wireless transmission requires that the terminal's modem be activated on a wireless network and a wireless gateway. The gateway routes the transaction via a land line to the processing host. When the gateway receives a response from the host, it transmits it back to the terminal via the wireless network.

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