LinkPoint® 9100 GPRS
REFERENCE MANUAL

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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 or equivalent type recommended by the manufacturer. Lithium battery should be replaced only by an authorized service center. Dispose of used batteries according to the manufacturer's instructions.

NOTICE

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INTRODUCTION

Congratulations on your choice of the LinkPoint® 9100 GPRS point-of-sale (POS) terminal. The LinkPoint 9100 GPRS 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 GPRS 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 GPRS 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 either to a phone line or a wireless network, offline “store and forward” credit sales can also be performed. The 9100 GPRS 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 GPRS 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 GPRS terminal has an integrated PIN pad to support debit and EBT transactions. DUKPT and Triple DES encryption are supported, and the terminal is Visa PED (PIN Encrypted Device) compliant.

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 GPRS:

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 GPRS is a fully mobile terminal that can be used either in wireless or dialup mode. When using the LinkPoint 9100 GPRS 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 GPRS 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. Before installing the roll of paper, make sure both of the two adjustable paper holders are pulled out (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. **Warning**: **Use only an analog phone line. Connecting this terminal to a digital line may damage the modem!** 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). (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 "boot up" to the SWIPE CARD idle screen unless no software application has been pre-downloaded. In that case it will display "Waiting for Download," and an application must be loaded into the terminal before it can be used.

Maintenance

The LinkPoint 9100 GPRS 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 GPRS services. Refer to your sales agreement for specific details on coverage. To repair or replace the LinkPoint 9100 GPRS 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.

- 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 parameter download 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 parameter download files.

- The [CLR] key can be used either as a backspace key to delete key-in errors, 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 parameter 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 limousine services to add tips during retail transactions. This is configurable in the parameter download 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 parameter download 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 parameter download 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 parameter download file.

- An Invoice Number prompt can be enabled or disabled globally either in terminal setup or in the parameter download file.

- An operator ID prompt can be globally enabled or disabled in the merchant's parameter download 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 parameter download 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 parameter download 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 GPRS terminal are the display panel, the card reader, the keypad, the battery, the thermal printer, the smart card reader, an RS-232 interface, and a SIM tray. Their respective features are detailed below in the description of each component.

The Display Panel

During normal operation the LinkPoint 9100 GPRS 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 parameter download 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.

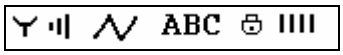


Figure 7

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

- **Antenna:** Indicates that the 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 GPRS 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 GPRS transactions are usually successful even 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 GPRS 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. (Important note: The battery icon is only an approximate indicator of charge. Even when it drops to one bar, the terminal can still be used until the words "LOW BATTERY" start to appear on the screen during each transaction.)

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. The parameter download file 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 parameter download file-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 parameter download 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: (1) the main menu for transactions; (2) the admin menu for local functions such as reports, review, setup, demo mode, and date and time; and (3) a special setup menu for use only by support personnel.

The Card Reader

The LinkPoint 9100 GPRS 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 away 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 parameter download 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 GPRS 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 terminal displays "Powering Off / Thank you for using LinkPoint 9100," and then the screen 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:

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

- 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 the merchant's parameter download file.

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. (But, as noted above, the battery icon is only an approximate indicator of charge. Even when it drops to one bar, the terminal can still be used until the words "LOW BATTERY" start to appear on the screen during each transaction.) 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, the "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 parameter download file. (Note: The factory default setting is 60 minutes. If this value is changed by changing Field 1192 in the merchant's parameter download file, a configuration download must be performed, and 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 two and one-fourth inches wide and can be up to one and seven-eighths inches in diameter. 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 a parameter download or in local Setup in the terminal. The number of customer copies of the receipt can also be set in the parameter download file 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 GPRS 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.

The SIM Card and SIM Card Tray

In the LinkPoint 9100 GPRS terminal, the SIM card tray slides into a slot on the left side of the unit (see Figure 10). This tray holds the SIM (Subscriber Identity Module) card that is required for communication with the GPRS network. The SIM card tray can be removed by using a pointed object such as the tip of a ball-point pen to depress the yellow button on the end of the tray. (The arrow in Figure 10 is pointing to this button.) This pushes the tray part way out, and it can then be pulled out by hand (see Figure 11). **Some ISOs cover the tray with a seal or sticker prior to deployment. In those cases, the tray will not be visible.**

Figure 10: Left side of LP 9100 GPRS terminal showing the SIM tray inserted. The arrow points to the yellow ejection button on the lower end of the tray.

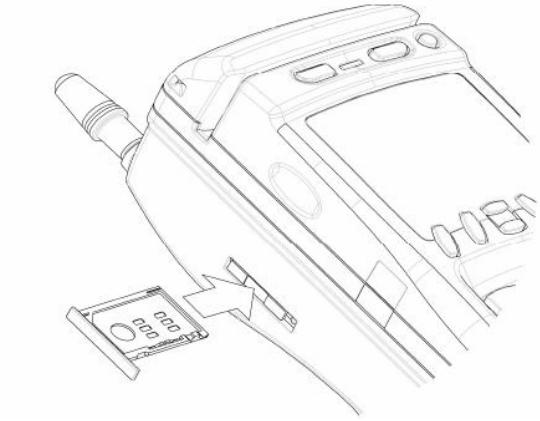


Figure 11: SIM tray. The SIM card tray has been taken out of the 9100 terminal from the slot indicated by the arrow.

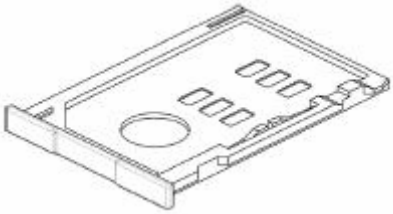


Figure 12: SIM tray without a SIM card installed. The SIM tray is ready for a SIM card to be installed.

If the SIM card has not been installed by the deployment facility, install it as follows:

(1) Carefully punch the SIM card out of its plastic holder, which is the size and shape of a credit card. This holder can be found inside the box that contained the terminal. Save the plastic holder. It has the SIM ID printed on it, and this number will be required for SIM activation on the wireless gateway. (The SIM ID is the 20-digit number on the plastic holder.)

(2) Push the SIM card into the SIM tray so that the card's gold contacts are facing outward. There is only one way that the card can fit into the tray (Figure 13). Check that the SIM card is fully inserted into the tray.

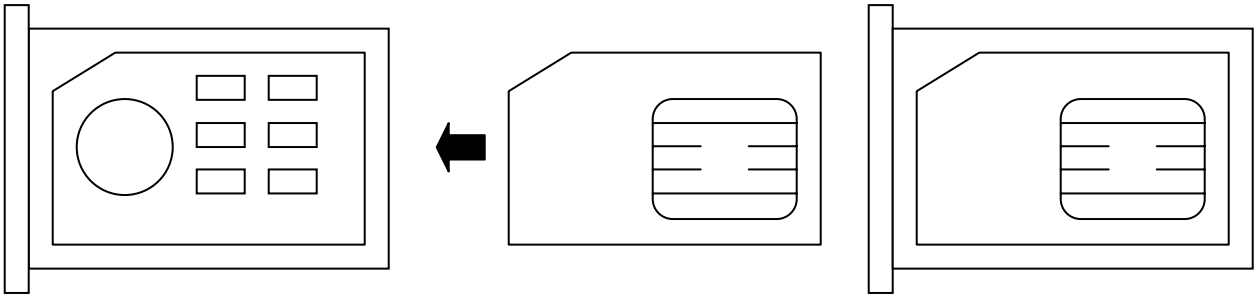


Figure 13: SIM tray and SIM card. The SIM card is installed into the recessed area that has a beveled edge in the upper left corner. There is only one way the card can fit into this recessed area.

(3) Slide the SIM tray with card into the slot on the side of the terminal (see Figure 11). Make sure that the tray is not crooked. If it is positioned correctly, it should slide into the slot with very little resistance.

(4) Push the tray into the slot only until it is flush with the side of the terminal (use the arrow in Figure 11 as a guide).

(5) Power up the terminal and put it into wireless mode (as described elsewhere in this manual). If the terminal displays "CHECK SIM", the card has not been installed correctly. Power the terminal down, remove the SIM tray and repeat the above procedure.

Important: If the SIM card has already been installed, it should be removed and replaced only by an authorized repair facility. The SIM tray (containing a SIM card) should never be removed when the terminal is powered on. If a merchant needs to obtain a SIM card, which is required for the terminal to communicate in wireless mode, the merchant must contact their service provider.

LinkPoint 9100 GPRS 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, 1450 mAH nominal.
A fully charged and conditioned battery will perform at least 100 transactions run one right after the other with printing of both receipt copies, and may perform as many as 120 or more. Note that a weak wireless signal (RSSI less than 10) will increase GPRS modem power consumption and may reduce the number of transactions that can be run on a single battery charge.
The lithium backup battery protects stored software and data for a minimum of 3 years.

Battery Charger Operates at 110 volts and 60 Hz input, 7.8 volts DC @ 1 amp output.
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 $1x10^5$ swipes.
Swipe speeds up to 19 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 an internal GSM/GPRS modem that supports dual-band 850/1900 MHz operation. The modem will not connect with the wireless network until a VPN-enabled SIM card has been installed and the terminal's Wireless Setup has been properly configured. The wireless modem has a fixed antenna that screws into the top of the terminal. ***Important: The terminal may function without the antenna, but using the terminal without its antenna is not recommended and may cause modem failure by improperly concentrating RF energy in the modem.***
GPRS (4+1) communications occur at up to 85.6 kbit/s, with CS1-CS4 coding schemes.

The dialup modem allows connection through a PSTN (public switched telephone network) to the processing host.
The dialup modem supports asynchronous connection. Synchronous connection is possible but is not currently supported.
The modem is capable of operating at speeds of up to 14400 baud asynchronous offering V.21, V.22bis. V.23, V.34, and V.32 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 $1x10^6$ 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 Height is 220 mm (8.6 inches); width is 65 mm (2.5 inches); depth is 70 mm (2.7 inches); weight is 475 grams (1.05 lb.).

PIN Pad Secure design capable of secure PIN capture. Supports DUKPT and Triple DES. Visa PED compliant. 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-approved SAMs. Up to four ID-000 SAM cards 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 in the form of a holographic seal 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 and Triple DES encryption algorithms in the BIOS.
Visa on-line PED certified.
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.
The serial port complies with RS 232-E electrical characteristics.

The main serial port provides 300, 1200, 2400, 4800, 9600, 19200, and 38400 bps operation; 7 or 8 data bits, odd, even or no parity; and 1 or 2 stop bits. The control signal lines RTS, CTS, DTR, DSR, RI and CD are supported. When either the Wireless or PSTN Modem is in operation, the main serial port is not available.

The AUX1 serial port provides 300, 1200, 2400, 4800, 9600, 19200 and 38400 bps operation; 7 or 8 data bits; odd, even or no parity; 1 or 2 stop bits. The control signal lines RTS, CTS, and DSR are supported.

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.

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.

DOWNLOAD AND ENCRYPTION PROCEDURES

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)

Caution: This procedure will erase the old application and 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 38400 IN ## S [SECONDS]	PRESS 2 KEY *(NOTE: THE TERMINAL DEFAULTS TO 38400 IF NO KEY IS PRESSED)*
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" ***OR*** 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 GPRS 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 AT EACH PROMPT 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 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 ***OR*** EXIT DOS MODE ON THE PC

TERMINAL DISPLAY	***ACTION***
LOADING	AFTER THE DOWNLOAD IS DONE, 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 Triple DES Key Encryption

DISPLAY	***ACTION***
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 V2.17 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 MAST/SESS
3 MAST/SES 3D PRESS 3 KEY = MAST/SES 3D

MAST/SESS 3DES
1 MKIXOR 1200
2 MASTER KEY
3 WORKING KEY PRESS 1 KEY = MKIXOR 1200 AND DOWNLOAD KEY VIA SECURE KEYLOADER PC
OR
PRESS 2 KEY = MASTER KEY AND ENTER THE THREE KEY PARTS MANUALLY FOR MASTER KEY 1
VERIFY THE CHECKSUM
PRESS THE [OK] KEY
REPEAT THIS PROCEDURE FOR MASTER KEY 2 AND MASTER KEY 3

PRESS 3 KEY = WORKING KEY AND ENTER THE WORKING KEY 1 MANUALLY
REPEAT FOR WORKING KEY 2 AND WORKING KEY 3
VERIFY THE CHECKSUMS
PRESS THE OK KEY

APPLICATION SETUP
1 FILE SYSTEM
2 SRVTRN78LINKPOINT
3 KEY MANAGEMENT POWER THE TERMINAL DOWN

The terminal must be powered down after this procedure to exit the application manager!

DUKPT Key Encryption

DISPLAY	***ACTION***
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 MAST/SES 3D	PRESS 1 KEY = DUKPT AND DOWNLOAD THE KEY VIA SECURE KEYLOADER PC

The terminal must be powered down after this procedure to exit the application manager!

(Note: Master Session is listed as an option on the Encryption menu, but it should not be used as it is not compliant to new Visa and MasterCard encryption regulations.)

Configuration (Parameter) Download

This loads the merchant parameters such as business name and merchant ID into terminal. This download requires a PC that has been set up with the files for the LP 9100 GPRS FDC Omaha application. For a remote configuration download, a telephone cord must be plugged into the terminal. ***Use only an analog phone line, as a digital line may damage the modem.*** *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 (DEFAULT 1234) PRESS [OK] KEY
SETUP 1 PRINTER 2 BACKLIGHT 3 CONTRAST	PRESS 4 KEY = COMMS
HOSTS 1 COMMS TYPE 2 WIRELESS 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 DOWNLOAD PHONE NUMBER PRESS [OK] KEY ***OR*** PRESS NO KEY IF # CORRECT
CONFIG HOST 1 HOST PHONE 2 TERMINAL ID	PRESS 2 KEY = TERMINAL ID
CONFIG TERM ID ID: [DOWNLOAD ID # DISPLAYED] CHANGE ? YES NO	IF NECESSARY, PRESS YES KEY AND ENTER CORRECT DOWNLOAD FILE 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 5 KEY = CONFIG LOAD
CONFIG TERM ID ID: [# DISPLAYED] CHANGE ? YES NO	VERIFY THE DOWNLOAD ID PRESS NO KEY IF ID # IS OK
CONFIG TERM ID START LOAD CONFIRM? YES NO	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 that has been set up with the files for the LP 9100 GPRS FDC Omaha application. For a remote application upgrade, a telephone cord must be plugged into the terminal. ***Use only an analog phone line, as a digital line may damage the modem.*** *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.*

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	***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 (DEFAULT 1234)

	PRESS OK KEY
SETUP 1 PRINTER 2 BACKLIGHT 3 CONTRAST	PRESS 4 KEY = COMMS
HOSTS 1 COMMS TYPE 2 WIRELESS 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, 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 DOWNLOAD 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? YES NO	PRESS YES KEY TO START
ZONTALK DOWNLOAD [DOWNLOAD 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 the download computer 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 the download computer again after the initial download.

Wait until the terminal has finished loading all "applets."

At the completion of every application upgrade, the message "Mount Fail / Likely Cause Unformatted Device" will appear. This is a result of the fact that the AppMan module is included in application upgrades, and overwrites part of the Flash memory. When this message appears, the operator should press the [OK] key. The terminal will then display "1. Format \F1 Dev? 2. Format \N1 Dev? All data is erased." At this display the operator should press the [1] key. The terminal will display "Formatting" for about ten seconds, followed by "Format Succeeded." When this message appears, the operator should press the [OK] key and the terminal will reboot.

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 Edit procedures in Zontalk or LoadPoint. 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/LoadPoint 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/LoadPoint files.

Other fields which normally have the same value regardless of the individual merchant should probably *not* be included in the Zontalk/LoadPoint 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/LoadPoint 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 first 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/LoadPoint files are the "flags" to enable or disable each card type (for example, see Field 61005).

Note: The only fields that have been changed from the Motient 9100 application version 1.06 to the GPRS 9100 application version 1.07 are: 7013, which was Wireless Inactivity Timeout in the Motient application, and is Wireless Host Port in the GPRS application; and 7014, which is a new field, Wireless APN, found only in the GPRS application.

Important Note: Except for the receipt header and trailer line fields, fields must NOT be left blank in a Zontalk/LoadPoint file, unless the table below shows that their default value is [Blank]. Including other fields in a Zontalk/LoadPoint 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)	Y
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
1115	N	1	"Must Close Batch Warning (0=No Warning, 1-9=No of days before Warning)"	2
1131	X	14,14	"Idle Screen: Area B" (custom idle prompt for second line of display;	SWIPE CARD

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			this parameter can be changed to override the "SWIPE CARD" default display)	
1132	X	21,21	"Idle Screen: Area A" (custom idle prompt for top line of display; this parameter overrides the date/time display)	[Blank]
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"	Y
1158	Q	1	"Debit Return Enabled" (Y or N)	Y
1160	Q	1	"Credit Return Enabled" (Y or N)	Y
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	N

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			up; if set to N, terminal will always go into dialup mode after powering up)	
1178	Q	1	"Print Unsuccessful Transaction Receipts" (Y or N) **(Must be set to Y for EBT merchants)**	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 <u>must</u> 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)	Y
1203	S [TP]	1	"Tone or Pulse Dialing (T or P)"	T
1252	X	10,1	"Default Config Terminal ID" (for Zontalk/LoadPoint parameter download; normally this will be the merchant's CAN file # plus check	00000001 [Must be changed before doing a config load]

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			digit for Cardservice merchants)	
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	X	29	"Receipt Header L1: Text"	RETAIL STORE **[This and the other "default" receipt header lines below MUST be changed in the individual merchant files]**
1359	X	29	"Receipt Header L2: Text"	CROSSROADS MEGA-MALL
1360	X	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	X	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	X	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	X	29	"Customer Agreement L2" (flex agreement) (below signature line)	according to card issuer
1383	X	29	"Customer Agreement L3" (flex agreement) (below signature line)	agreement
1384	X	29	"Customer Agreement L4" (flex agreement) (below signature line)	(merch. agreement if return)
1462	N	8	"Menu Password" (manager password)	1234
1463	Q	1	"Hot Keys Enabled" (if set to Y, menu options can be accessed by pressing the corresponding numeric keys)	Y
1464	N	2	"Idle Timeout Period (Seconds)" (time before terminal returns to idle prompt when any menu is being displayed, but no key is pressed; minimum 1 second, maximum 99	60

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			seconds; if set to 00, terminal never times out)	
1558	N	3	"Max Transactions in Batch (Max 300)" (number of items in batch; 500 is the maximum for FDC Omaha host, but **the recommended limit for this application is 300**)	300
2015	S [3210]	1	"Credit Sale: Fraud Control 0:None 1:Last4 2:MSR 3:Both"	0
2055	S	1	"Ticket Only: Fraud Control 0:None 1:Last4 2:MSR 3:Both"	0
2075	S	1	"Credit Return: Fraud Control 0:None 1:Last4 2:MSR 3:Both"	0
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 1:Last4 2:MSR 3:Both"	0
3221	Q	1	"CREDIT RETURN Password Required" (Y or N)	Y
3231	Q	1	"VOID Password Required" (Y or N)	Y
3241	Q	1	"AUTH ONLY Password Required" (Y or N)	N
3251	Q	1	"TICKET ONLY Password Required" (Y or N)	N
3311	Q	1	"ONLINE CREDIT SALE Password Required" (Y or N)	N
3321	Q	1	"OFFLINE CREDIT SALE Password Required" (Y or N)	N
3411	Q	1	"DEBIT SALE Password Required" (Y or N)	N
3421	Q	1	"DEBIT RETURN Password Required" (Y or N)	Y
3611	Q	1	"EBT FOOD SALE Password Required" (Y or N)	N
3621	Q	1	"EBT FOOD RETURN Password Required" (Y or N)	N
3631	Q	1	"EBT FOOD BALANCE Password Required" (Y or N)	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

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
3831	Q	1	"BATCH UPDATE Password Required" (Y or N)	N
3911	Q	1	"UPLOAD ALL OFFLINE TRANSACTIONS Password Required" (Y or N)	Y
3921	Q	1	"UPLOAD SINGLE OFFLINE TRANSACTION Password Required" (Y or N)	Y
3950	Q	1	"ADMIN DIAGNOSTIC Password Required"	N
3951	Q	1	"ADMIN REPRINT Password Required"	N
3952	Q	1	"ADMIN REVIEW Password Required"	N
3953	Q	1	"ADMIN REPORT Password Required"	N
3954	Q	1	"ADMIN RESPONSE Password Required"	N
3955	Q	1	"ADMIN BATCH Password Required"	Y
3956	Q	1	"ADMIN SETUP Password Required"	Y
3957	Q	1	"ADMIN DATE & TIME Password Required"	N
3958	Q	1	"ADMIN PASSWORD Password Required"	Y
3959	Q	1	"ADMIN DEMO MODE Password Required"	N
7001	P	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)	30
7011	S [1234 56789 0.]	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)	010.224.002.101
7012	N	5	"Wireless 1: Connection Timeout" (in seconds)	60
7013	N	5	"Wireless 1: Host Port"	12516
7014	X	25	"Wireless 1:APN"	ALLEN1.APRIVA.COM
7101	P	20	"Config 1: Phone Number" (phone number for remote parameter, i.e.,	94100651 [Not a valid number;

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			configuration, downloads and application upgrades)	must be changed before doing a config 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	P	20	"Txn 2: Phone Number" (host secondary authorization phone number)	18002289074
7202	Q	1	"Txn 2: PreDial Supported" (Y or N)	Y
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	P	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	P	20	"Batch 2: Phone Number" (batch secondary phone number)	18002289074
7702	Q	1	"Batch 2: PreDial Supported" (Y or N)	Y
7703	N	1	"Batch 2: Re-Dial Attempts" (batch secondary phone # re-dial attempts)	0
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	X	4,4	"Wireless Proc: Device ID" (device ID for wireless transactions; ***must be different from primary proc device ID)***	DB01
20002	N	3,3	"Data Input Idle Timeout Period 0	030

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			(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)	
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 = card type is enabled)	N
61006	N	7	"MC Purchase Card Wireless Type Table"	0004560
61007	Q	1	"MC Purchase Card Customer Code Prompt" (Y or N)	Y
61008	Q	1	"MC Purchase Card Order Number	N

Parameter (Field #s from TDF)	Field Type	Field Length	Description of Field and Comments	"Default" Value (SEE NOTE ABOVE!)
			Prompt" (Y or N)	
61009	Q	1	"MC Purchase Card Tax Prompt" (Y or N)	Y
61010	Q	1	"MC Purchase Card AVS Only Prompts" (Y or N)	N
61011	Q	1	"MC Purchase Card CVC2 Prompt" (Y or N)	Y
61020-61211			(Additional MasterCard and MC purchase, business, business debit, and corporate fleet card ranges and related fields--***see Fields 60001 to 61011 above for example of all the fields for one card range***).	
61220-61531			(Visa and Visa purchase and fleet card ranges and related fields)	
61540-61551			(AMEX "34" card range and related fields)	
61560-61571			(AMEX "37" card range and related fields)	
61580-61590			(Discover (Novus) card range and related fields)	
61600-61610			(JCB card range and related fields)	
61620-61630			(Diners Club card range and related fields)	
61640-61650			(Carte Blanche card range and related fields)	
61660-61690			(JAL card ranges and related fields)	
61700-61711			(FDC test card range and related fields)	
61720-61730			("Unknown" card range and related fields--allows 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.*	

SIM CARD ACTIVATION

Before the terminal can be used, the SIM card must be activated by the wireless gateway service. This SIM ID together with the terminal serial number must be provided to the wireless gateway service so that the SIM can be activated. The SIM ID number is a 20-digit number that can be found on a plastic card in the box with each terminal (this card may be taped to the lid of the box).

If this card is missing from the terminal's box, the only way to obtain the SIM ID is to remove the SIM card from the terminal and read the ID number from the back of the SIM card. The SIM ID cannot be read from the terminal's application.

STANDARD TRANSACTIONS

The LinkPoint 9100 GPRS uses transaction menus as well as transaction "hot" 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.

Choosing 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 procedure for changing modes is as follows: Press the [9] key at the idle prompt. When SETUP / Enter Password appears, key the password (default = 1234) and press [OK]. The comms type (Wireless or Dialup) 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.

The mode can also be changed in terminal Setup 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 Dialup) 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 GPRS 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 limousine services to accept and process gratuities (tips) with their credit card transactions. By downloading this application with the Zontalk/LoadPoint 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/LoadPoint 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**, **OR 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 SALE - *ONLINE* - *MANUALLY ENTERED*	Press 1 for Credit Menu, then press 1 for Sale, then press 1 for Online	Key account # & press [OK] Key expiration date & press [OK] 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 - *OFFLINE* *(Use only where there is no phone line or wireless coverage available. Note that the offline sales are <u>not</u> approved until they are uploaded later. Some offline sales may be declined when they are uploaded for approval.)*	Press 1 for Credit Menu, then press 1 for Sale, then press 2 for Offline	Swipe card ***<u>or</u>*** key account # & exp. date manually Remaining prompts will be same as for an online sale, but you will *not* get an approval *(Note: You <u>must</u> upload any offline sales at the end of the business day; see Batch Upload instructions in the Batch Transactions table below)*
CREDIT RETURN *(Use this to issue a refund to an account)*	Press 1 for Credit Menu, then press 2 for Return	Enter password & press [OK] Swipe card ***<u>or</u>*** key account number & exp. date manually Remaining prompts will be similar to those for a sale

CREDIT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
VOID *(Use this to cancel a transaction in the current open batch)*	Press 1 for Credit Menu, then press 3 for Void	Enter password & press [OK] 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
AUTHORIZE ONLY *(This will pre-authorize an amount but will <u>not</u> capture the sale or charge the customer's account)*	Press 1 for Credit Menu, then press 4 for Authorize	Swipe card ***<u>or</u>*** key account number & exp. date manually 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

DEBIT TRANSACTIONS

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

EBT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
EBT FOOD SALE	Press 3 for EBT Menu, then press 1 for Food Sale	Swipe the EBT card ***or*** 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 amount & press [OK] Give the terminal to the customer to enter the PIN & press [OK] Wait for approval & receipt

EBT TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
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 stamp balance on the EBT account)*	Press 3 for EBT Menu, then press 3 for FoodStp Bal	Swipe the EBT card ***or*** 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] Give the terminal to the customer to enter the PIN & press [OK] Wait for receipt
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 ***or*** 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 TRANSACTION TYPE	HOW TO START THE TRANSACTION FROM THE IDLE PROMPT	STEPS TO COMPLETE THE TRANSACTION
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 ***or*** 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
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 ***or*** 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

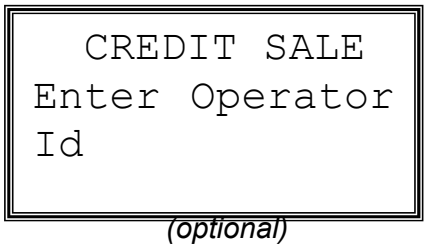
CREDIT CARD TRANSACTIONS

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.

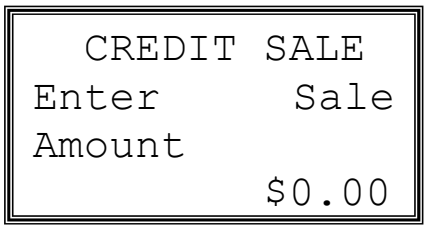
The following prompts will appear if credit sale is selected from the menus by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [1] = SALE, then [1] = ONLINE. (A swiped credit card sale may also be started by simply swiping the card at the idle prompt or the LinkPoint logo).

Display Message	**Operator Action**
CREDIT SALE Enter Password (*optional*)	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 XXXXXXXXXXXXX *(optional)*	The swiped card number will appear. Press OK to continue.

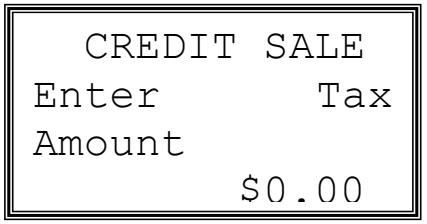


(optional)

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



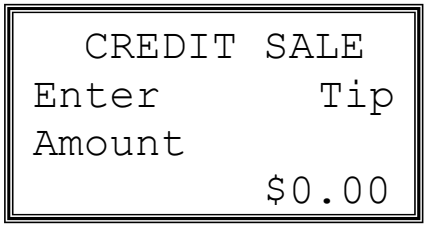
Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].



(optional)

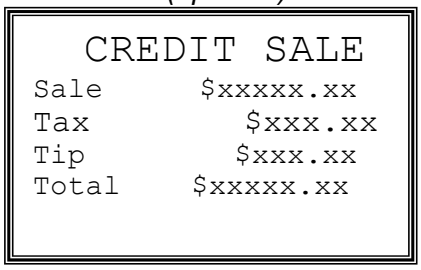
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



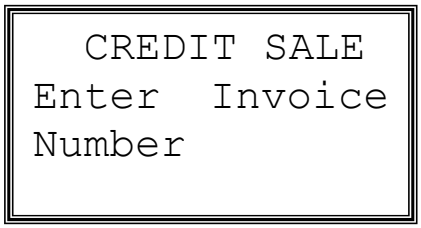
(optional)

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



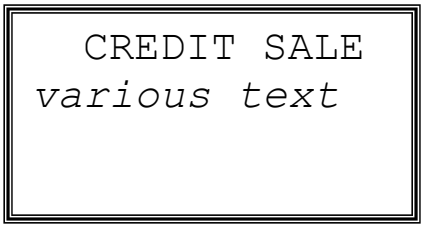
(optional) (conditional)

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.

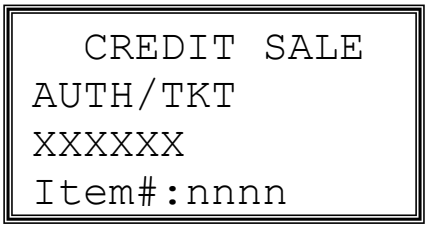


(optional)

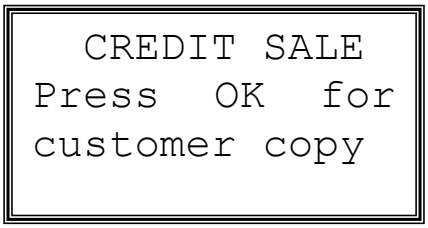
Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.



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

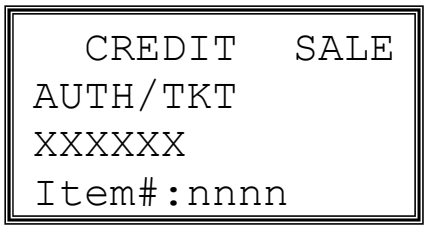


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



(conditional)

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



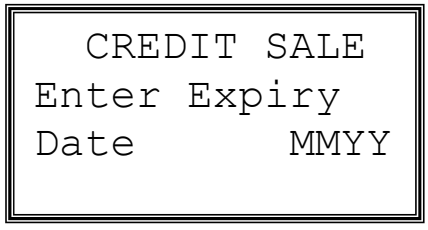
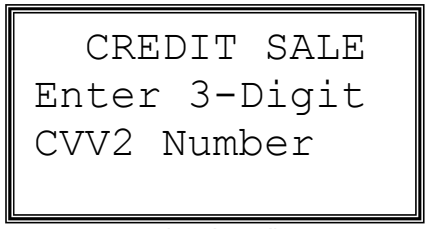
The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

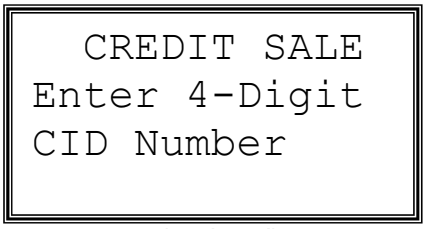
Credit Card Sale—Manual Entry

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.

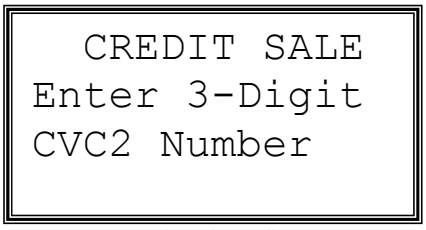
Display Message	Operator Action
 (optional)	If prompted, key in the merchant password (1-6 digits) and press [OK].
	Key the cardholder's account number (max 19 digits), and press [OK].
	Key in the four-digit expiration date using two digits for the month and two for the year, the press [OK].
 *(optional)* OR	Key in the 3-digit Visa CVV2 number and press [OK], or press [OK] to bypass.



(optional)

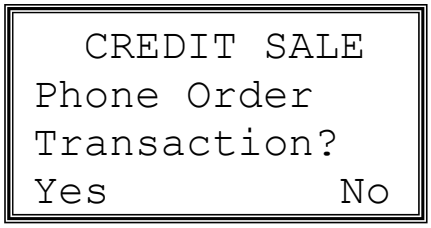
Key in the 4-digit AMEX CID number and press [OK], or press [OK] to bypass.

OR

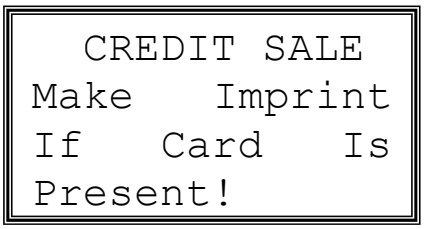


(optional)

Key in the 3-digit MasterCard CVC2 number and press [OK], or press [OK] to bypass.

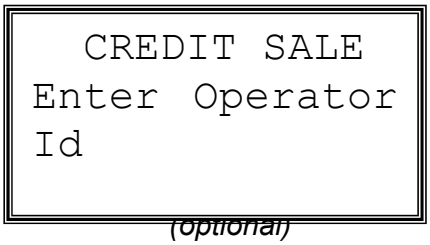


Press the far left soft key under YES if the order was received by phone, or press the far right key under NO if it was not.



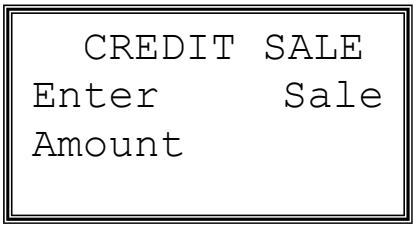
(conditional)

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

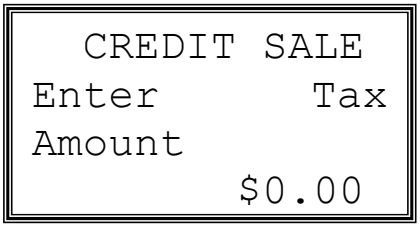


(optional)

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



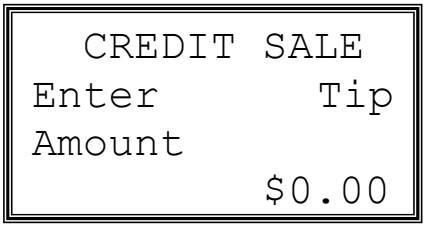
Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].



(optional)

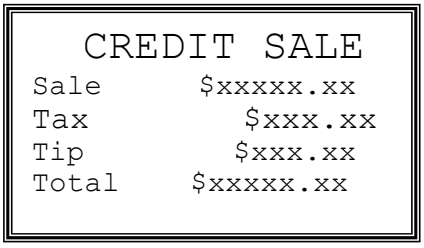
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



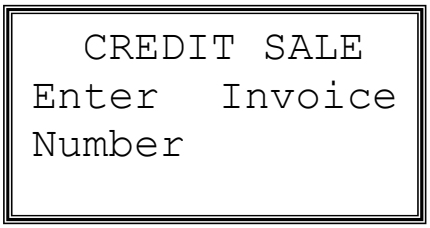
(optional)

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



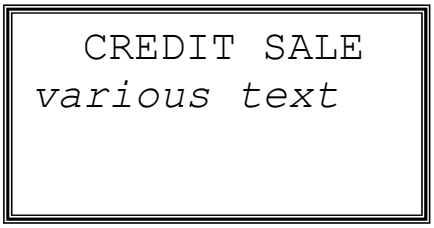
(optional) (conditional)

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.



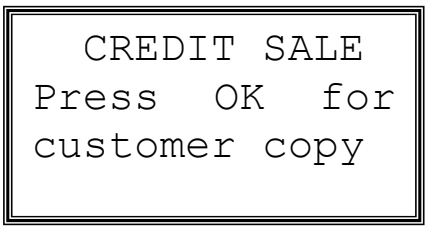
(optional)

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



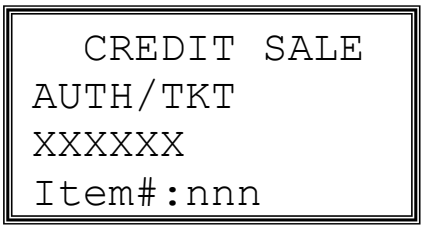
The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

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



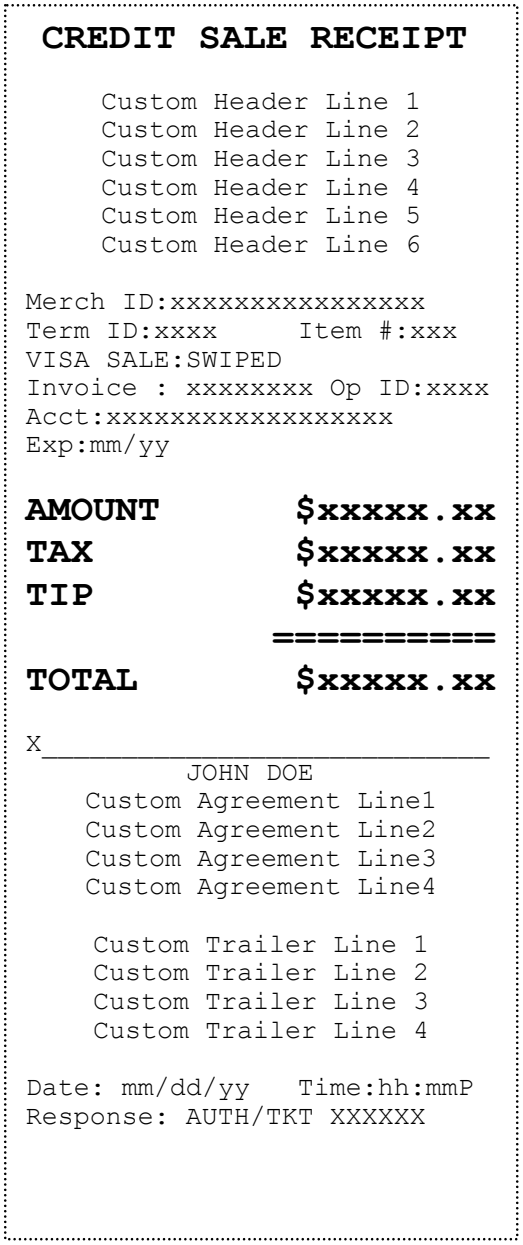
(conditional)

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



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

Credit Card Sale–Receipt



```
 CREDIT 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx      Item #:xxx
VISA SALE:SWIPED
Invoice : xxxxxxxx Op ID:xxxx
Acct:xxxxxxxxxxxxxxxxx
Exp:mm/yy

AMOUNT          $xxxxx.xx
TAX             $xxxxx.xx
TIP             $xxxxx.xx
                ==========
TOTAL           $xxxxx.xx

X_____________________________
           JOHN DOE
    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time:hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Card, tran type, entry method
-Invoice#, operator id
-Card number
-Expiry Date

-Purchase Amount
-Tax Amount
-Tip Amount

-Total Amount

-Cardholder Signature
-Cardholder name (if swiped)
-Custom cardholder agreement lines (max 4)

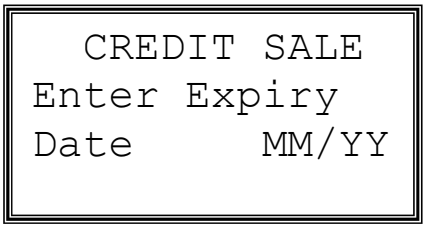
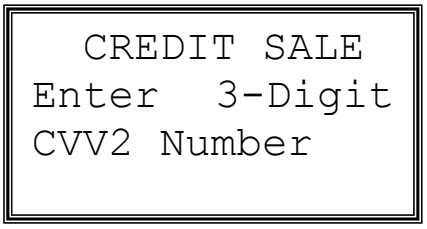
-Custom trailer lines (max 4)

-Transaction date & time
-Host Response text

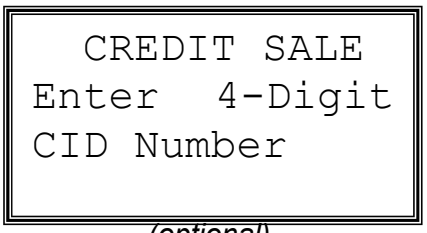
Credit Card Sale–Manual Entry With Direct Marketing/AVS

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	Operator Action
(optional)	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].
 *(optional)*	Key in the 3-digit VISA CVV2 number and press [OK], or press [OK] to bypass.

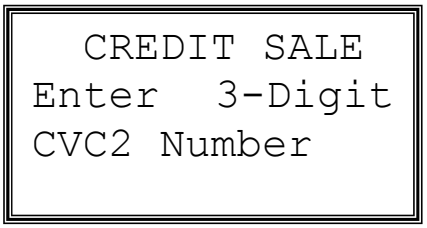
OR



(optional)

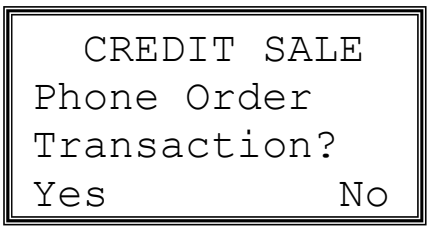
Key in the 4-digit AMEX CID number and press [OK], or press [OK] to bypass .

OR

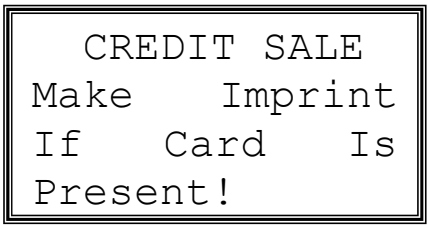


(optional)

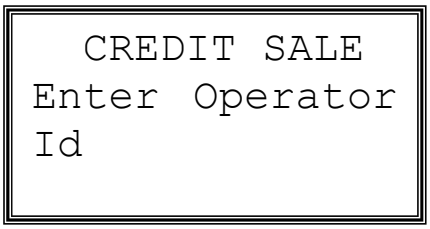
Key in the 3-digit MasterCard CVC2 number and press [OK], or press [OK] to bypass.



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.

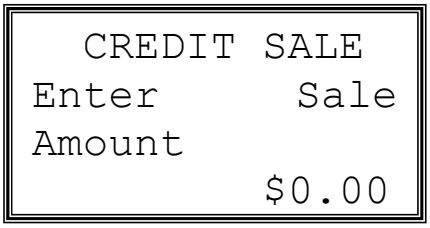


This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

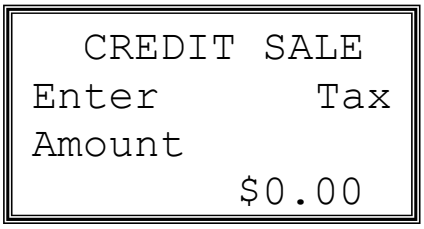


(optional)

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

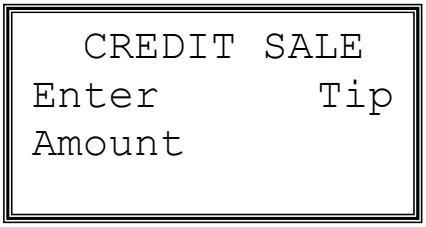


Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].



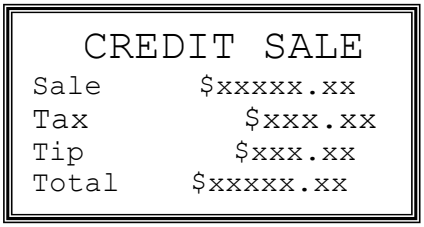
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



(optional)

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



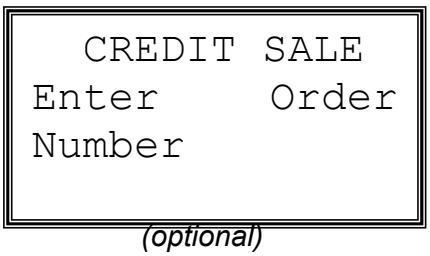
If tip prompt is enabled or if tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.

(optional)

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

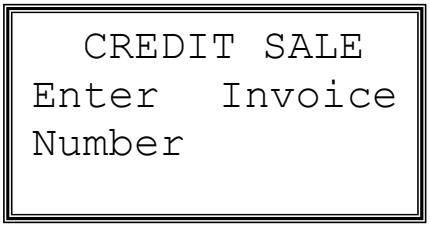
(optional)

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



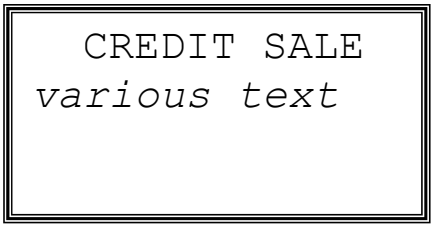
(optional)

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

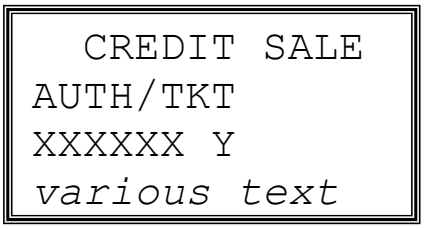


(optional)

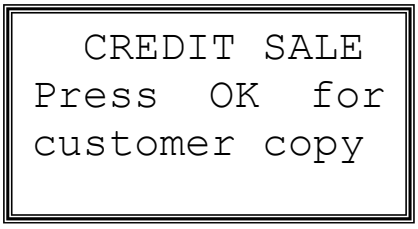
Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.



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

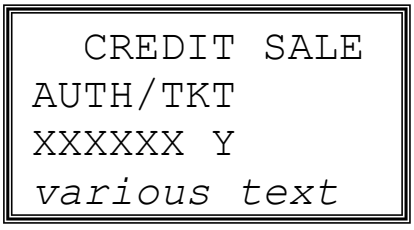


The terminal displays the authorization response text and the AVS code. The bottom line will also display the text interpretation of the AVS code. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



(conditional)

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



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

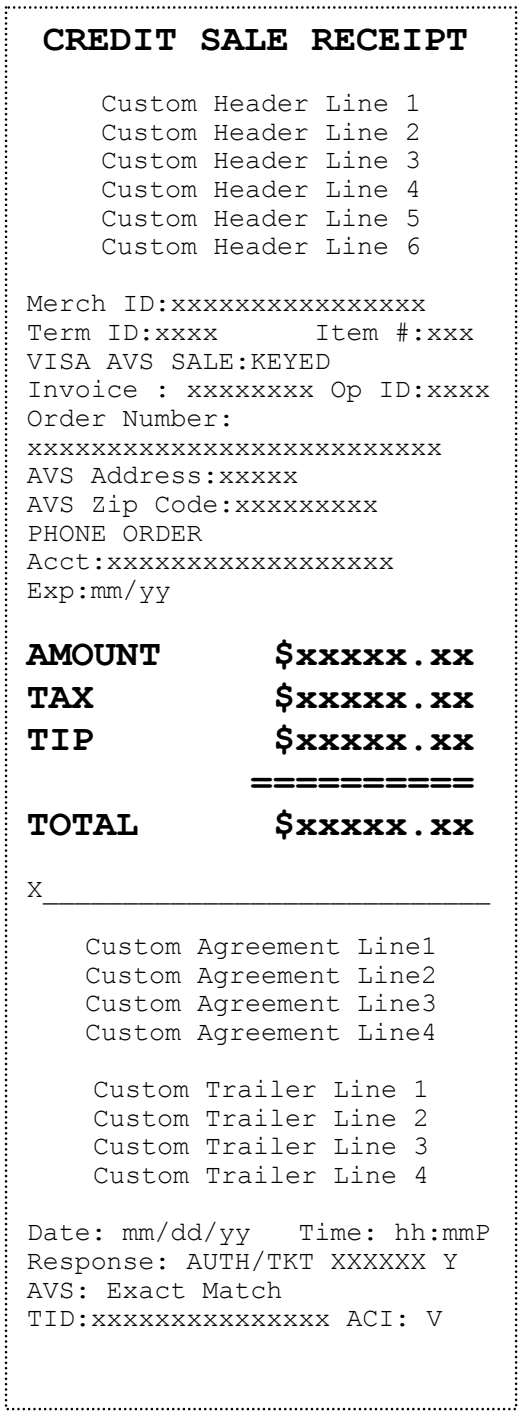
Press [CLR] to return to either the idle or transaction menu screen.

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 Code	Terminal Display	Meaning
A	Adr Match Only	Address Match Only
E	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
X	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



```
 CREDIT 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx      Item #:xxx
VISA AVS SALE:KEYED
Invoice : xxxxxxxx Op ID:xxxx
Order Number:
xxxxxxxxxxxxxxxxxxxxxxxxx
AVS Address:xxxxx
AVS Zip Code:xxxxxxxxx
PHONE ORDER
Acct:xxxxxxxxxxxxxxxxx
Exp:mm/yy

AMOUNT       $xxxxx.xx
TAX          $xxxxx.xx
TIP          $xxxxx.xx
             ==========
TOTAL        $xxxxx.xx

X_____________________________

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX Y
AVS: Exact Match
TID:xxxxxxxxxxxxxxx ACI: V
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID & Item #
-Card, tran type, entry method
-Invoice#, operator id
-Order number

-AVS numeric address info
-AVS zip code 5–9 digits
-If phone order
-Card number
-Expiry Date

-Purchase Amount
-Tax Amount (optional)
-Tip Amount (optional)

-Total Amount (optional)

-Cardholder Signature

-Custom cardholder agreement lines (max 4)

-Custom Trailer Lines (max 4)

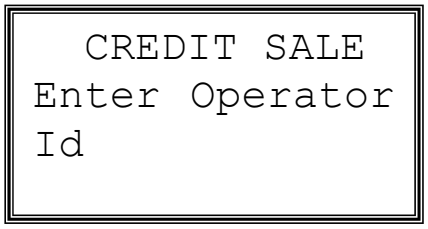
-Transaction date & time
-Host Response text
-AVS response description
-Transaction ID, auth characteristic indicator

Purchase Card Sale—Swiped

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

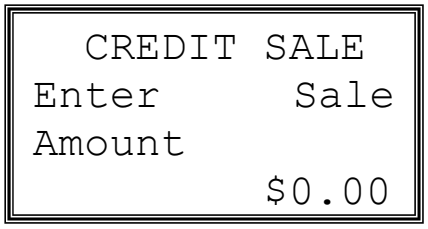
To start a swiped purchase card sale, select credit sale from the menus by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [1] = SALE, then [1] = ONLINE. Then follow the remaining prompts shown below.

Display Message	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 #	Slide the card through the card reader.
CREDIT SALE Enter Last 4 Digits	Key the last 4 digits of the account and press [OK].
(optional)	
CREDIT SALE Swiped Card Data XXXXXXXXXXXXX	The swiped card number will appear. Press [OK] to continue.
(optional)	

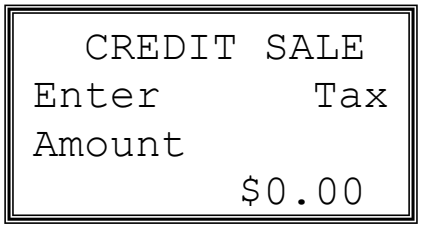


(optional)

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



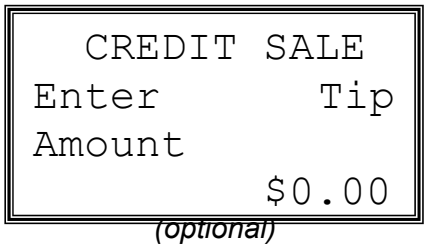
Key in the amount (max 7 digits) of the sale without the decimal point, then press [OK].



(optional)

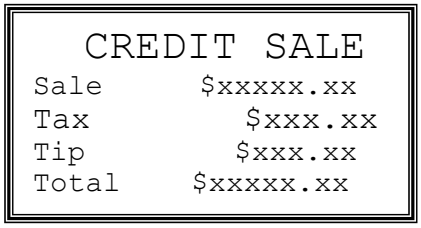
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



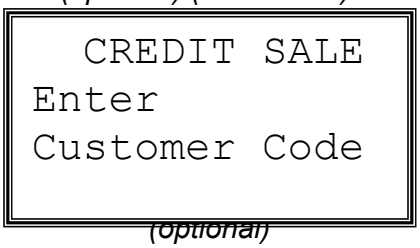
(optional)

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



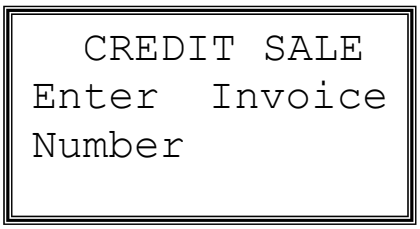
(optional) (conditional)

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.



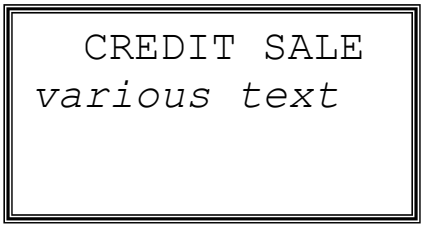
(optional)

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

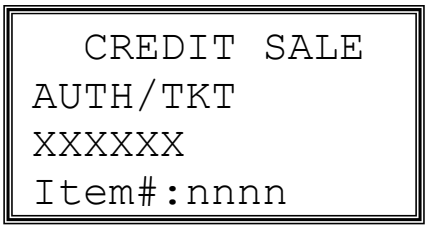


(optional)

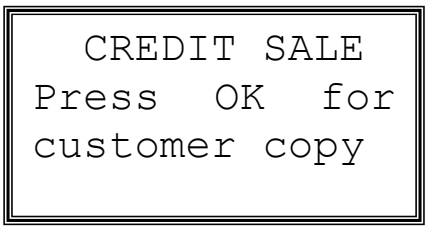
Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.



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

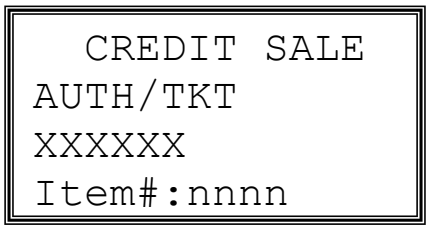


The approval message is displayed. The terminal displays this message until the receipt is printed, assuming that the printer is available and enabled.



(conditional)

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



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

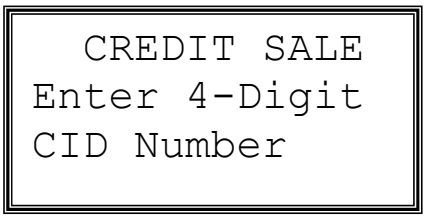
Purchase Card Sale–Manual Entry

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	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 (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	Key in the 3-digit VISA CVV2 number and press [OK], or press [OK] to bypass.
(optional)	

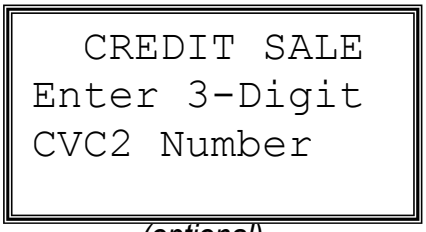
OR



Key in the 4-digit AMEX CID number and press [OK], or press [OK] to bypass.

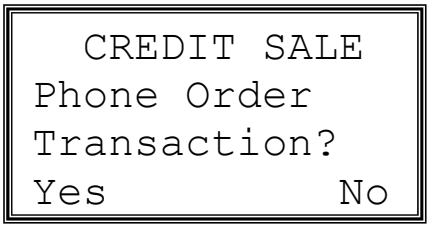
(optional)

OR

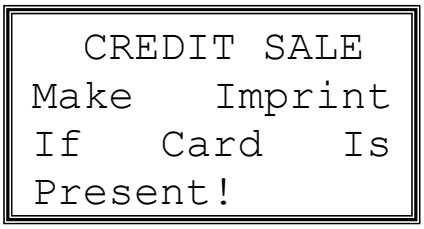


Key in the 3-digit MasterCard CVC2 number and press [OK], or press [OK] to bypass.

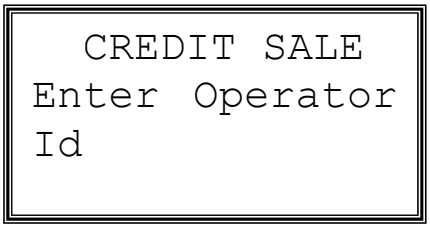
(optional)



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.

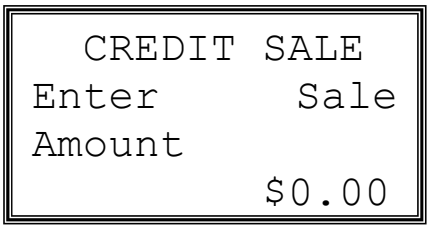


This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

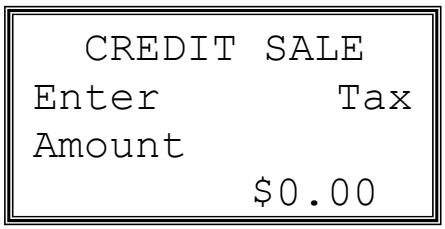


Key in the operator ID (up to four numeric characters) and press [OK], or simply press [OK] to skip this input.

(optional)

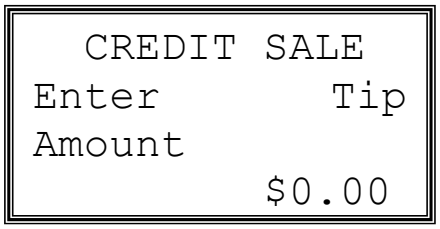


Key in the amount (maximum 7 digits) of the sale without the decimal point, then press [OK].



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

This is a required field for purchase cards.

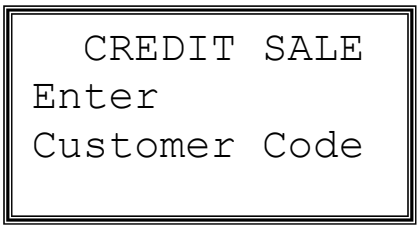


(optional)

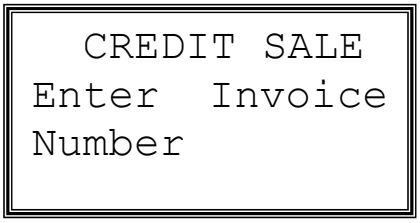
Key in the tip amount (max 5 digits) without the decimal point then press [OK].

(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.

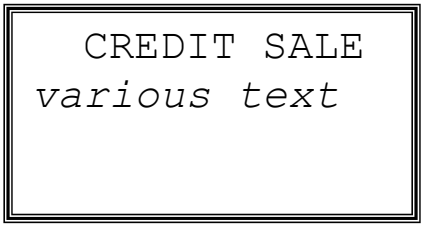


Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

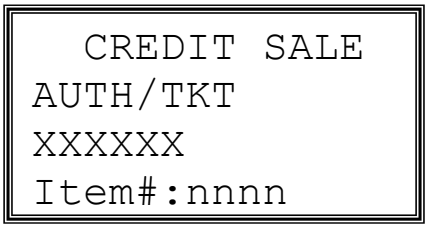


(optional)

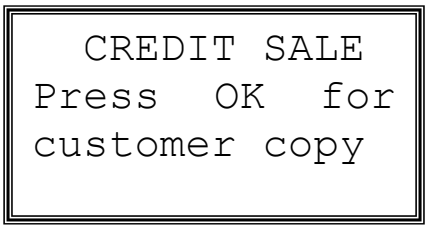
Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.



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

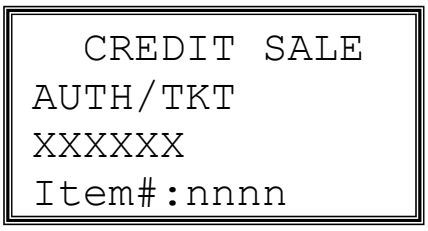


The approval message is displayed. The terminal displays this message until the receipt is printed, assuming that the printer is available and enabled.



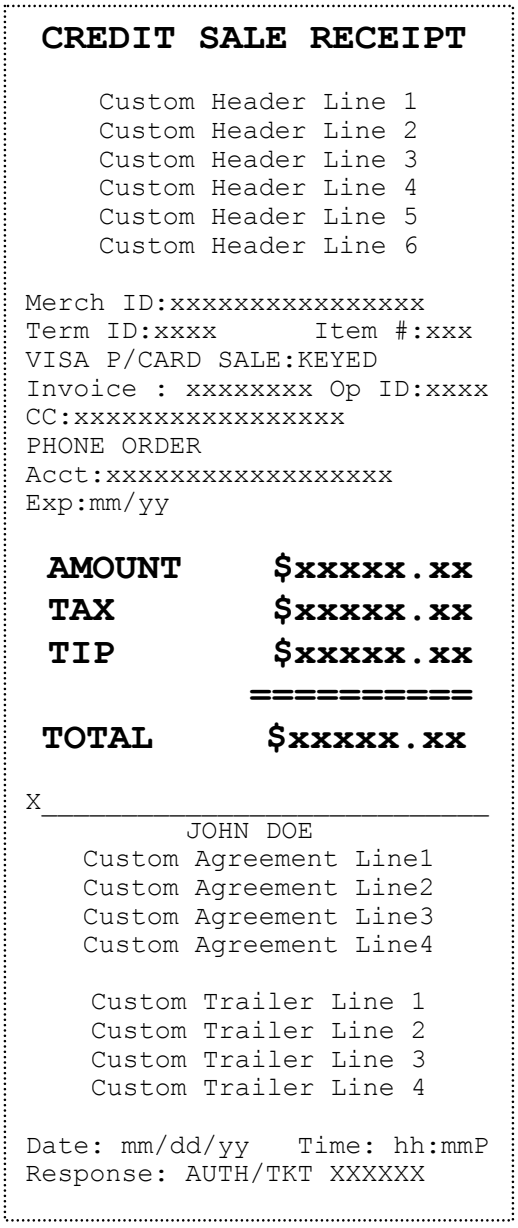
The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)



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

Purchase Card Sale—Receipt



```
 CREDIT 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx      Item #:xxx
VISA P/CARD SALE:KEYED
Invoice : xxxxxxxx Op ID:xxxx
CC:xxxxxxxxxxxxxxxx
PHONE ORDER
Acct:xxxxxxxxxxxxxxxxx
Exp:mm/yy

 AMOUNT      $xxxxx.xx
 TAX         $xxxxx.xx
 TIP         $xxxxx.xx
             ==========
 TOTAL       $xxxxx.xx

X_____________________________
          JOHN DOE
    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines
(maximum 6)

-Merchant ID
-Terminal ID & Item #
-Card, tran type, entry method
-Invoice#, operator ID
-Customer Code
-If Phone Order
-Card number
-Expiry Date

-Purchase Amount (before tax)
-Tax Amount

-Tip Amount

-Total purchase amount with tax

-Cardholder Signature
-Cardholder name (if swiped)
-Custom cardholder agreement lines (max 4)

-Custom trailer lines
(max 4)

-Transaction date & time
-Host Response text

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	Operator Action
CREDIT RETURN Accepted Item#:nnnn	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	Operator Action
CREDIT RETURN Accepted Item#:nnnn	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

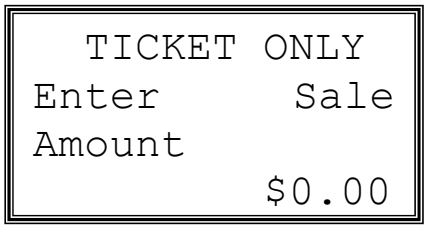
A manually entered credit card return with direct marketing and AVS is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [2] = RETURN. The remaining prompts will be the same as those for a standard keyed credit card return as described above.

Ticket Only—Swiped

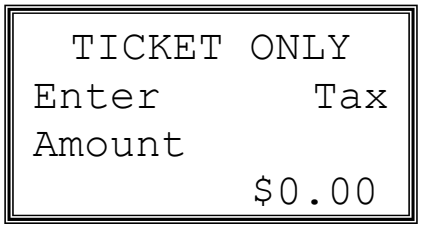
A ticket only sale should be performed to capture a sale if a prior approval has been obtained from the voice center or by running an authorization only transaction.

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	Operator Action
TICKET ONLY Enter Password (*optional*)	If prompted, key in the merchant password (1-6 digits) and press [OK].
TICKET ONLY Swipe Card or Key Account #	Slide the card through the card reader.
TICKET ONLY Enter Last 4 Digits (*optional*)	Key the last 4 digits of the account and press [OK].
TICKET ONLY Swiped Card Data XXXXXXXXXXXXX	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.



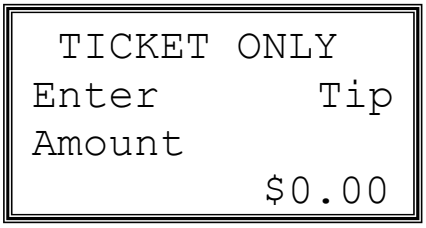
Key in the amount of the sale (maximum 7 digits) without the decimal point, then press [OK].



(optional)

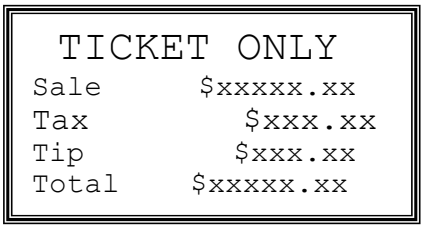
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



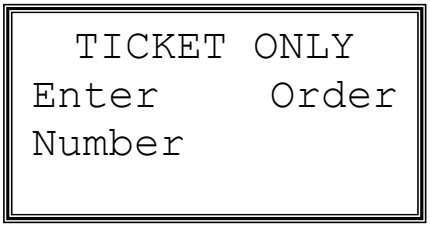
(optional)

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



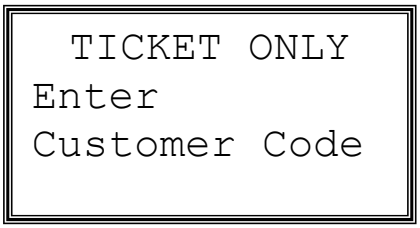
(conditional)

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.



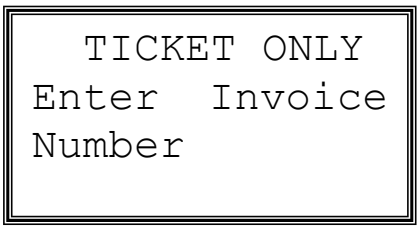
(optional)

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



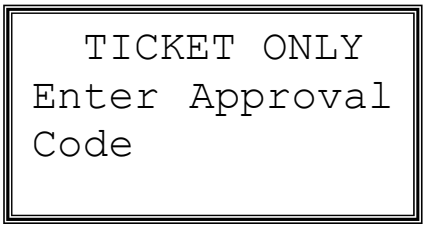
(optional)

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

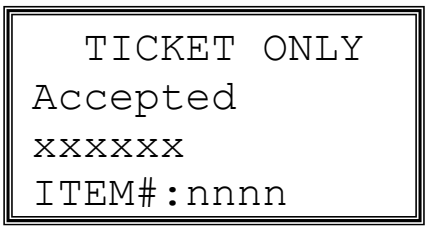


(optional)

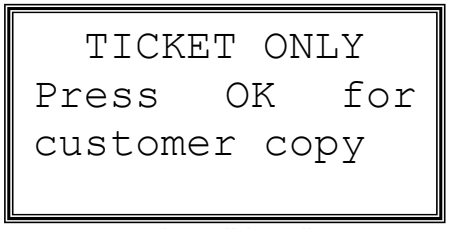
Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.



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

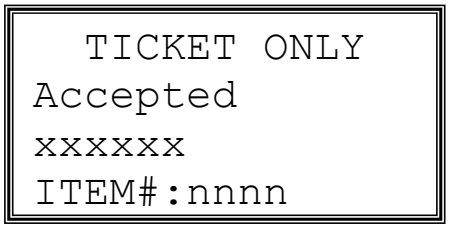


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



(conditional)

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

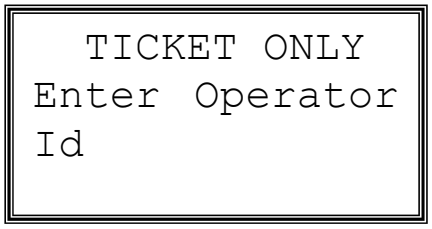


The approval message is displayed. Press [CLR] to return to either the idle or transaction menu screen.

Ticket Only—Manual Entry

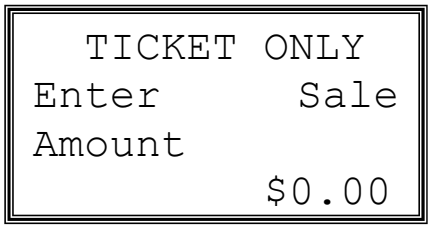
A manually entered ticket only is started by pressing [OK] at the idle prompt, followed by [1] = CREDIT, then [5] = TICKET. Then follow the prompts shown below.

Display Message	Operator Action
TICKET ONLY Enter Password *(optional)*	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 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! *(conditional)*	This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

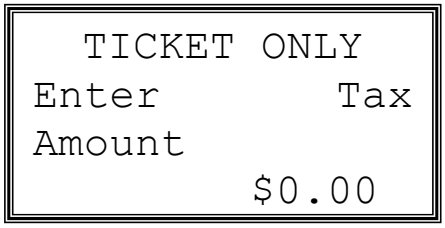


(optional)

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



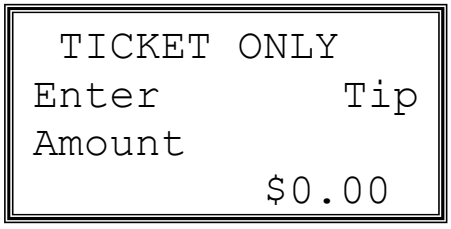
Key in the amount of the sale (max 7 digits) without the decimal point then press [OK].



(optional)

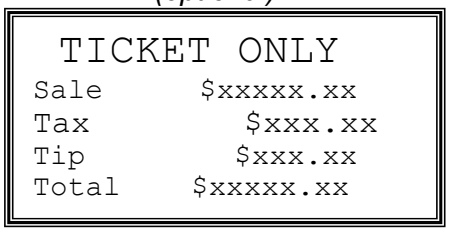
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



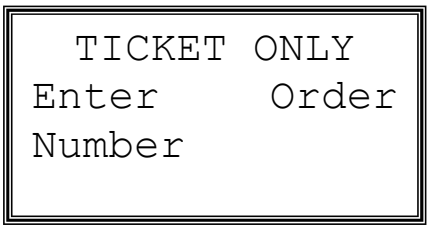
(optional)

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



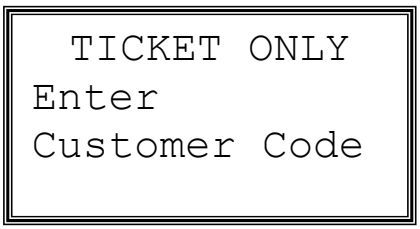
(conditional)

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.



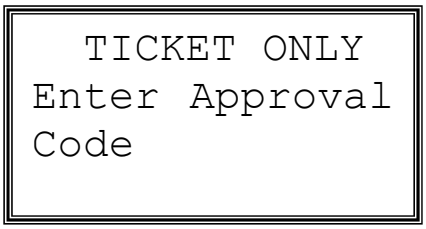
(optional)

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

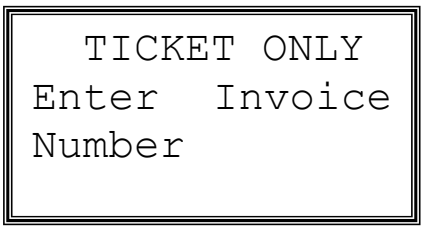


(optional)

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

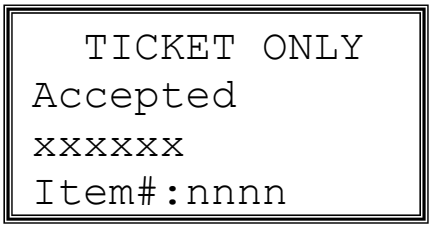


Key in the approval code (6 alphanumeric) previously obtained via voice authorization or through auth only transaction and press [OK].

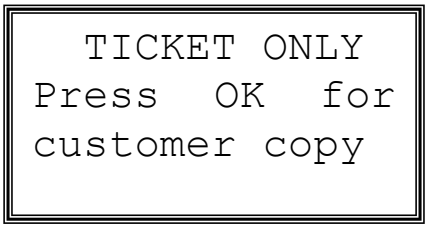


(optional)

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

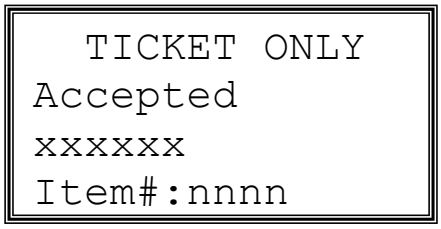


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



(conditional)

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



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	Operator Action
TICKET ONLY Enter Tax Amount $0.00	Key in the tax amount (max. 5 digits) without the decimal point, then press [OK]. This is a required field for purchase cards.
TICKET ONLY Enter Customer Code	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.

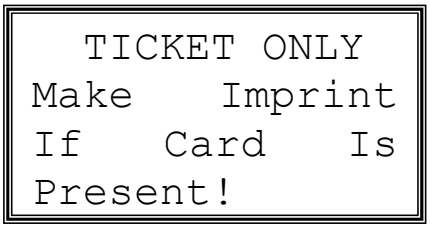
Purchase Card Ticket Only–Receipt

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

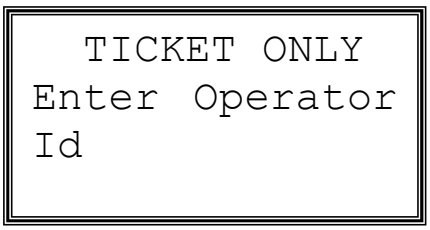
Ticket Only–Manual Entry with Direct Marketing/AVS

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	Operator Action
TICKET ONLY Enter Password *(optional)*	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.

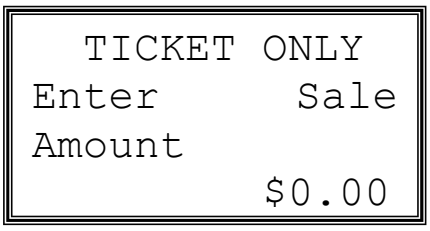


This message is displayed for two seconds. If the card is present the user should obtain an imprint with a manual imprinter.

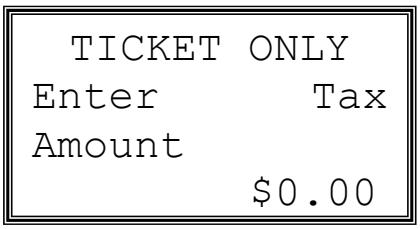


(optional)

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



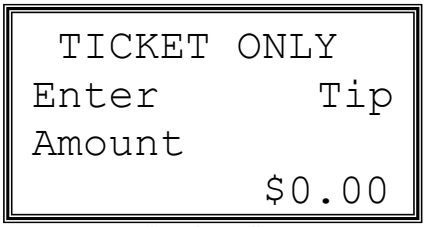
Key in the amount (maximum 7 digits) of the sale without the decimal point then press [OK].



(optional)

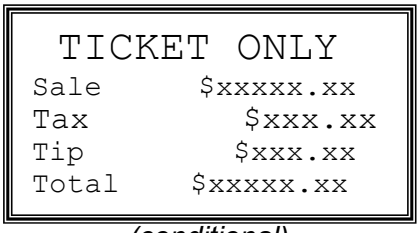
Key in the tax amount (max 5 digits) without the decimal, then press [OK].

This is a required field for purchase cards.



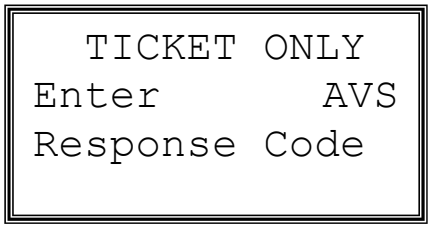
(optional)

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

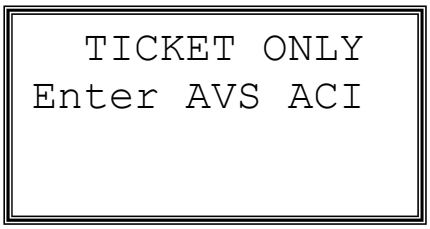


(conditional)

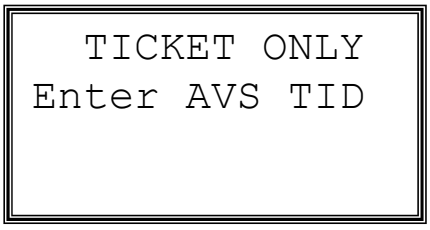
If tip prompt is enabled, or the tax prompt is enabled, the totals for the transaction are displayed. Press [OK] to continue. Press [CLR] key to return to the enter sale amount screen.



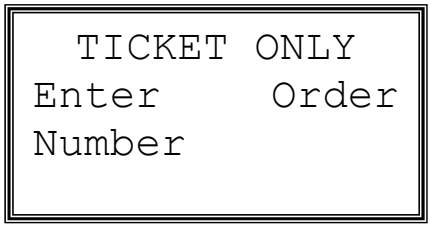
Key in the previously obtained AVS response code, one alphanumeric character, and press [OK].



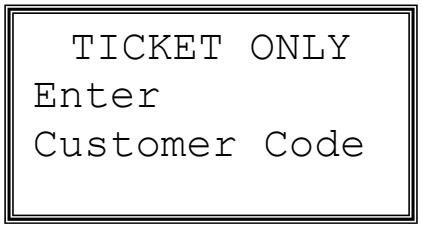
Key in the one character alphanumeric authorization characteristic indicator and press [OK].



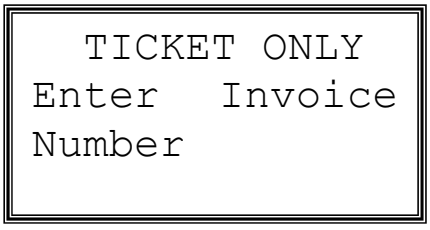
Key in the transaction ID number (maximum 16 alphanumeric) and press [OK].



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

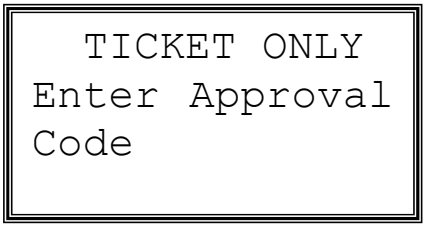


Key in the customer code (up to 17 alphanumeric characters) as provided by the purchasing agent and press [OK].

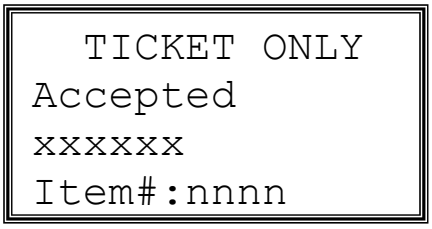


Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

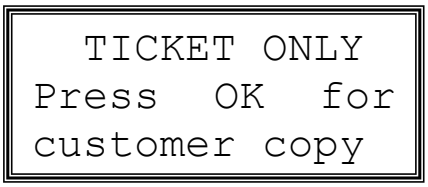
(optional)



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

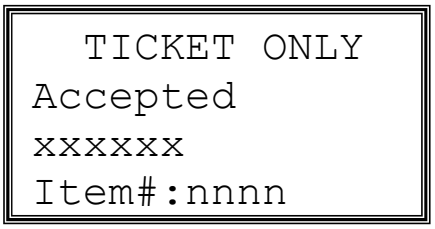


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



(conditional)

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



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

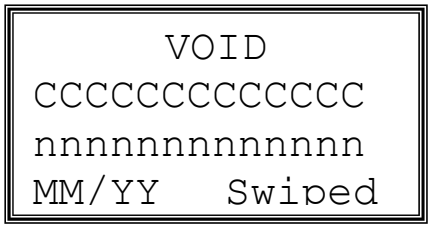
The keyed authorize only transaction with direct marketing/AVS will have the same prompts as a manual credit sale with direct marketing/AVS, except for the differences described above.

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.

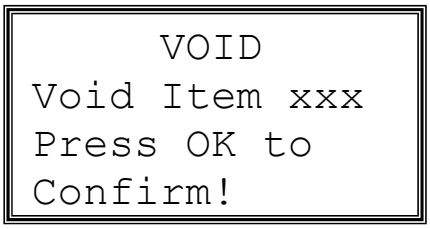
Display Message	Operator Action
VOID Enter Password *(optional)*	If prompted, key in the merchant password (1-6 digits) and press [OK].
VOID Enter Item #	Key in the item number (maximum 3 digits) of the transaction to void and press [OK]. (The item number appears on the original receipt.)
VOID xxx SALE $nnnnnn.nn Prev Next	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.



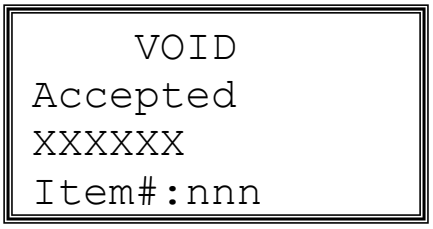
Further details of the transaction are displayed including Card Type, Account Number, Expiry date and account entry method, i.e., Swiped or Keyed.

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

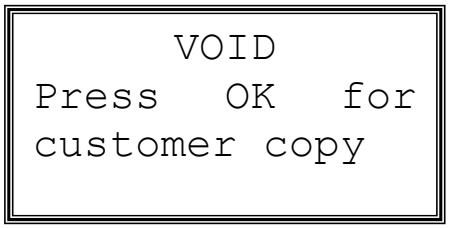
Press [CLR] to exit.



Press [OK] to confirm the void.



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.



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

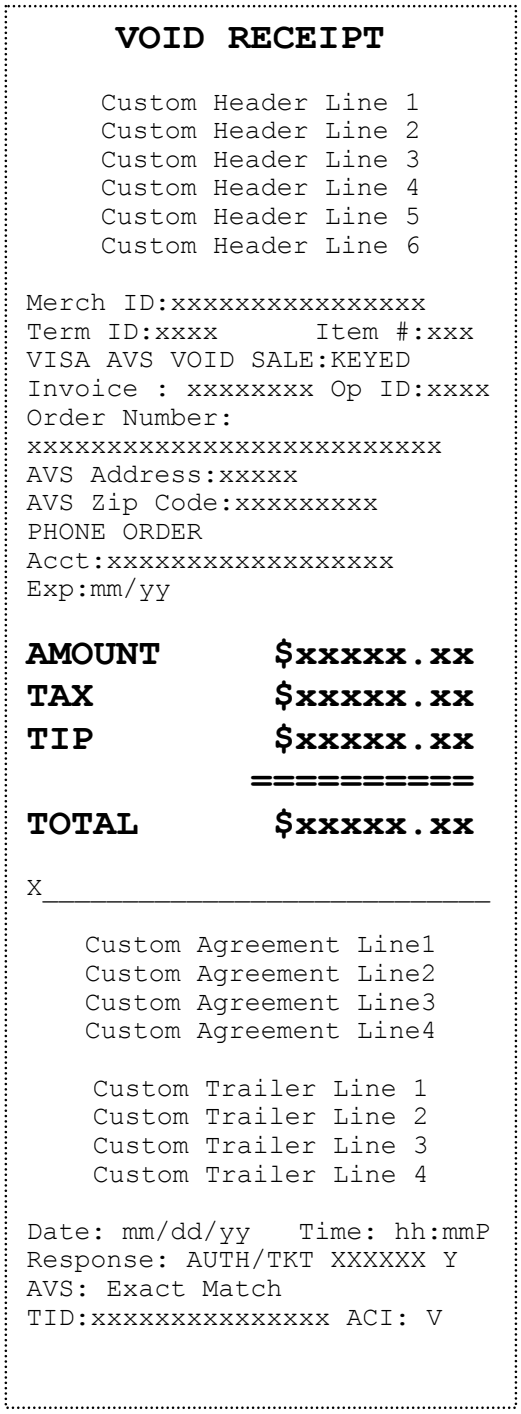
(conditional)

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:



```
      VOID 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx      Item #:xxx
VISA AVS VOID SALE:KEYED
Invoice : xxxxxxxx Op ID:xxxx
Order Number:
xxxxxxxxxxxxxxxxxxxxxxxxx
AVS Address:xxxxx
AVS Zip Code:xxxxxxxxx
PHONE ORDER
Acct:xxxxxxxxxxxxxxxxx
Exp:mm/yy

AMOUNT        $xxxxx.xx
TAX           $xxxxx.xx
TIP           $xxxxx.xx
              ==========
TOTAL         $xxxxx.xx

X_____________________________

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX Y
AVS: Exact Match
TID:xxxxxxxxxxxxxxx ACI: V
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID & Item #
-Card, tran type, entry method
-Invoice#, operator id
-Purchase order number
-AVS numeric address info
-AVS zip code 5–9 digits
-If phone order
-Card number
-Expiry Date

-Purchase Amount

-Tax Amount (optional)
-Tip Amount (optional)

-Total Amount (optional)

-Cardholder Signature

-Custom cardholder agreement lines (max 4)

-Custom Trailer Lines (max 4)

-Transaction date & time
-Host Response text
-AVS response description
-Transaction ID, auth characteristic indicator

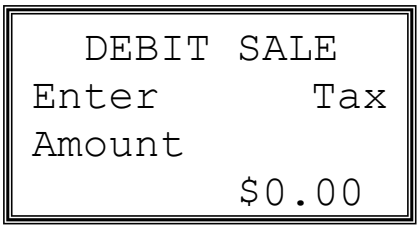
ATM/DEBIT TRANSACTIONS

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	Operator Action
DEBIT SALE Enter Password	If prompted, key in the merchant password (1-6 digits) and press [OK].
(*optional*)	
DEBIT SALE Swipe Card	Slide the card through the card reader. (Manual entry is not allowed.)
DEBIT 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)	
DEBIT SALE Enter Sale Amount $0.00	Key in the amount of the sale (max 7 digits) without the decimal point, then press [OK].



(*optional*)

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

(optional)

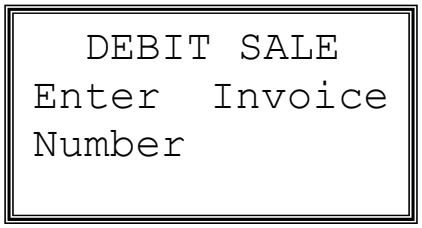
Key in the tip amount (max 5 digits) without the decimal point then press [OK].

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.

(*optional*)

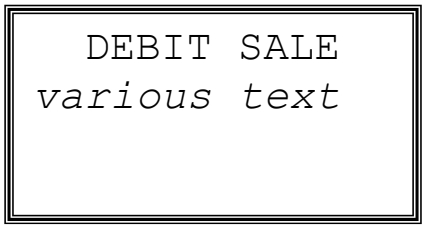
Key in the cashback amount of the sale (max $999.99) without the decimal point then press [OK], or simply press [OK] to skip this field.

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



(optional)

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

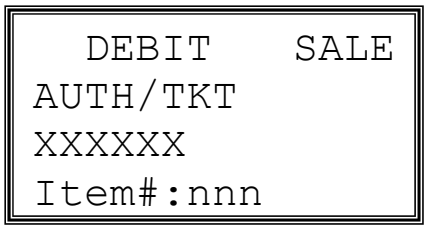


The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

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

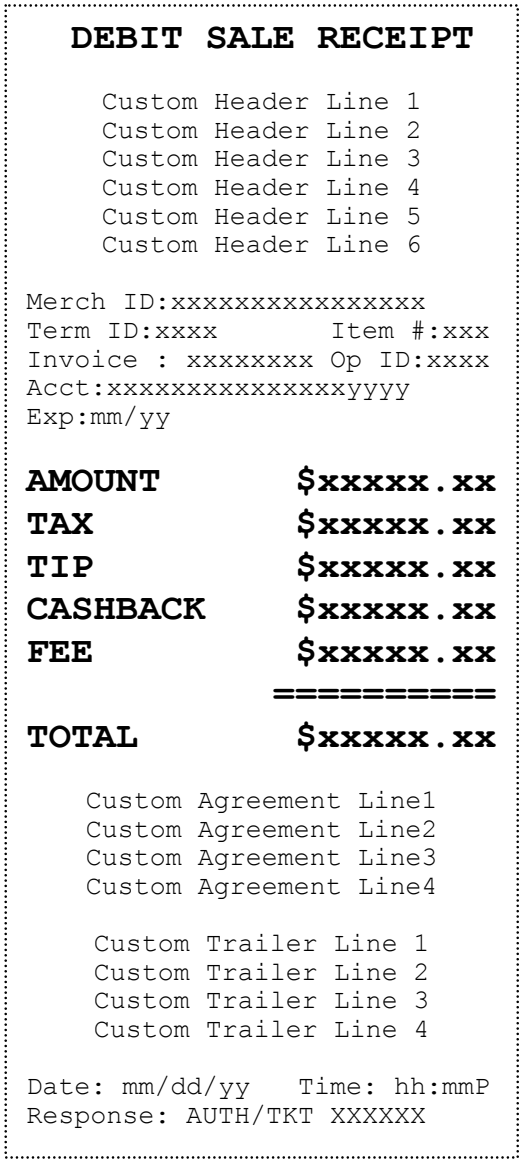
(conditional)

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



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

ATM/Debit Sale—Receipt



```
   DEBIT 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx       Item #:xxx
Invoice : xxxxxxxx Op ID:xxxx
Acct:xxxxxxxxxxxxxxyyyy
Exp:mm/yy

AMOUNT          $xxxxx.xx
TAX             $xxxxx.xx
TIP             $xxxxx.xx
CASHBACK        $xxxxx.xx
FEE             $xxxxx.xx
                ==========
TOTAL           $xxxxx.xx

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Invoice#, operator id
-Card number
-Expiry Date

-Purchase amount
-Tax amount
-Tip amount

-Cash back amount (optional)

-Txn fee(optional)

-Total Sale amount

-Custom agreement lines (max 4)

-Custom trailer lines (max 4)

-Transaction date & time
-Host Response text

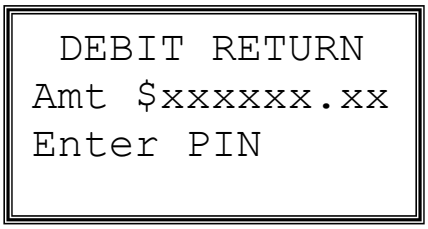
Note that the merchant copy of the receipt will display the entire PAN.

ATM/Debit Return

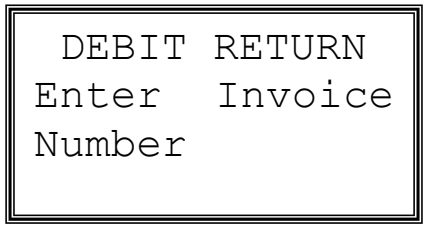
This transaction should be performed if it is necessary to refund a debit sale.

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 *(optional)*	Key in the operator ID (up to four numeric characters) and press [OK], or simply press [OK] to skip this input.
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 *(optional)*	Key in the tax amount (max 5 digits) without the decimal, then press [OK].

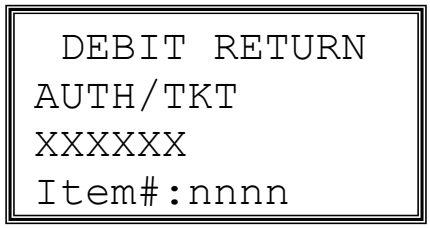


Key in the PIN (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

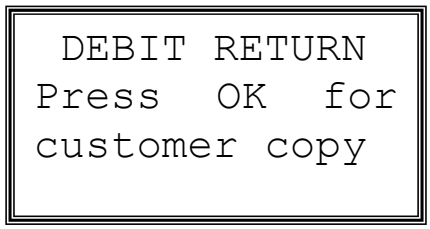


Key in the invoice number (up to eight alphanumeric characters) and press [OK], or simply press [OK] to skip this field.

(*optional*)

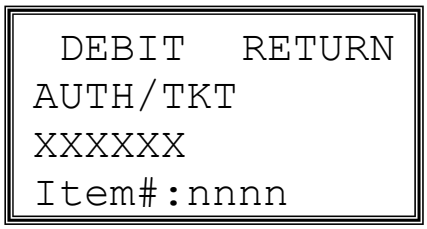


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



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

(conditional)



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

ATM/Debit Return—Receipt

```
 DEBIT RETURN 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx        Item #:xxx
Invoice : xxxxxxxx Op ID:xxxx
Acct:xxxxxxxxxxxxxxyyyy
Exp:mm/yy

AMOUNT          $xxxxx.xx
TAX             $xxxxx.xx
                =========
TOTAL           $xxxxx.xx

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Invoice#, operator id
-Card number
-Expiry Date

-Return amount
-Tax amount

-Total Amount

-Custom agreement lines (max 4)

-Custom trailer lines (max 4)

-Transaction date & time
-Host Response text

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

EBT TRANSACTIONS

Important: For every EBT merchant, parameter Field 1178 ("Print Unsuccessful Transaction Receipts") must be set to YES in the merchant's download file. Then, if an EBT transaction is declined, the receipt will print the customer's account balance, the reason for the decline, and the decline reason code. This information is required by state EBT programs whenever a transaction is declined.

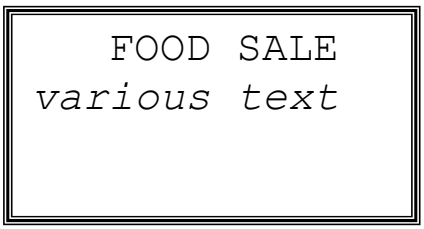
EBT Food Sale

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	Operator Action
FOOD SALE Enter Password	If prompted, key in the merchant password (1-6 digits) and press [OK].
(*optional*)	
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].

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.

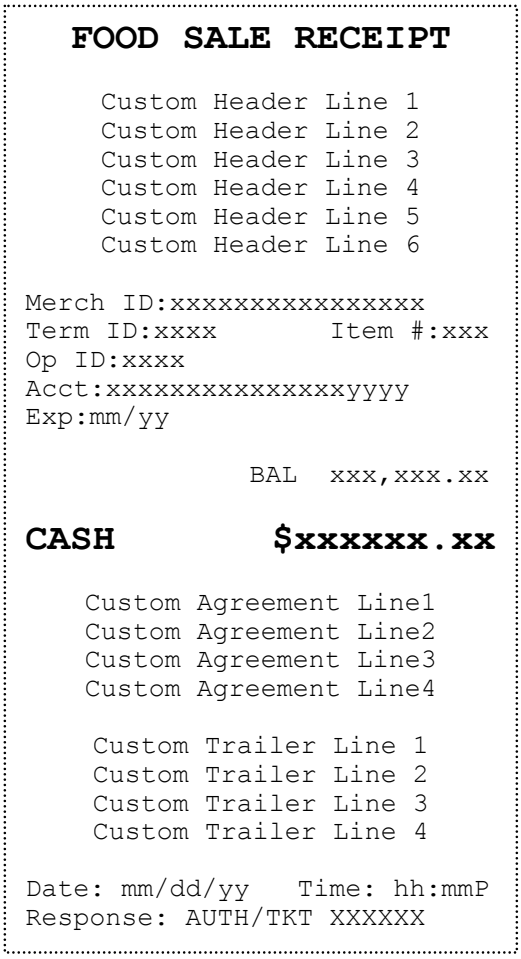
The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

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

(conditional)

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

EBT Food Sale—Receipt



```
   FOOD 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx       Item #:xxx
Op ID:xxxx
Acct:xxxxxxxxxxxxxxyyyy
Exp:mm/yy

              BAL  xxx,xxx.xx

CASH          $xxxxxx.xx

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #,
-Operator id
-Card number
-Expiry Date (if any)

-Remaining EBT Balance as contained in response
-Cash amount

-Custom agreement lines (max 4)

-Custom trailer lines (max 4)

-Transaction date & time
-Host Response text

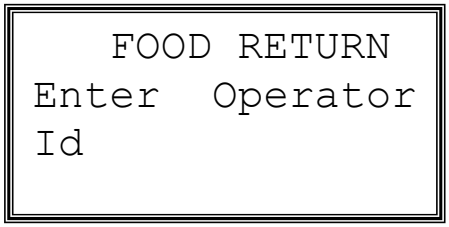
Note that the merchant copy of the receipt will display the entire PAN.

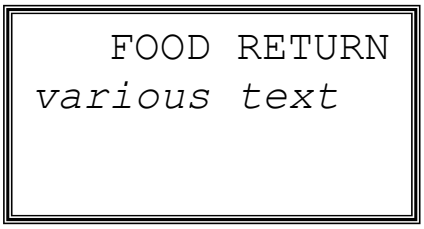
EBT Food Return

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
(*optional*)	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 sale amount (max 7 digits) without the decimal point, then press [OK].
	Key in the PIN number (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.

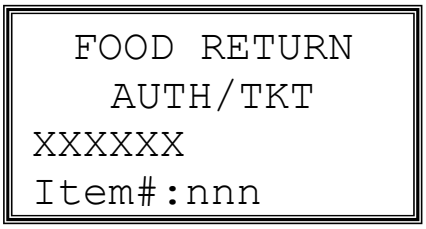


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.

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

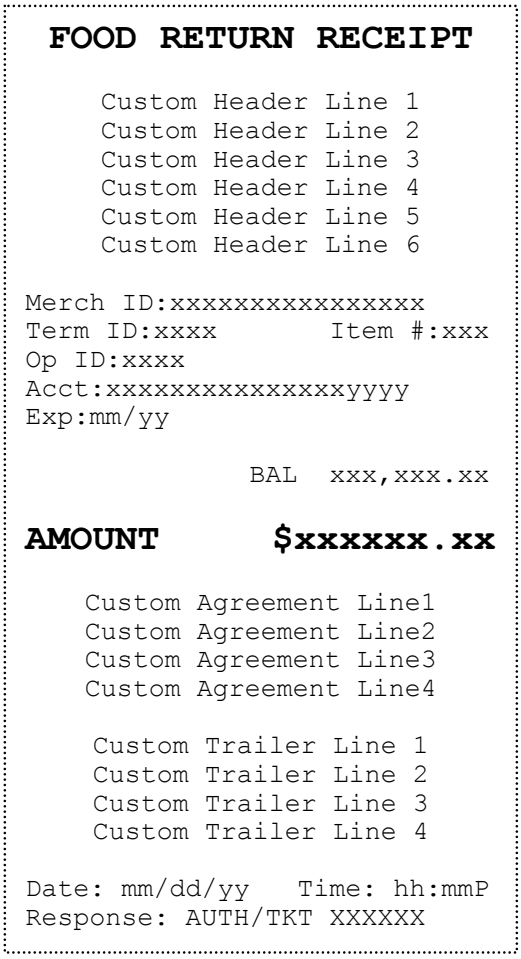
(conditional)

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



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

EBT Food Return—Receipt



```
  FOOD RETURN 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx       Item #:xxx
Op ID:xxxx
Acct:xxxxxxxxxxxxxxyyyy
Exp:mm/yy

              BAL  xxx,xxx.xx

AMOUNT        $xxxxxx.xx

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Operator id
-Card number
-Expiry Date (if any)

-Remaining EBT Balance as contained in response
-Sale amount

-Custom agreement lines (max 4)

-Custom trailer lines (max 4)

-Transaction date & time
-Host Response text

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.

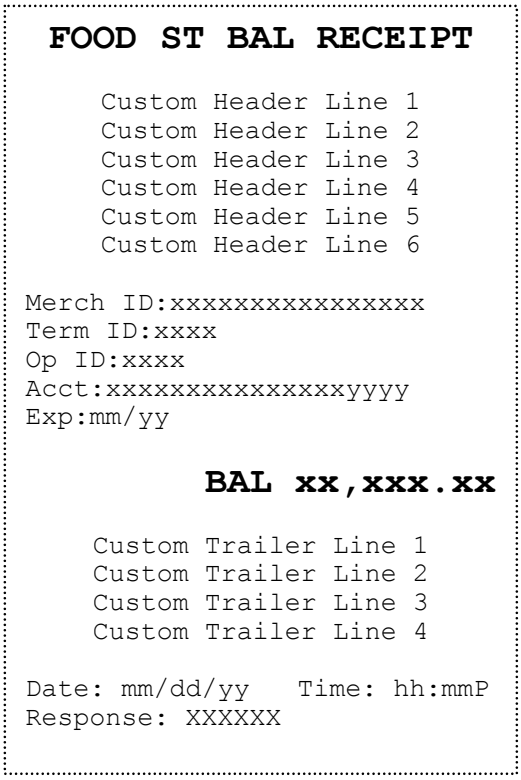
Display Message	Operator Action
FOOD ST BAL Enter Password (*optional*)	If prompted, key in the merchant password (1-6 digits), and press [OK].
FOOD ST BAL Swipe Card or Key Account #	Slide the card through the card reader.
FOOD ST BAL Enter Operator Id	Key in the operator ID (up to four numeric characters) and press [OK]. This is a required prompt for EBT.
FOOD ST BAL Enter PIN	Key in the PIN number (4 to 8 digits) and then press [OK]. Each digit entered will appears as the '*' symbol.
FOOD ST BAL *various text*	The terminal displays several messages indicating it is communicating with the host. These are DIALING, REDIALING, SENDING, RECEIVING, and DISCONNECTING.

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

(*conditional*)

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Op ID:xxxx
Acct:xxxxxxxxxxxxxxxyyyy
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)

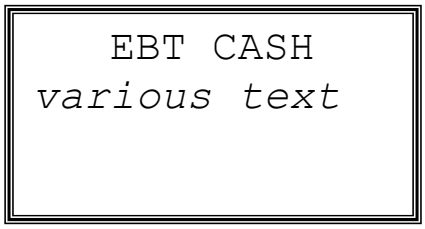
-Transaction date & time
-Host Response text

EBT Cash Sale

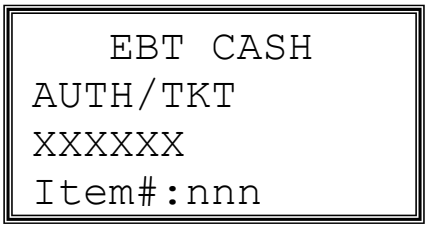
EBT (Electronic Benefits Transfer) transactions should be performed only if the merchant's account has been activated for EBT.

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.

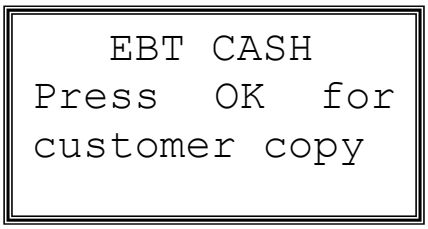
Display Message	Operator Action
EBT CASH Enter Password (*optional*)	If prompted, key in the merchant password (1-6 digits) and press [OK].
EBT CASH Swipe Card	Slide the card through the card reader. (Manual entry is not allowed.)
EBT CASH Enter Operator Id	Key in the operator ID (up to four numeric 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.



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

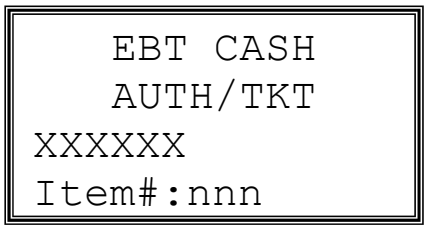


The approval message is displayed. The terminal displays this message until the receipt is printed assuming that the printer is available and enabled.



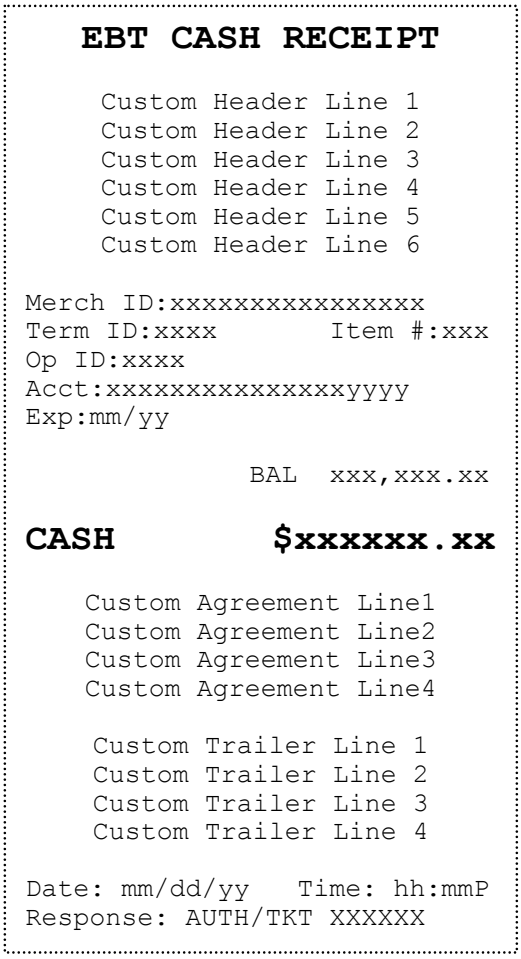
The terminal displays this message, waiting for acknowledgement before printing the customer receipt, if second receipt is enabled.

(conditional)



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

EBT Cash Sale—Receipt



```
    EBT CASH 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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx       Item #:xxx
Op ID:xxxx
Acct:xxxxxxxxxxxxxxyyyy
Exp:mm/yy

              BAL  xxx,xxx.xx

CASH          $xxxxxx.xx

    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time: hh:mmP
Response: AUTH/TKT XXXXXX
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Operator id
-Card number
-Expiry Date (if any)

-Remaining EBT Balance as contained in response
-Cash amount

-Custom agreement lines (max 4)

-Custom trailer lines (max 4)

-Transaction date & time
-Host Response text

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

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 above), 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.

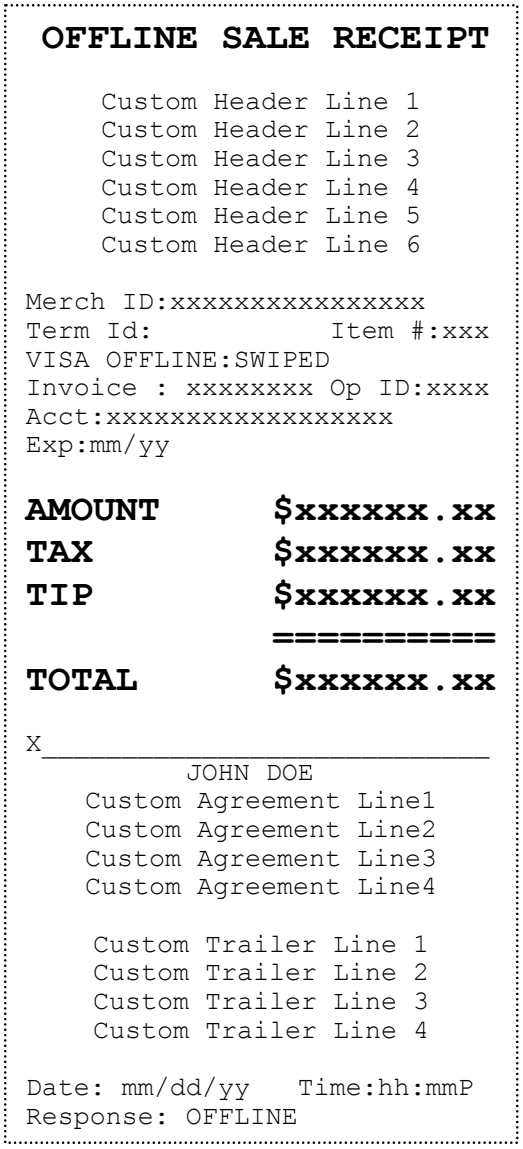
If offline sale transactions are present in the device, the following screen will appear on power up of the terminal:

Display Message	**Operator Action**
Offline Txns XXX In Batch Upload Now? Yes No	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



```
 OFFLINE 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

Merch ID:xxxxxxxxxxxxxxx
Term Id:           Item #:xxx
VISA OFFLINE:SWIPED
Invoice : xxxxxxxx Op ID:xxxx
Acct:xxxxxxxxxxxxxxxxx
Exp:mm/yy

AMOUNT        $xxxxxx.xx
TAX           $xxxxxx.xx
TIP           $xxxxxx.xx
              ==========
TOTAL         $xxxxxx.xx

X_____________________________
           JOHN DOE
    Custom Agreement Line1
    Custom Agreement Line2
    Custom Agreement Line3
    Custom Agreement Line4

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

Date: mm/dd/yy   Time:hh:mmP
Response: OFFLINE
```

-Transaction type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Card, tran type, entry method
-Invoice#, operator id
-Card number
-Expiry Date

-Purchase Amount
-Tax Amount (Optional)

-Tip Amount (Optional)

-Total Amount

-Card Holder Signature
-Cardholder name (if swiped)
-Custom cardholder agreement lines (max 4)

-Custom trailer lines (max 4)

-Transaction date & time
-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.

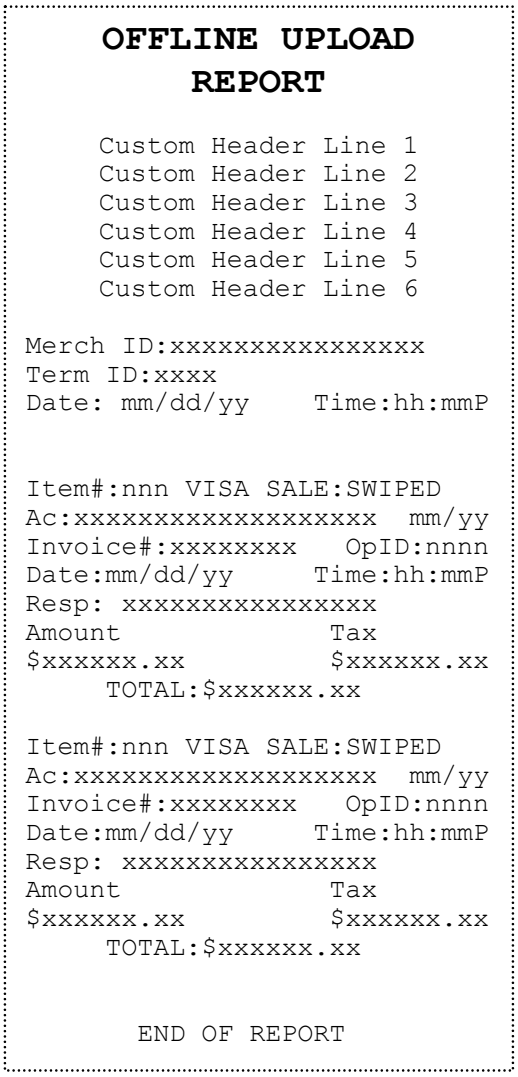
If 1 ALL TXNS is selected, the operator then presses the left-most soft key under YES to start the upload.

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:



```
     OFFLINE UPLOAD
        REPORT

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Date: mm/dd/yy    Time:hh:mmP


Item#:nnn VISA SALE:SWIPED
Ac:xxxxxxxxxxxxxxxxxx  mm/yy
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount              Tax
$xxxxxx.xx          $xxxxxx.xx
     TOTAL:$xxxxxx.xx

Item#:nnn VISA SALE:SWIPED
Ac:xxxxxxxxxxxxxxxxxx  mm/yy
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount              Tax
$xxxxxx.xx          $xxxxxx.xx
     TOTAL:$xxxxxx.xx


       END OF REPORT
```

-Report type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Report date & time

-Item#, card type & entry method
-Account number and expiry date
-Invoice number, operator id
-Transaction date & time
-Host response

-Purchase amount, optional tax
-Optional total

-Item#, card type
-Account number
-Invoice number, operator id
-Transaction date & time
-Host response

-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

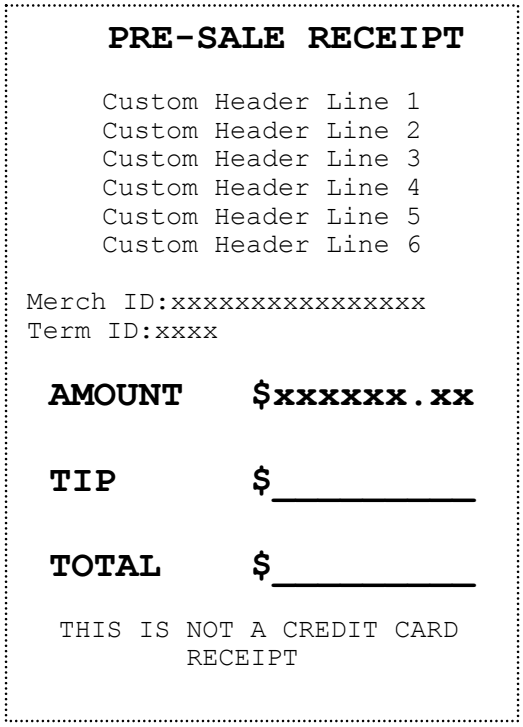
This function is not a financial transaction. It will not be stored in the terminal's memory and will not affect totals. Its purpose it to allow businesses to offer a tip option to their customers by printing a pre-sale receipt. This is not a restaurant transaction.

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	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.
(conditional)	

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx

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 communication or other error, the reason for this will be displayed. The table on the next page 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
<Txn Name> Comms Error <nnnnnnnnnnnn nnnnnnnnnnnn>	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
Application Error (followed by three lines of variable text)	This usually occurs only if erroneous values have been entered in the merchant's Zontalk/LoadPoint file, or if certain fields in the file have been left blank. Reboot the terminal. Then reset the CDS (see how to do this under "Special Setup Functions" in this manual). Rebuild the Zontalk/LoadPoint file with the correct values (see the table under "Download Parameters and Options" for guidance). Perform a configuration download to re-load the parameters.
CHECK SIM	The terminal has been powered up in wireless mode but the SIM card is missing. Power the terminal off and install the SIM card.
Code 42	This indicates a "tamper" event. The terminal must be swapped.
Comms. Error Fault Id: NNNN	A general communications fault, identified by a 4-digit number, occurred. Try again. If the problem persists, call the help desk.
Declined Setup	The wireless Merchant ID and/or Terminal ID in the terminal's local Setup do not match those at the wireless gateway. Check the MID and TID in Admin/Setup/Comms/Wireless and then call the gateway help desk to check their setup.
Hardware Error Call Help Desk	There may be an internal connection or other hardware problem. Try the transaction again. If the problem persists, call the help desk.
Host Busy Try Again	The host is busy and cannot answer the incoming call. Try the transaction again.
Host Timeout	In wireless mode, terminal has not received response from host within particular time. Try again.
Line Lost	A connection was established but then an unexpected disconnect occurred. Check the connections or the wireless signal and try again.
Modem Error Please Retry	The wireless modem was unable to send the transaction. Try again.
No Answer	The host did not pick up the incoming call. Try again.
No Dial tone Connect Line!	Dial tone cannot be detected in dialup mode. Check the phone line connections. Make sure the phone line has a dial tone.
No Response From Host	A connection was established but the remote host did not send ENQs. Try again.
Out Of Network Coverage	Wireless modem could not detect network signal. Move to another location & try again. Also try powering the terminal down and up to reset the modem. Wait about one minute for the modem to reconnect with the wireless network.
Searching For Network	Wireless modem could not detect network signal. Move to another location & try again, or wait for the modem to find a signal. Also try powering the terminal down and up to reset the modem. Wait about one minute for the modem to reconnect with the wireless network.
Signal Lost	The wireless network signal was lost before the transaction was completed. Try again.
SIM NOT ENABLED WIRELESS MODE NOT AVAILABLE	This message will appear if a key is pressed at the "CHECK SIM" display. Power the terminal off and install the SIM.

REVIEW

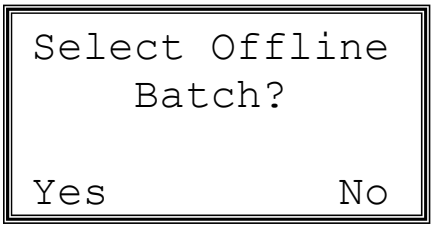
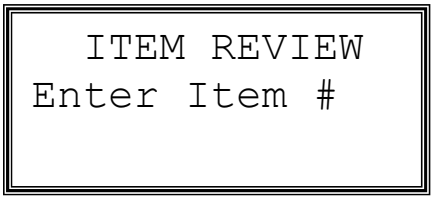
Several local review operations allow the totals and detailed transaction information to be display on the terminal screen for appraisal by the merchant.

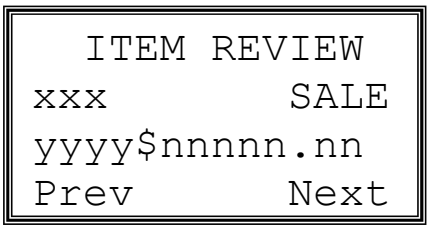
(Note: After a batch has been successfully closed, it can still be viewed in the Reviews until a new batch is started.)

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	Operator Action
 (*optional*)	If prompted, key in the merchant password (1-6 digits) and press [OK].
 *(conditional)*	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.
 *(optional)*	Key in the item number of the transaction to review and press [OK].



(yyyy = VOID for voided items)

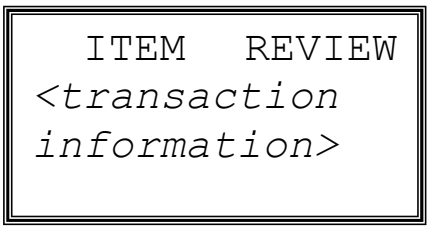
The item number and transaction name are displayed on the second line followed by the dollar amount.

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.



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 three 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].

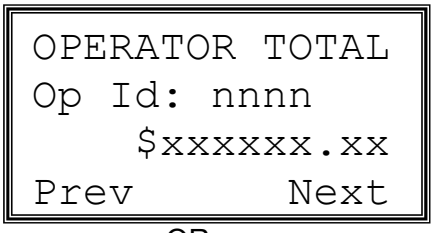
A sub-menu listing all the possible card types will be present for the user to choose from. This will also include an "ALL" option for a grand total of all card totals.

Select Offline Batch? Yes No *(conditional)*	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.

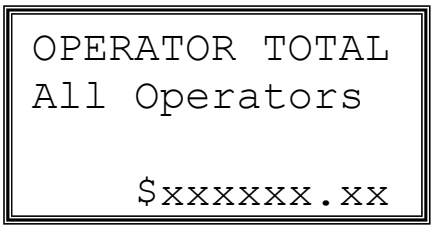
Review—Operator ID

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 Action
OPERATOR TOTAL Enter Password (*optional*)	If prompted, key in the merchant password (1-6 digits) and press [OK].
Select Offline Batch? Yes No *(conditional)*	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.
OPERATOR TOTAL Enter Operator Id	Key in the operator ID required then press [OK] or just press [OK] to select all operators.



OR



The totals for a particular operator are displayed.

Press the far left soft key under PREV to view the previous operator's 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 GPRS 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

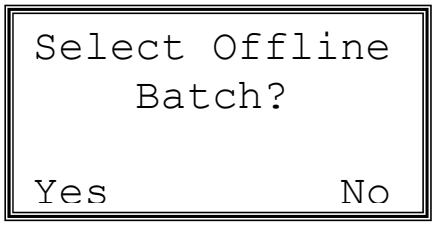
On all detail reports displaying transaction types, the following abbreviations are used:

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



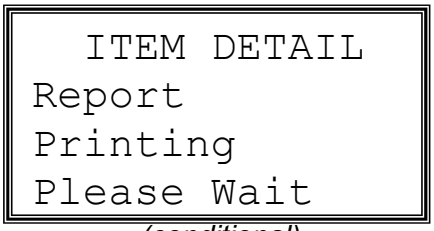
(conditional)

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.



(conditional)

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:

```
   ITEM DETAIL REPORT

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Date: mm/dd/yy    Time:hh:mmP


Item#:nnn VISA SALE:SWIPED
Ac:xxxxxxxxxxxxxxxxxx  mm/yy
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount             Tax
$xxxxxx.xx         $xxxxxx.xx
     TOTAL:$xxxxxx.xx


Item#:nnn DEBIT SALE
Ac:xxxxxxxxxxxxxxxxxx
CC:xxxxxxxxxxxxxxxx
Order Number:
xxxxxxxxxxxxxxxxxxxxxxxx
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount                 Tax
$xxxxxx.xx         $xxxxx.xx
      Cashback:$xxxxxx.xx
        Tip:$xxxxx.xx
     Surcharge:$xxxxxx.xx
       TOTAL:$xxxxxx.xx

       END OF BATCH
```

-Report type

-Custom header lines
(max 6)

-Merchant ID
-Terminal ID and Item #
-Report date & time

-Item#, card type, tran type & entry method
-Account number and expiry date
-Invoice number, operator id
-Transaction date & time
-Host response
-Purchase amount, optional tax
-Optional total

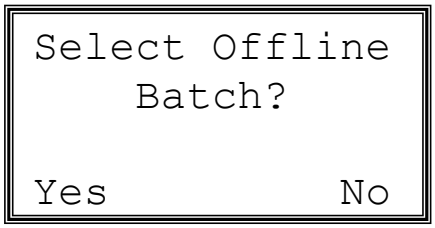
-Item#, card type, trans type
-Account number
-Customer Code
-Order number

-Invoice number, operator id
-Transaction date & time
-Host response
-Purchase amount, optional tax
-
Optional cashback
-Optional tip
-Optional txn fee surcharge
-Optional total
-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	Operator Action
 *(conditional)*	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.
(conditional)	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:

```
   CARD DETAIL REPORT

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Date: mm/dd/yy    Time:hh:mmP

   MasterCard TRANSACTIONS

NONE

      VISA TRANSACTIONS

Item#:nnn VISA SALE:SWIPED
Ac:xxxxxxxxxxxxxxxxxx  mm/yy
Order Number:
xxxxxxxxxxxxxxxxxxxxxx
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount              Tax
$xxxxxx.xx          $xxxxxx.xx
     TOTAL:$xxxxxx.xx

DEBIT TRANSACTIONS

Item#:nnn DEBIT SALE
Ac:xxxxxxxxxxxxxxxxxx
CC:xxxxxxxxxxxxxxxx
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount                  Tax
$xxxxxx.xx          $xxxxx.xx
      Cashback: $xxxxxx.xx
         Tip:$xxxxx.xx
     Surcharge:$xxxxxx.xx
       TOTAL:$xxxxxx.xx

      END OF BATCH
```

-Report type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Report date & time

-Card Type

-Item#, card type & entry method
-Account number and expiry date
-Order Number

-Invoice number, operator id
-Transaction date & time
-Host response

-Purchase amount, optional tax
-Optional total

-Card Type

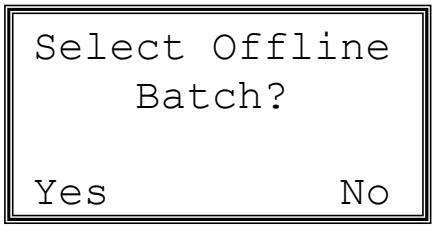
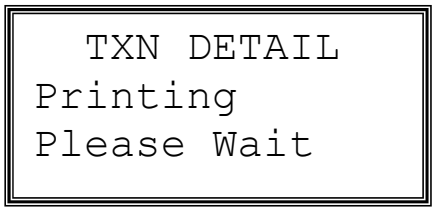
-Item#, card type
-Account number
-Customer Code
-Invoice number, operator ID
-Transaction date & time
-Host response
-Purchase amount, optional tax
-Optional cashback
-Optional tip
-Optional txn fee surcharge
-Optional total

-End of report marker

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	Operator Action
 *(conditional)*	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.
 *(conditional)*	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:

```
   TXN DETAIL REPORT

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Date: mm/dd/yy    Time:hh:mmP

     CREDIT TRANSACTIONS

Item#:nnn VISA SALE:SWIPED
Ac:xxxxxxxxxxxxxxxxxx  mm/yy
Order Number:
xxxxxxxxxxxxxxxxxxxxxxxx
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount              Tax
$xxxxxx.xx          $xxxxxx.xx
     TOTAL:$xxxxxx.xx


     DEBIT TRANSACTIONS

Item#:nnn DEBIT SALE
Ac:xxxxxxxxxxxxxxxxxx
CC:xxxxxxxxxxxxxxxx
Invoice#:xxxxxxxx   OpID:nnnn
Date:mm/dd/yy     Time:hh:mmP
Resp: xxxxxxxxxxxxxxx
Amount                  Tax
$xxxxxx.xx          $xxxxx.xx
      Cashback: $xxxxxx.xx
         Tip:$xxxxx.xx
     Surcharge:$xxxxxx.xx
       TOTAL:$xxxxxx.xx



       END OF BATCH
```

-Report type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #,
-Report date & time

-Category

-Item#, card type & entry method
-Account number and expiry date
-Order Number
-Invoice number, operator id
-Transaction date & time
-Host response

-Purchase amount, optional tax
-Optional total

-Category
-Item#, card type
-Account number
-Customer Code
-Invoice number, operator id
-Transaction date & time
-Host response
-Purchase amount, optional tax

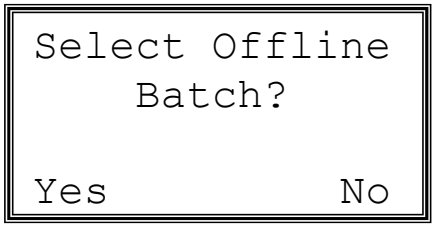
-Optional cashback
-Optional tip
-Optional txn fee surcharge
-Optional total

-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
 *(conditional)*	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 SUMMARY REPORT

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Batch #: n
Date: mm/dd/yy    Time:hh:mmP

     CREDIT TRANSACTIONS

              TXN       AMOUNT
SALE          nnn    $xxxxxx.xx
RETURN        nnn    $xxxxxx.xx
TICKET        nnn    $xxxxxx.xx
VOID          nnn    $xxxxxx.xx
=========     ===    ==========
SUB-TOTAL     nnn    $xxxxxx.xx

      DEBIT TRANSACTIONS

              TXN       AMOUNT
SALE          nnn    $xxxxxx.xx
RETURN        nnn    $xxxxxx.xx
========      ===    ==========
SUB-TOTAL     nnn    $xxxxxx.xx

       EBT TRANSACTIONS

SUB-TOTAL     nnn    $xxxxxx.xx

      ALL TRANSACTIONS

CREDIT        nnn    $xxxxxx.xx
DEBIT         nnn    $xxxxxx.xx
EBT           nnn    $xxxxxx.xx
===========   ===    ==========
GRAND TOTAL   nnn    $xxxxxx.xx

       END OF BATCH
```

-Report Type

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Batch number
-Report date & time

-Category

-No of sales and total amount
-No of returns and total amount
-No of tickets and total amount
-No of voids and total amount

-Total for all credit txns
-Category

-No of sales and total amount
-No of returns and total amount

-Total for all debit txns

-Total for all EBT txns

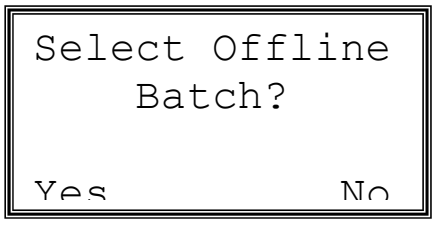
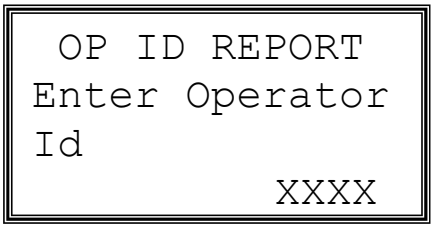
-Credit sub total
-Debit sub total
-EBT sub total

-Grand total for open batch

-End of report marker

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
 *(conditional)*	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:

```
OPERATOR XXXX REPORT

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

Merch ID:xxxxxxxxxxxxxxx
Term ID:xxxx
Date: mm/dd/yy    Time:hh:mmP

ITEM  CARD  TRANS       TOTAL
001   MC    SALE    $xxxxxx.xx
008   VISA  RETRN   $xxxxxx.xx
                    ==========
SUB-TOTAL           $xxxxxx.xx

       END OF OPERATORS
```

-Report Type and op id

-Custom header lines (max 6)

-Merchant ID
-Terminal ID and Item #
-Report date & time

-Item#, card/txn type & amount

-Total value for operator

-End of report marker

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
XXXXXXXXXX Abort Report ? Yes No	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. XXXXXXXXXX represents the report type

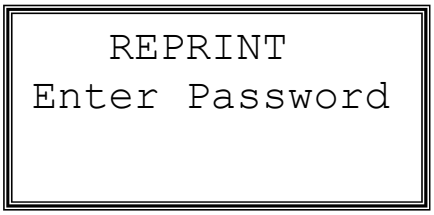
Low Battery Indication When Printing Reports

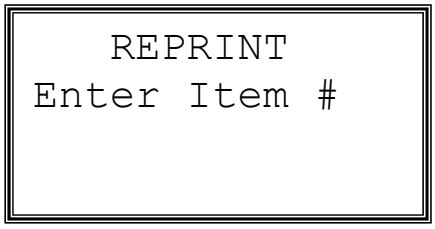
If a low battery level is detected when a report starts to print, then the following screen will appear:

Display Message	Operator Action
XXXXXXXXXX Battery Low Print Report ? Yes No	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. XXXXXXXXXX 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	Operator Action
 *(optional)*	If prompted, key in the merchant password (1-6 digits) and press [OK].
(conditional)	The terminal requests the merchant to select either merchant or customer receipt reprint, or both.
(conditional)	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.



(optional)

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.

(conditional)

While the receipt is reprinting, this display will be shown.

The reprinted receipt will be identical to the original receipt except the word **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.

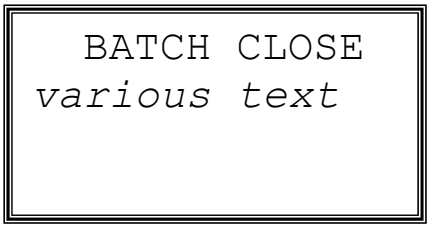
Batch Close

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

Important Note: A batch that was done in wireless mode must be closed in wireless mode! A batch that was done in dial-up mode must be closed in dial-up mode! You cannot 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.

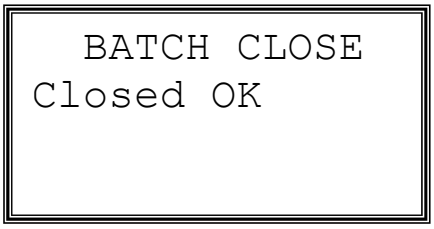
Display Message	Operator Action
BATCH CLOSE Enter Password (*optional*)	If prompted, key in the merchant password (1-6 digits) and press [OK].
BATCH CLOSE Print Report? Yes No *(optional)*	Press the far left hand soft key to print a summary report and item detail report after close. Press the far right hand soft key to print only a close receipt.
BATCH CLOSE Credit $xxx.xx Debit/EBT $xxx.xx Total $xxx.xx Press OK to Cont.	The batch credit amount, batch debit and EBT amount, and the batch total amount are displayed. Press [OK] to confirm the close.



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

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

(conditional)



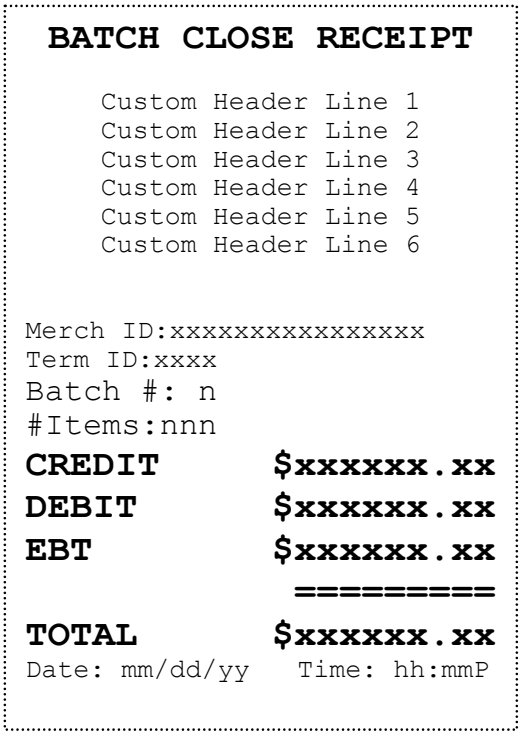
After printing the batch close receipt, the successful close message is displayed. Press [CLR] to return back to the transaction menu screen.

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 only credit transactions. It will not include debit or EBT totals. The merchant should call the help desk if the close gets a force or invalid response.

Note: If a large batch is being closed, the host may respond "Rejected / Please Try Later." This indicates that the wireless gateway service is still processing the batch. The merchant should wait several minutes and try to close again.

Batch Close–Receipt



-Merchant header

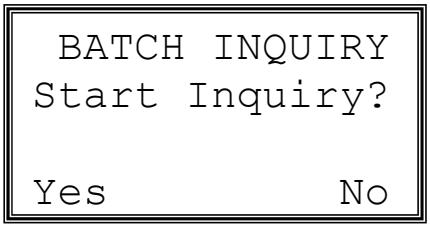
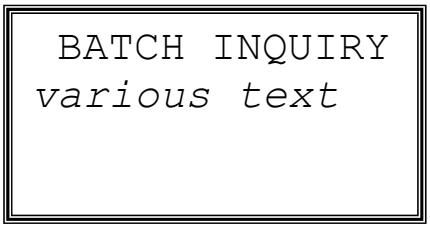
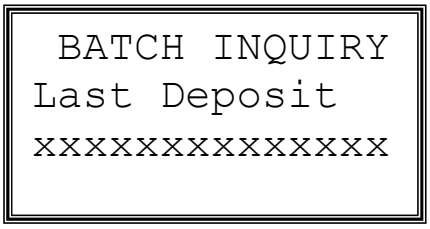
-Merchant ID
-Terminal
-Batch number (0 through 9)
-Number of items in batch
-Batch Credit total
-Batch Debit total
-Batch EBT total

-Batch Total
-Transaction date & time

Batch Inquiry

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

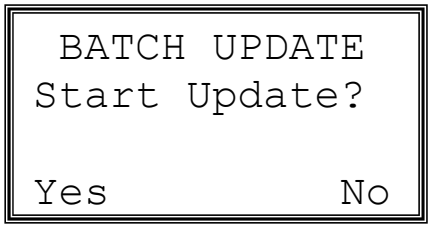
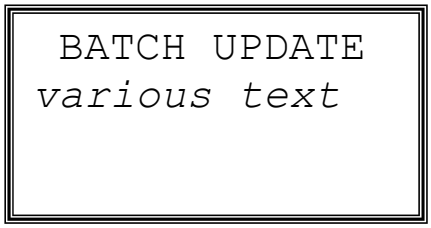
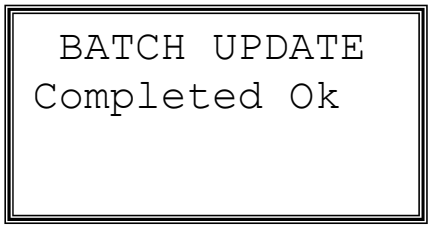
A batch inquiry is started by pressing the [OK] key at the idle prompt, followed by [4] = BATCH, then [2] = INQUIRY. Then follow the remaining prompts shown below.

Display Message	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.
	The terminal displays several messages indicating it is communicating with the host. These are CONNECTING, CONNECTED, SENDING, RECEIVING, and DISCONNECTING.
	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.)

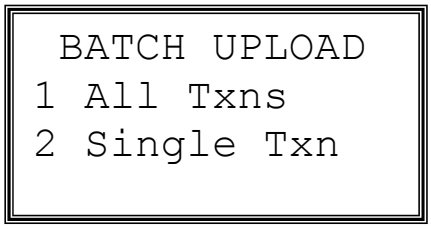
A batch update is started by pressing the [OK] key at the idle prompt, followed by [4] = BATCH, then [3] = UPDATE. Then follow the remaining prompts shown below.

Display Message	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 CONNECTING, CONNECTED, SENDING, RECEIVING, and DISCONNECTING.
	Press [CLR] to return to the batch menu screen.

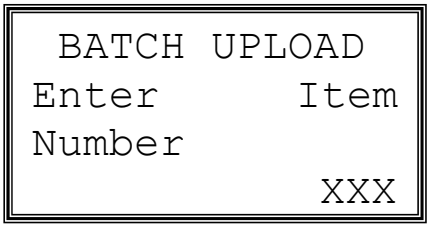
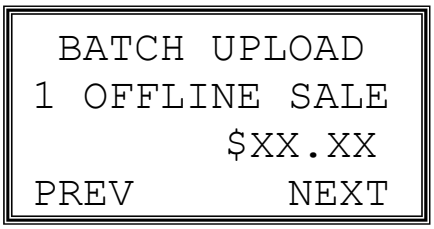
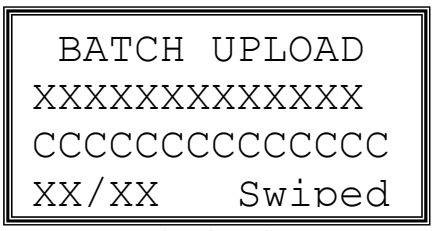
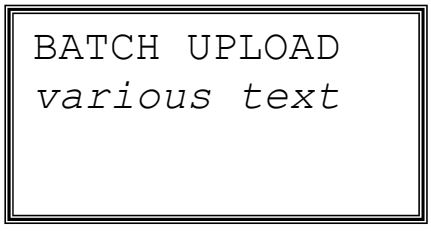
Offline Batch Upload

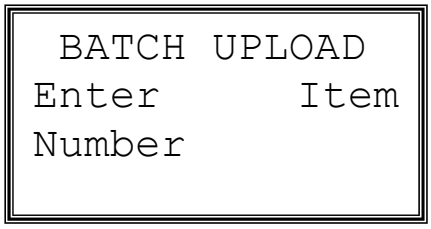
This transaction uploads offline credit sale transactions to the host. (For more information about offlines, please see the section in this manual entitled Offline Transactions.)

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

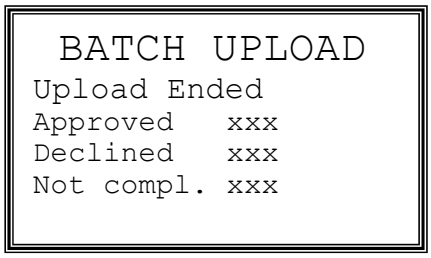
Offline Upload—Single Transaction

Display Message	Operator Action
 (optional)	If prompted, key in the merchant password (1-6 digits) and press [OK].
 *(optional)*	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.
 *(optional)*	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 CONNECTING, CONNECTED, SENDING, RECEIVING, and DISCONNECTING.



The next item number can now be entered for upload.

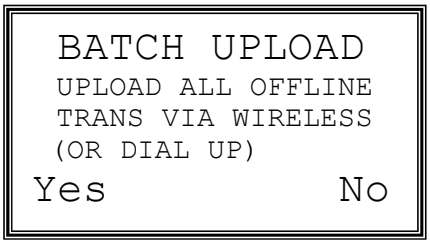
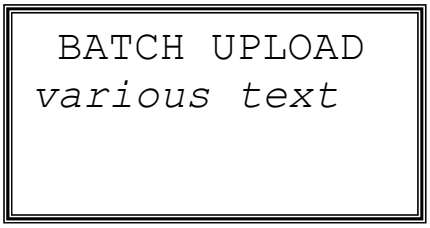
Press [CLR] to return to the batch menu screen.

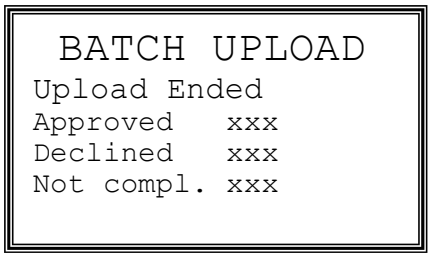


Press [CLR] to return to the batch menu screen.

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

Batch Upload—All Transactions

Display Message	Operator Action
(optional)	If prompted, key in the merchant password (1-6 digits) and press [OK].
 *(optional)*	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 CONNECTING, CONNECTED, SENDING, RECEIVING, and DISCONNECTING.



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**, **OR 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 to calculate an override password.

- 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 MENU OPTIONS	FIRST SUB-MENU OPTIONS	2ND SUB-MENU OPTIONS	3RD SUB-MENU OPTIONS	EXPLANATION
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 = All)
	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 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	2ND SUB-MENU OPTIONS	3RD SUB-MENU OPTIONS	EXPLANATION
		2 Receipt	--	Sets number of customer copies
		3 Format	1 Header	Sets up receipt header lines text
			2 Trailer	Sets up receipt trailer lines text
			3 Flex	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 batch)
		2 Wireless	1 Auth IP	Sets wireless IP address
			2 Auth Port	Sets wireless port
			3 APN	Sets wireless APN
			4 Terminal ID	Sets wireless terminal ID (FDC 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/LoadPoint config phone no.
			2 Terminal ID	Sets Zontalk/LoadPoint 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)
		6 Dial Type	--	Sets dial type to Tone or Pulse (Rotary)

ADMIN MAIN MENU OPTIONS	FIRST SUB-MENU OPTIONS	2ND SUB-MENU OPTIONS	3RD SUB-MENU OPTIONS	EXPLANATION
	5 Config Load	--	--	Loads merchant's parameters (in dialup mode only)
	6 App Upgrade	--	--	Loads new versions of software (in dialup mode only) - **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
	9 Key Mgmt	--	--	Selects key management type (Master Session vs. DUKPT)

ADMIN MAIN MENU OPTIONS	FIRST SUB-MENU OPTIONS	2ND SUB-MENU OPTIONS	3RD SUB-MENU OPTIONS	EXPLANATION
	0 Merchant ID	--	--	Sets merchant ID (can NOT change with transactions in batch; requires secret code from a password generator supplied by terminal manufacturer)
7 Date & Time	1 Date	--	--	Sets terminal's 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*)
9 Demo Mode	--	--	--	Changes between live and demo mode (can NOT enter demo mode until live batch has been closed)
0 Diagnostic	1 Version	--	--	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 MENU OPTIONS	FIRST SUB-MENU OPTIONS	2ND SUB-MENU OPTIONS	3RD SUB-MENU OPTIONS	EXPLANATION
	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 GPRS 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 **Operator Action**

```
 HOST RESPONSE
Enter Password
```

(*optional*)

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

```
 HOST RESPONSE
Response N:
xxxxxxxxxxxxxx
            xx
```

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 five 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	Operator Action
BATCH Enter Password	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	Operator Action
BATCH HISTORY Batch#:nnn $xxxxxx.xx/nnn MM/DD/YY HH:MM (*optional*)	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	Operator Action
BATCH NUMBER Current:n Change? Yes No	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.

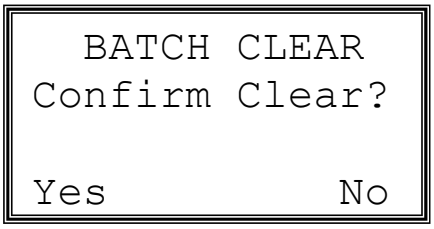
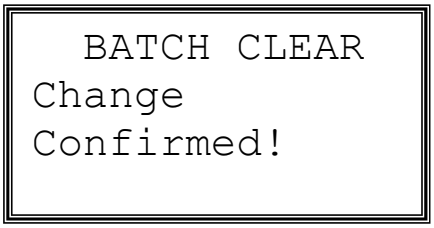
Batch Clear

Caution: The Batch Clear operation deletes all transactions from the batch and should be used only under extreme situations. Also note that this operation only deletes the batch from the terminal's local memory. There may still be an open batch of transactions at the wireless gateway and at the processing host.

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.

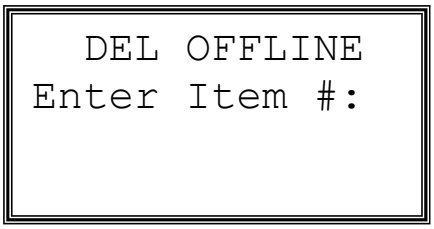
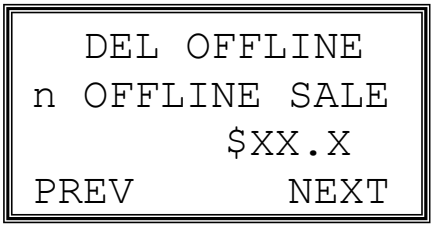
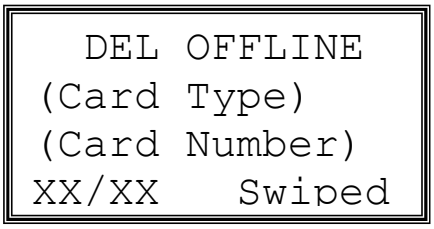
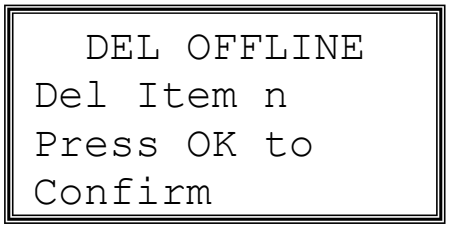
Display Message	Operator Action
	Press the far left-hand soft key under Yes to clear the current batch. Press the far right-hand soft key or the [CLR] key to leave the batch unchanged.
	The confirmation message will be displayed and the terminal will return to the Batch menu.

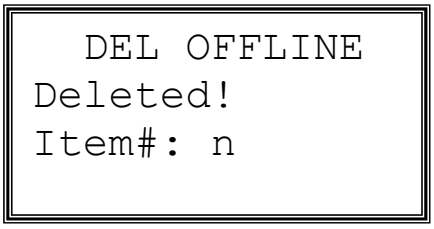
Delete Offline Transactions

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.

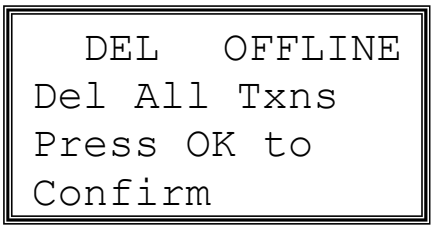
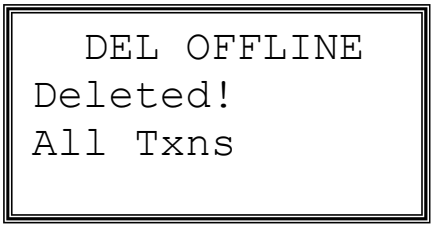
Display Message	Operator Action
	Enter the item number of the offline transaction to be deleted.
	Press [OK] to display the detailed transaction information (n = offline item number). Press [CLR] key to cancel the operation.
	The detailed transaction information including card type, card number, expiry date and entry method is displayed. Press [OK] to proceed to the confirmation screen. Press [CLR] to cancel the operation.
	Press [OK] to delete the transaction. Press [CLR] to cancel the operation.



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

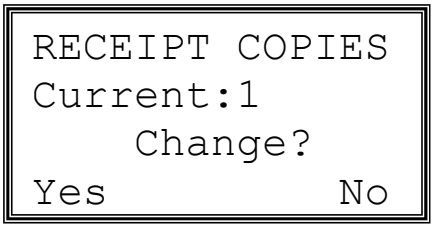
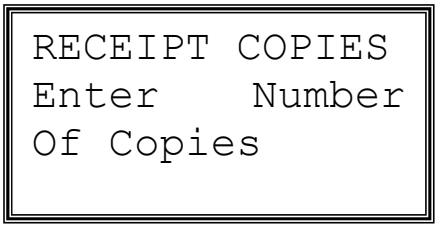
From the idle prompt, PRINTER ENABLE is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [1] = PRINTER, then [1] = ON\OFF. Then follow the prompts shown below:

Display Message	Operator Action
PRINTER Mode: Off Change? Yes No	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.
OR	
PRINTER Mode: On Change? Yes No	
(*conditional*)	
PRINTER Change Confirmed!	The confirmation message will be displayed before returning to the menus.

Customer Receipt Copies

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	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/LoadPoint file and then perform a configuration download, rather than locally in setup.)

Display Message	Operator Action
FORMATTING Write New Line XXXXXXXXXXXXX	Key in the desired receipt line and press [OK]. The terminal will return to the menus.

Backlight Timeout Period

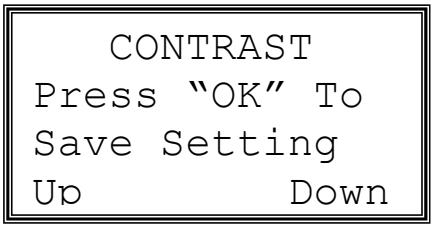
This is the period of inactivity before the backlight is switched off, specified in seconds. If the backlight is not needed, battery power can be saved by setting the timeout time to 0 (zero) so that the backlight will not come on. From the idle prompt, backlight is accessed by pressing the blue [F]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

Display Message	Operator Action
BACKLIGHT Current:030 Change? Yes No	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.
BACKLIGHT Enter Timeout	Enter the new backlight timeout period, (max 3 numeric digits), and press [OK].
BACKLIGHT Change Confirmed!	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	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:

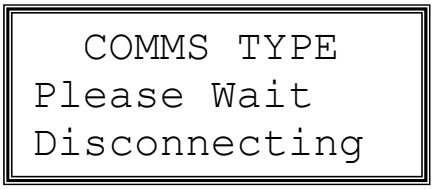
1. Communications type, i.e., set to dialup mode or wireless mode
2. Wireless communication parameters
3. Dialup communication parameters
4. Configuration host communication parameters
5. Dial prefix for all dialup communications (transaction, settlement and configuration)
6. Dial type for dialup communications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

Communications Type

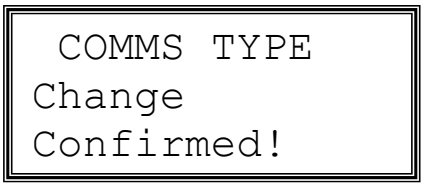
This allows selection of wireless or dialup mode.

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	Operator Action
COMMS TYPE Txns in Batch! Continue Yes No *(conditional)*	If this display appears, it indicates that there is an open batch of transactions in the current mode. Press the far left-hand soft key to continue, or press the far right-hand soft key to cancel.
COMMS TYPE Phone Change ? Yes No	Press the far left-hand soft key to switch communications method to wireless mode. Press the far right key or the [CLR] key to leave the status unchanged and return to the menus.
OR	
COMMS TYPE Wireless Change ? Yes No	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.



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

Note: Communications type can also be changed from the idle prompt (LinkPoint or Swipe Card) by pressing the [9] key as a "shortcut." The terminal will display "SETUP / Enter Password." After the password is entered, the current comms type will be displayed, and it can be changed by pressing the Yes key as explained above.

Warning: Use only an analog phone line in phone mode. Connecting this terminal to a digital line may damage the modem!

Wireless Communications Parameters

The configurable wireless communications parameters are:

1. Auth IP Address: This address is used for both authorization and settlement in wireless mode.

2. Auth Port: the port number used to connect to the wireless gateway.

3. APN: used by the wireless network to connect the modem to the wireless gateway.

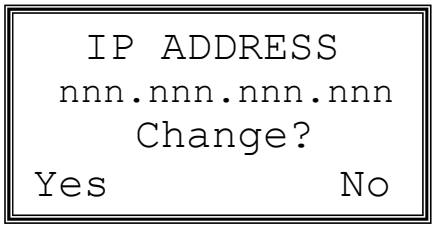
4. Terminal ID: used to identify the terminal on the FDC Omaha processing network.

Auth IP Address

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

From the idle prompt, Auth IP Address 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 **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.)

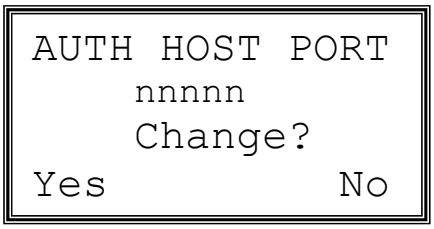
The confirmation message will be displayed for two seconds before returning to the menus.

Auth Port

The port used for wireless communications is configured with this option.

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

Display Message **Operator Action**



Press the far left-hand soft key to change the Auth Port number.

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

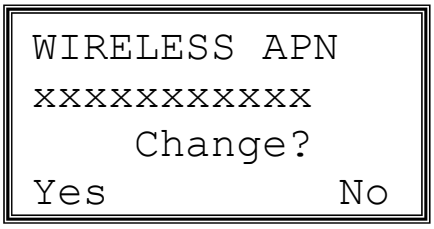
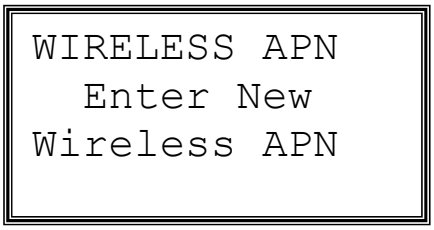
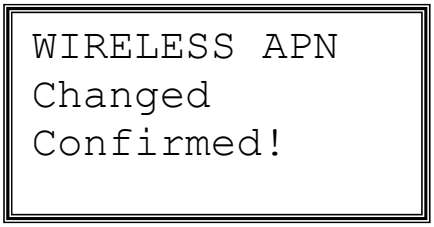
Enter the new Auth Host Port (up to five digits) and press [OK].
(Note: 65535 is the largest port number allowed.)

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

APN

The APN used for wireless communications is configured with this option.

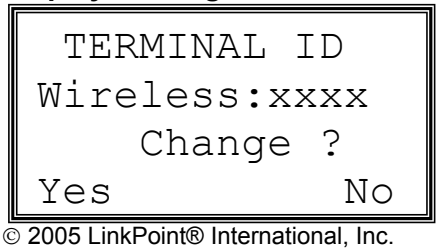
From the idle prompt, APN is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [2] = WIRELESS, then [3] = APN. Then follow the prompts shown below:

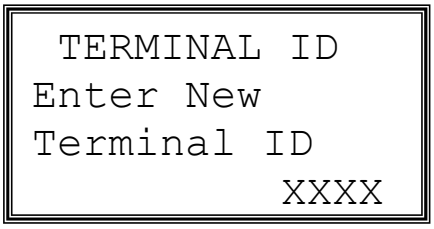
Display Message	Operator Action
	Press the far left-hand soft key to change the APN number. Press the far right-hand soft key or the [CLR] key to leave the status unchanged and return to the menus.
	Enter the new APN and press [OK].
	The confirmation message will be displayed for two seconds before returning 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).**

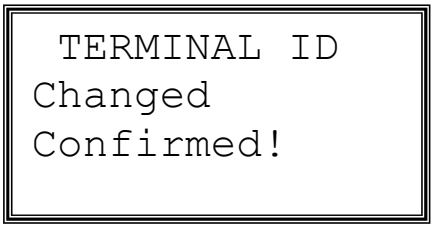
From the idle prompt, wireless terminal ID is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [2] = WIRELESS, then [4] = TERMINAL ID. Then follow the remaining prompts shown below:

Display Message	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:

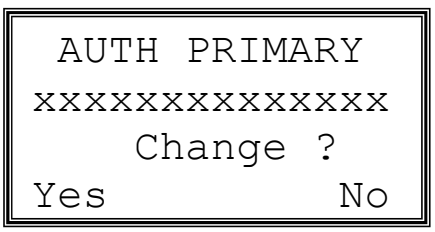
1. Authorization host phone number 1 (primary)
2. Authorization host phone number 2 (secondary)
3. Close host phone number 1 (primary)
4. Close host phone number 2 (secondary)
5. Terminal ID—used to identify the terminal to FDC Omaha

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 **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.

AUTH PRIMARY Changed Confirmed!

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

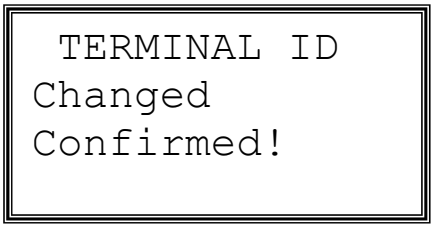
From the idle prompt, secondary close number is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [3] = DIAL-UP, then [4] = CLOSE 2 PH. The remaining prompts will be the same as for the primary auth number, except the top line heading will 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	Operator Action
TERMINAL ID Dial-Up:xxxx Change ? Yes No	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

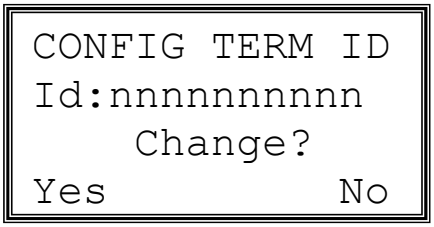
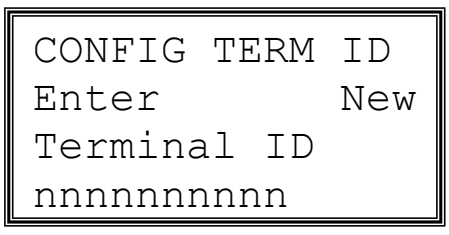
2. Terminal ID—used to identify the terminal to the configuration host

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	**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].

CONFIG TERM ID Change Confirmed!	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) to be configured.

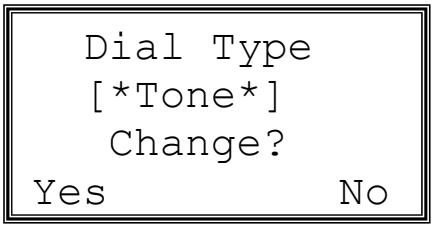
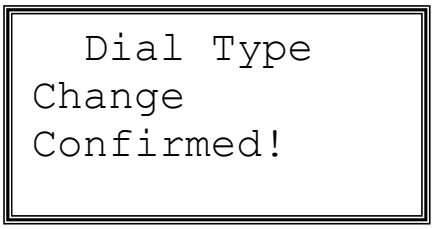
From the idle prompt, dial prefix is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [4] = COMMS, then [5] = DIAL PREFIX. Then follow the remaining prompts shown below:

Display Message	Operator Action
DIAL PREFIX nnnnnnnnnnn Change? Yes No	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.
DIAL PREFIX Enter New Dial Prefix	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}.
DIAL PREFIX Change Confirmed!	The confirmation message will be displayed before returning to the menus.

Dial Type

This option will allow the dial type (only used when communicating via the PSTN phone dialup connection, not wireless) to be configured as touch tone or pulse (i.e., rotary).

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

Display Message	Operator Action
	The current dial type will be displayed on the second line as Tone or Pulse (default value is Tone). 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 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: All open batches (wireless and dialup) 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. **Use only an analog phone line for the download, as a digital line may damage the modem.**

Display Message	Operator Action
CONFIG TERM ID Id:nnnnnnnnnn Change? Yes No	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.
CONFIG TERM ID Start Load Confirm? Yes No	Press the far left-hand soft key to start the config download. Press the far right-hand soft key to cancel the download.
(Download information is displayed)	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

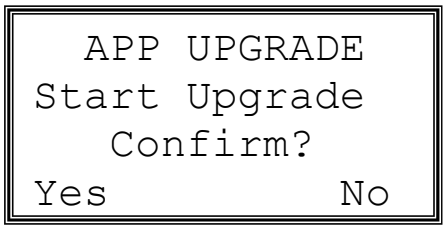
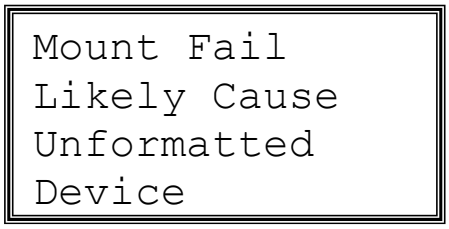
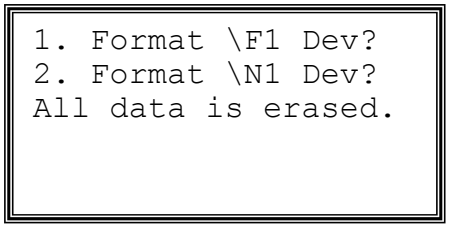
This menu option will initiate a software application upgrade. The terminal's executable code will be modified.

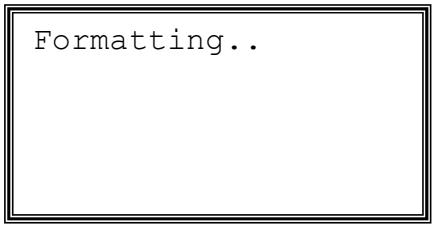
From the idle prompt, application upgrade is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [6] = APP UPGRADE. Then follow the remaining prompts shown below.

Note: All open batches (wireless and dialup) must be closed before the download can be performed.

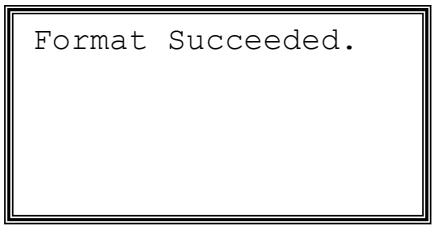
Note: The configuration phone number must be set correctly (see above under Configuration Host Phone Number) before attempting the application upgrade. **Use only an analog phone line, as a digital line may damage the modem.**

Important Note: After the upgrade is completed, a configuration download (see above) *must* be performed to re-load the merchant's parameters!

Display Message	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. Note that the terminal may re-dial the download host several times in the course of the upgrade.
	At the end of every application upgrade, this message will appear. Press the [OK] to continue.
	Press the [1] key.



Wait for the formatting to complete (takes about ten seconds).



Press the [OK] key and wait for the terminal to reboot to the “Swipe Card” prompt. After this a configuration download MUST be performed to reload the merchant’s parameters.

For more information about the application upgrade, see the section in this manual entitled Application Upgrade.

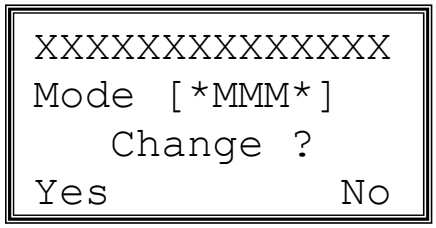
Enabling Prompts

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/LoadPoint file.)

Setting Transaction Prompts

From the idle prompt, prompts is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [7] = PROMPTS. Then select the prompt to be changed from the menu that appears. When changing any prompt, the following display will appear (where XXXXXXXXXXXXXX = the prompt name):

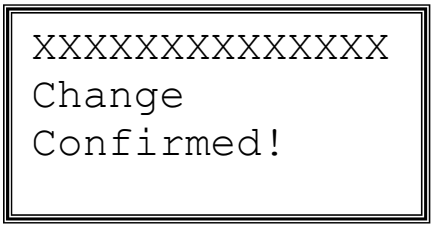
Display Message **Operator Action**



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 (XXXXXXXXXXXXX).



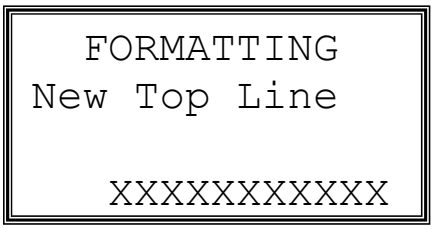
The confirmation message will be displayed before returning to the menus.

The prompt type will appear on the top line (XXXXXXXXXXXXX).

Setting Idle Prompt Top Line

On selecting the idle top prompt the following screen appears:

Display Message



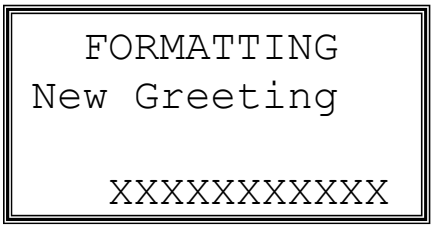
Operator Action

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



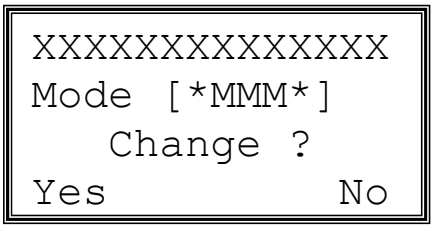
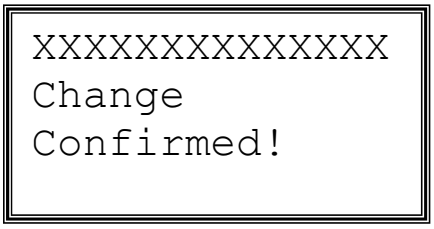
Operator Action

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/LoadPoint file.)

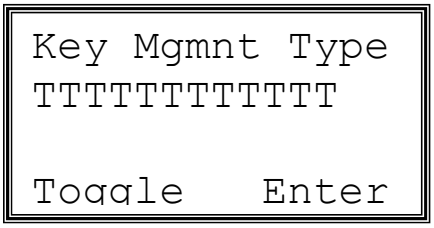
From the idle prompt, Enable Transactions is accessed by pressing the blue [F] key, followed by [6] = SETUP, then the password and [OK], then [8] = ENABLE TXNS. Then select the transaction to be enabled or disabled from the menu that appears. When a transaction is selected, the following display will appear (where XXXXXXXXXXXXXX = the transaction type):

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 (XXXXXXXXXXXXX).
	The confirmation message will be displayed before returning to the menus. The transaction type will appear on the top line (XXXXXXXXXXXXX).

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
	TTTTTTTTT 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.

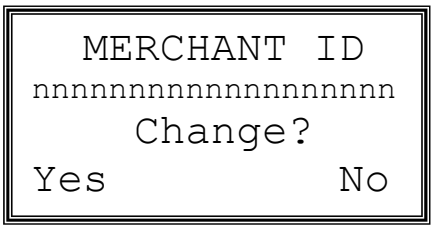
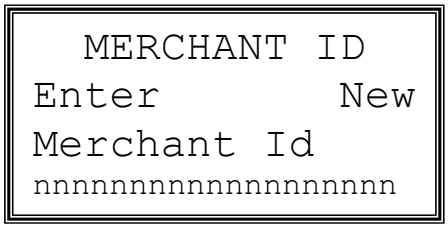
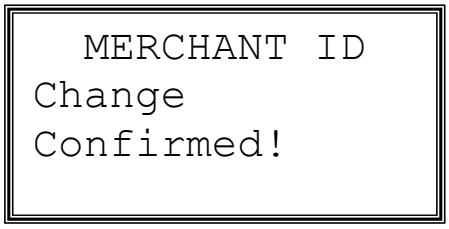
Merchant ID

The merchant ID setup function allows the operator to change the merchant ID of the terminal via Setup. **Note that the merchant ID can also be changed by changing it in the merchant's parameter file, then performing a configuration download.**

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	**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

Date And Time

The LinkPoint 9100 GPRS 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:

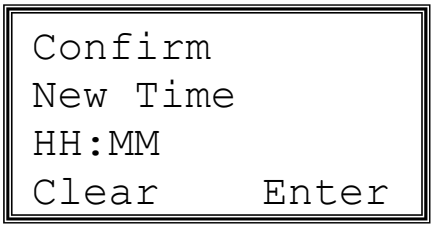
Display Message	Operator Action
SETUP DATE Enter New Date MMDDYYYY XXXXXXXX	Enter the new date as eight digits (two for the month, two for the day and four for the year). Press [OK].
Confirm New Date MMDDYYYY Clear Enter	The confirmation message will be displayed. The operator should press [OK] to confirm 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
SETUP TIME Enter New Time HH:MM XX:XX	Enter the new time as four digits (two digits for the hour and two for the minutes). Use 24-hour military time. Press [OK].



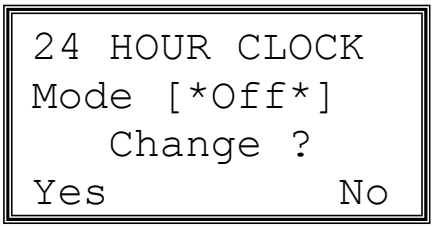
The confirmation message will be displayed. The operator should press OK or the enter key to confirm the new time. The terminal will then return to the date & time menu.

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 **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.

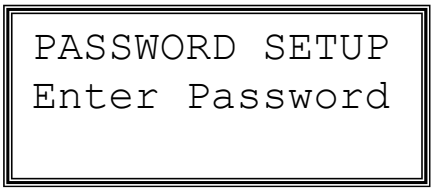
The change will be confirmed. The terminal will return to the date & time menu.

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:

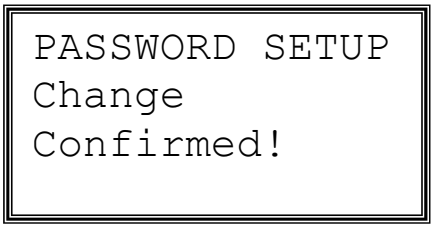
Display Message **Operator Action**



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 earlier 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

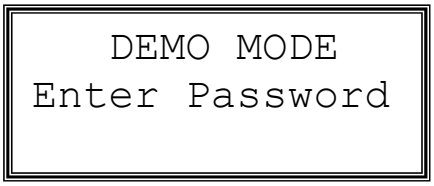
Demo (training) mode allows all transactions, reports, and reviews to be performed in a "fake" training mode. Demo mode may only be entered when there are no transactions in the batch. When demo mode is exited, all demo transactions will be deleted.

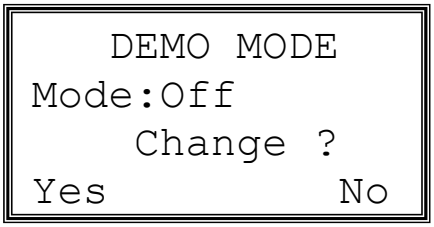
In demo mode, all receipts will print the following message at the top of the receipt:

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



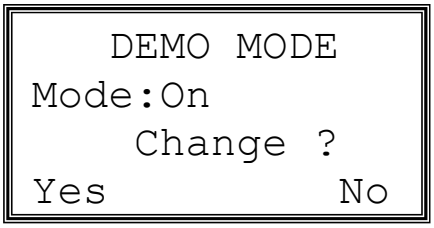
Press the far left-hand soft key to enable demo mode and go to the confirmation screen.

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

(conditional)

If there are any transactions in the open batch, this message will be displayed. Pressing [OK] or [CLR] will return to the menu.

(If terminal is in Demo Mode:)



(*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.

The confirmation message will be displayed before returning to the menus. When demo mode is exited, all demo transactions will be automatically deleted.

Diagnostics

The diagnostic functions allow testing of the different hardware components of the 9100 GPRS terminal.

Version Name and Number

This option will display the terminal's application version name and number.

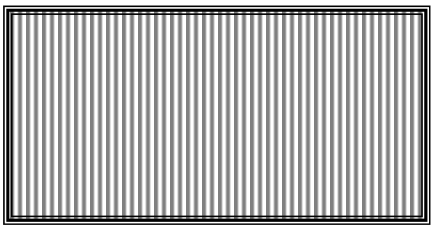
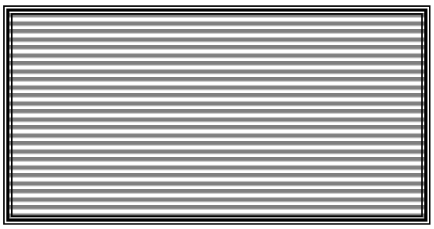
From the idle prompt, Version is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [1] = VERSION.

Display Message	Operator Action
	Press the [OK] key to return to the menu.

Display Test

This option will test the 9100 GPRS 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	Operator Action
	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 (i.e., 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:

```
*--------------------------*
*------- PRINTER TEST ------*
*--------------------------*

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
KEYBOARD TEST Press a key:	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.
KEYBOARD TEST Press a key: FOUR KEY	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.
Track X Data <xxxxxxxxxxxxx xxxxxxxxxxxxxx xxxxxxxxxxxxx>	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 (i.e., dialer test) is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [6] = DIALER.

Display Message	Operator Action
DIALER TEST Cannot Test Dial when in Wireless mode	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. Wait about ten or twenty seconds for the test to complete.
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, Serial (i.e., 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. Note that this is NOT a complete test of memory, and it is not a destructive test.

From the idle prompt, Memory (i.e., memory test) is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [8] = MEMORY.

Display Message	Operator Action
MEMORY TEST Please Wait.	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 modem version number and the current received signal strength of the wireless modem. This test cannot be performed in dialup mode.

From the idle prompt, Wireless (i.e., the wireless test) is accessed by pressing the blue [F] key, followed by [0] = DIAGNOSTIC, then [9] = WIRELESS.

Display Message	Operator Action
WIRELESS TEST Version NNNNNN RSSI: nn uVdBm	The version number of the modem and the signal strength are displayed. (Note that signal strength is converted by the terminal into a positive number by adding 116 to the actual RSSI, which is a negative number. For example, an RSSI of -101 would be shown on the terminal's display as 15.) Press the [OK] or [CLR] key to return to the diagnostics menu. The last line will display mode not enabled if

SPECIAL SETUP FUNCTIONS

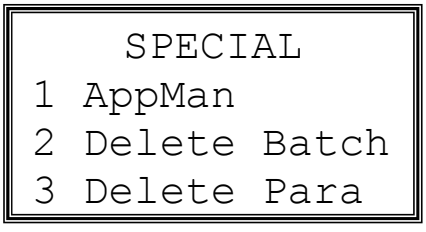
The special setup menu is a separate menu from Admin. **This menu should be accessed only by qualified support personnel. It is <u>not</u> intended for use by merchants!**

The special setup menu 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	**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.xx
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.

Note: Activity Timer should ***NOT* be changed via AppMan. It should only be changed by changing Zontalk/LoadPoint 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.

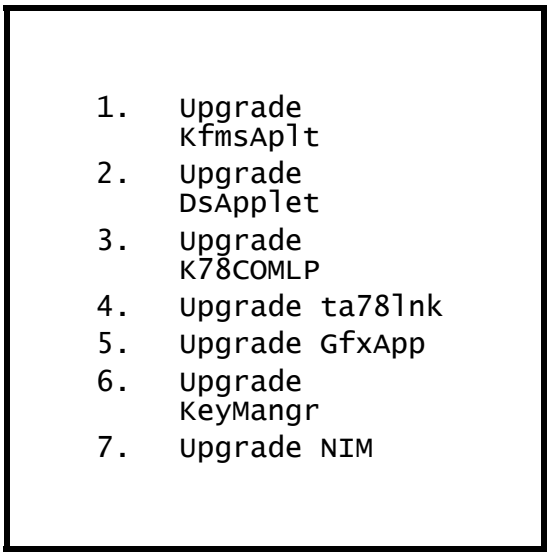
A direct PC-to-terminal software upgrade is performed as follows:

Press [1] = Software Upgrade. The following submenu will appear:

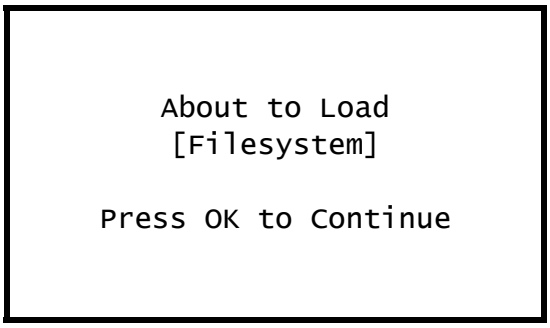
Select Loader
1. Zontalk
2. Serial Loader

(Do *not* choose [1] = Zontalk.)

Press [2] = Serial Loader. The following display will appear:



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



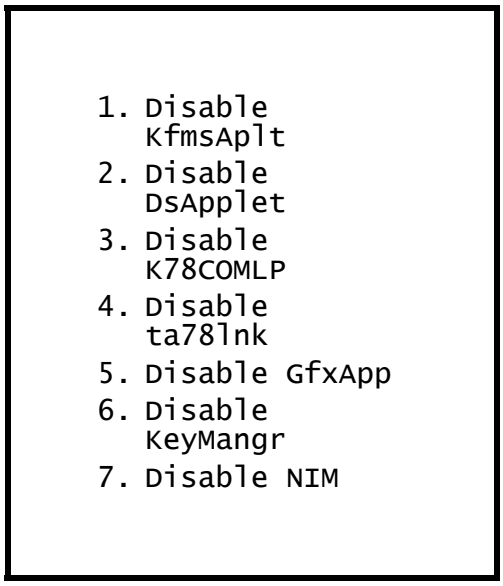
Press OK to confirm, and load the software from a PC using a standard loader application.

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:



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.

4. 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 the 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 V3.17
Appman: 2.17
KfmsAplt: 1.00
DsApplet: 2.10
K78COMLP: 1.07
ta78lnk: 1.00d
GfxApp: 1.01
KeyMangr: 1.06
NIM: 1.52
Pos_lp: 1.07
APMENGLISH: 2.10
Zontalk: 1.04

(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, the Visa PED version, or the modem firmware version. The "boot" version and Visa PED version numbers 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 GPRS 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/LoadPoint 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.

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/LoadPoint-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

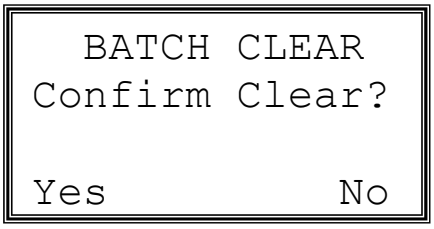
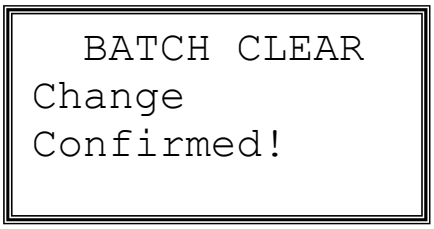
Delete Batch is accessed by pressing [2] = DELETE BATCH on the Special Menu. (Delete Batch can also be accessed more easily via the Admin menu. Please see the section Batch Clear under Local Functions earlier in this manual.)

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:

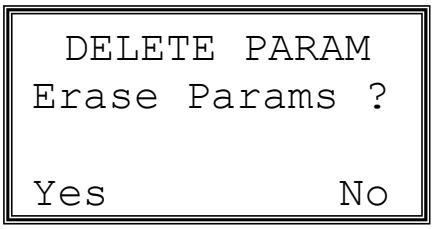
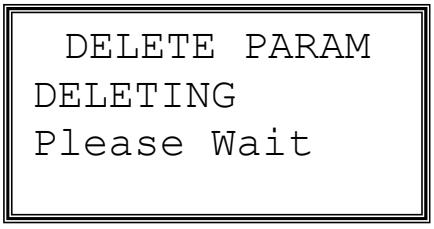
Display Message	Operator Action
	Press the far left-hand soft key under Yes to clear the current batch. Press the far right-hand soft key or the [CLR] key to leave the batch unchanged.
	The confirmation message will be displayed and the terminal will return to the Special menu.

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	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.
	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
ADMIN STACK&HEAP USE 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
Rebooting...	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/LoadPoint field in the terminal's memory.

When READ CDS is selected, the following display will appear:

Display Message	Operator Action
READ CDS TABLE Key Table ID	Key the number of the Zontalk/LoadPoint field to be viewed and press [OK]. For example, key 7001 and [OK] to view the primary authorization phone number in Field 7001.
READ CDS TABLE Key Table ID 7001 18002289074	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 ADMIN / Transaction Cancelled. Press [CLR] or [C] again and the terminal will return to the CREDIT SALE menu.

APPENDIX—TROUBLESHOOTING GUIDELINES

Normally there will be no problems using the LinkPoint 9100 GPRS terminal. However, on the rare occasions when problems or questions do arise, this guide can be used to help 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.

If you don't find an alphabetical listing for a particular issue, try doing a word search through this guide using a key word or phrase that describes the issue (e.g., "No Open Batch").

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/LoadPoint 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 earlier in this manual). Rebuild the Zontalk/LoadPoint file with the correct values (see the table under Download Parameters and Options for guidance). Perform a configuration download to re-load the parameters. Note: If the terminal cannot be rebooted (always boots back up to the application error), it will be necessary to send the terminal back to the deployment center for a full download and re-encryption. **Important: Other than extra receipt header and trailer lines and the Dial Prefix field, NO fields should ever be left blank in a download configuration file! Doing so can cause an Application Error that will make the terminal inoperable so that it will have to be returned to the deployment center for a full download.**

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. Vary the swipe speed to find the one that is optimal. (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 and debit 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.

BATCH REJECTED / NO OPEN BATCH is displayed on batch close attempt: This indicates that the batch has been force-closed on the processing network. For a wireless batch, call the wireless gateway service and ask them to verify that the batch was force-closed for the correct amount; if so, have them delete the batch on their database and increment their batch number for the terminal; then delete the wireless

batch in the terminal. For a dialup batch, call the processing network and verify that the batch was force-closed for the correct amount; then delete the dialup batch in the terminal.

BATCH REJECTED / PLEASE TRY LATER is displayed on batch close attempt: This means the wireless gateway service is still processing the batch. The merchant should wait five minutes and try to close again. If the batch is very large, it may be necessary to try to close more than once until "Closed OK" is displayed.

Battery frequently runs down: (a) Please see comments under "Battery icon drops from three bars to two or one bar after a small number of transactions." The operator may be erroneously assuming that the battery has run down when in fact it has not. (b) 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*. (c) The battery may need to be conditioned. Do this by fully charging it, then using the terminal until the battery is fully discharged (starts displaying "Low Battery" warnings during transactions), then fully recharging it. (d) 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. (e) 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 icon drops from three bars to two or one bar after a small number of transactions: When the battery icon drops from three to two bars or even to one bar, this does not mean the battery must be recharged. The battery icon is only an approximate indicator of the battery's state of charge. It is necessary to recharge the battery only when the message "LOW BATTERY" starts to appear during transactions.

BATTERY LOW! RECHARGE 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 battery icon drops from three to two bars or even to one bar, this does not mean the battery must be recharged. The battery icon is only an approximate indicator of the battery's state of charge. It is necessary to recharge the battery only when the message "LOW BATTERY" starts to appear during transactions. When this 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 (but please see comments below under "Battery never finishes charging"). 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 never finishes charging: Normally charging should finish after about five hours (battery icon stops flashing). In some cases the battery icon may continue to flash after eight or more hours of charging. This occurs because of a slight imbalance between battery capacity and the terminal's charging circuits. In this case the battery is nevertheless fully charged, and the charger can be disconnected.

Battery requires replacement: Use only a battery designed specifically for the LinkPoint 9100 GPRS terminal. The merchant should call the terminal help desk for information on ordering these batteries. To replace the battery in the 9100 GPRS, 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.

CARRIER LOST appears during a config (parameter) download: Verify that the download computer is running. The computer may not be correctly set up for the terminal family "LP 9100 GPRS." Contact the administrator of the download computer to investigate this.

CHECK SIM appears on the display when the terminal is powered up: This means the SIM card has been removed from the terminal. The terminal cannot be used in wireless mode until it has been powered down and the SIM card has been reinstalled. If the message appears when there is a SIM card installed, it might mean that the SIM card is damaged. Power down the terminal, replace the SIM, and try again.

CODE nn (Code plus a two-digit number) appears on the display: The terminal has a possible hardware problem. If "Code 42" is displayed, the terminal must be replaced. If any other code number persistently appears after rebooting the terminal, the terminal should be replaced.

COMMS ERROR is displayed on a wireless batch close attempt: The terminal did not connect with the wireless network. (a) Try to close again. (b) If the problem persists, see under "Terminal is not getting a signal."

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 terminal should be replaced.

COMMS TYPE / INITIALIZING MODEM: terminal gets "stuck" on this message when changing to wireless mode: The terminal is not able to connect with its wireless modem. Power the terminal down and up to reset it.

CONFIG LOAD NOT AVAILABLE IN WIRELESS MODE displayed during download attempt: Change the terminal from wireless to dialup mode and try the download again.

CONNECTING… is displayed indefinitely during a transaction attempt: The terminal is not able to connect with the wireless network. Press Cancel and try again. If the problem persists, power the terminal down and up to reset the modem, and try again.

"ConnStatus" and a number such as 0, 4 or 7 displays when the terminal is powered down: This indicates that the modem was not connected to the wireless network. Power the terminal back up and check the Admin/Diag/Wireless test for a signal. For more information about wireless signal problems, see Terminal Is Not Getting a Signal below.

Debit cards do not get approvals: (a) Make sure the debit transactions are being started correctly, by selecting the transaction menu for debit. If an ATM debit card sale is run as a credit-card sale, the terminal will display Card Type Not Accepted. (Note that debit "check cards" with the Visa or MC logo can be used for credit card transactions.) (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—CODE 12: INVALID TRANSACTION on EBT transactions: This means the merchant is not set up for EBT (Electronic Benefits Transfer) at the EBT processing network, or the setup is incorrect. The merchant should call the help desk and give them the FNS number from their EBT FNS (Food and Nutrition Services) certificate so that the help desk can verify the setup.

DECLINED—INVALID DEVICE when a wireless transaction is attempted: This indicates that the Merchant ID and four-digit Device ID in the terminal are the same as those for a different device at the wireless gateway service. The gateway service should be called for assistance in correcting this and finding out why the duplication occurred.

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 a 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.

DECLINED—SETUP response to all transaction attempts: This indicates that the merchant ID and/or Terminal ID (FDC four-digit device ID) do not match the MID and TID at the wireless gateway service. The help desk should check the MID and TID in the terminal's local Setup, then call the wireless gateway service to have them check the merchant's MID and TID on the gateway.

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 terminal should be replaced.

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. (Note that debit "check cards" with the Visa or MC logo can be used for credit card transactions.) (b) If these transactions are being started correctly but they still do not get approvals, the merchant should call the help desk for assistance. (c) If EBT transactions are declined with the message "Code 12: Invalid Transaction" on the decline receipt, this indicates that the account was probably set up with the wrong FNS number. The merchant should verify the FNS number on their EBT certificate by calling their state EBT program, then supplying the correct number to the ISO for this merchant. Correcting the system normally takes 24 hours. 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: (a) Try pressing the OK key. If the terminal displays "1. Format \F1 Dev? 2. Format \N1 Dev? All data is erased," press the 1 key. The terminal should display "Formatting.." for about ten seconds, then "Format Succeeded." Press OK at this prompt, and the terminal should reboot to the idle prompt. **Note: If the terminal had an open batch at this point, it will be lost and the help desk should be contacted to force close the batch at the network. The wireless gateway service should also be contacted so that they can close the batch on their database.** (b) If this formatting procedure does not work, the terminal 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 terminal should be swapped.

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. (a) Try the transaction again. (b) If the problem persists, check the Auth IP Address, Port, and APN in Admin/Setup/Comms/Wireless. Verify that these values are correct for the wireless gateway service being used. **(Note that these values are subject to change.)** (c) Check the Merchant ID and wireless Device ID in Admin/Setup and verify that they match the MID and Device ID on the wireless gateway for this terminal. Make any needed corrections in Setup and try again. Note: Any changes made in the terminal's Setup should be reported to the ISO for this merchant.

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 either the terminal is not programmed for debit/EBT, or the encryption type is set incorrectly. To check the encryption type, press the blue [F] key, then [6] = Setup. Enter the password and press [OK]. On the Setup menu, press [9] = Key Mgmt. The Key Mgmnt Type will be displayed (either Master/Session or DUKPT). To change it, press the left-most yellow key under "Toggle." Then press the right-most yellow key under "Enter."

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.

INVALID TERM TYPE is displayed on a config (parameter) download attempt: The LoadPoint file is built for the wrong terminal type. Have it built for a 9100 GPRS instead of a 9100 Motient terminal, and try the download again.

KEYMANAGER 1.2—KEYLOAD ERROR appears on the display after a configuration download: This indicates that a Master Session working key was downloaded into the terminal during the configuration download, but the terminal was not previously encrypted for debit, or was encrypted for DUKPT debit. Erase the parameters from the terminal using the procedure described in the Special Setup section of this manual. Then remove the working key field from the merchant's Zontalk/LoadPoint file and do another configuration download.

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 power key does not respond, it may be necessary to momentarily pull the battery and reinstall it to disconnect power. If the keys still do not respond after rebooting, the terminal should be replaced.

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 automatically shuts down while printing a transaction receipt (but 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.

MOUNT FAIL / LIKELY CAUSE UNFORMATTED DEVICE is displayed instead of the normal idle prompt: When this message appears, the operator should press the [OK] key. The terminal will then display "1. Format \F1 Dev? 2. Format \N1 Dev? All data is erased." At this display the operator should press the [1] key. The terminal will display "Formatting" for about ten seconds, followed by "Format Succeeded." At this point the operator should press the [OK] key and the terminal will reboot. **Note: If the terminal had an open batch at this point, it will be lost and the help desk should be contacted to force close the batch at the network. The wireless gateway service**

should also be contacted so that they can close the batch on their database. "Mount Fail" 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. If the terminal does not respond to the reformatting procedure, it must be swapped.

MUST CLOSE BATCH BEFORE CONTINUING: If this message appears when a transaction is attempted, it indicates that there is an open batch more than two days old still in the terminal. An old open batch in either mode (wireless or dialup) will cause this message to appear when the terminal is in the same mode or in the other mode than the open batch. The batch should be closed. If it gets "Rejected / No Open Batch," this may indicate that FDC Omaha has force-closed the batch on their network. The help desk should verify that the batch has closed for the correct amount, then delete it from the terminal's memory by going into Admin/5 Batch/3 Clear while the terminal is in the same mode as that of the old open batch. **For a wireless batch, the wireless gateway service MUST also be called so they can delete the old batch from their database.**

NO ANSWER is displayed during a transaction attempt: The processing network did not pick up the incoming call. Try the transaction again. If the problem persists, it will be necessary to check the authorization phone numbers in the terminal.

NO CONNECTION is displayed on a config (parameter) download attempt after the download started (displayed ten dashes): The LoadPoint file is built for the wrong terminal type. Have it built for a 9100 GPRS instead of a 9100 Motient terminal, and try the download again.

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. (d) The phone modem may be defective. If the terminal was plugged into a digital line, this may have damaged the modem or the phone modem may have failed for unknown reasons. If the modem still won't dial after everything has been checked, the terminal must be swapped.

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.

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. 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 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.) Note that

any GPRS terminal will take at least one minute to establish a connection with the wireless network.

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.

PASSWORD WRONG is displayed when the password is entered: (a) Try re-entering the password. Make sure it is being keyed correctly. (b) If the password is being entered correctly but the terminal will not accept it, someone may have changed the password. If the new password cannot be obtained, reset the password as follows: 1. First, calculate an override password from the terminal's current date (as displayed in the upper left corner of the "SWIPE CARD" idle prompt). To calculate this password, write the date in the format Yy Mm Dd. Then rearrange it as YMDymd. (For example, you would write December 18, 2005, as 05 12 18, then rearrange it as 011528.) This is the override password. 2. Use this override password to change the terminal's password. To do this, press the blue Function key, then 8 = Password. At the prompt "PASSWORD SETUP / Enter Password," key in the override password and press OK. At the prompt "PASSWORD SETUP / Enter New Password," key in whatever password the merchant wants. At the next prompt, "PASSWORD SETUP / Confirm New Password," reenter the same password and press OK. The terminal should display "Change Confirmed!" Cancel back to the idle prompt.

PHONE # ERROR is displayed during a download attempt: This sometimes occurs on a first attempt to do a download even if the phone number is correct. Start the download again.

PLEASE LOAD KAA is displayed: This means that the terminal has lost its Key for Application Authentication. The KAA is a security feature that prevents the loading of unauthorized software into the terminal. In rare cases, the KAA may be lost due to a problem in the terminal's RAM. When this message appears on the display, the terminal must be swapped.

PLEASE TRY LATER on batch close: For a large batch, this indicates that the wireless gateway service is still sending the batch to the processing network. The merchant should wait about five minutes and then try to close again. It may be necessary to re-try the close several times until the terminal receives the response "Closed OK."

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 terminal should be replaced.

PRINTING ERROR / CHECK PAPER: Load a new roll of paper into the printer, following the instructions under "Paper roll requires replacement" above. 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.)

REJECTED / NO OPEN BATCH on batch close attempt: This may indicate that FDC Omaha has already force-closed the batch on their network. The help desk should verify that the batch has closed for the correct amount, then delete it from the terminal's memory by going into Admin/5 Batch/3 Clear while the terminal is in the same mode as that of the old open batch. **For a wireless batch, the wireless gateway service MUST also be called so they can delete the old batch from their database**.

SEARCHING FOR NETWORK: See below under Terminal Is Not Getting a Signal.

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. 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.

SIM NOT ENABLED / WIRELESS MODE NOT AVAILABLE: This message will appear if a key is pressed at the "CHECK SIM" display (see above). Power the terminal off and install the SIM card. Note: This message may also occur if the terminal is switched from dialup to wireless mode when there is no wireless signal available.

Sys Error 0x67B2 appears during a configuration (parameter) download: (a) This error message indicates that there is a field in the merchant's Zontalk/LoadPoint file that the terminal's application does not support. 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/LoadPoint file. (b) It may also indicate that a required field in the Zontalk/LoadPoint file has been left blank or

has invalid data in it. Reset the CDS as explained above, correct the download file, and re-download the terminal.

Sys Error 0x70F appears during a configuration (parameter) download: This error message indicates that the Config TID in the terminal does not match the Config TID in LoadPoint (or the check digit is wrong).

TERMINAL ID NOT FOUND appears during a configuration (parameter) download: This means that a file has not been built under the terminal's Config TID. Have the ISO build the file, and then try the download again.

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 antenna is attached to the top of the terminal and is not broken. If it is missing or broken, the merchant should call the help desk to request a replacement antenna. (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. If there is still no signal, power the terminal down and up to reset it. **After resetting, wait at least one minute for the terminal to establish a connection with the wireless network.** Try the Diagnostic Wireless test again. (f) If the charger is plugged into the terminal, UNPLUG it and try the Wireless test again. In an area with a weak signal, charging the battery reduces the wireless modem's sensitivity. (g) If the merchant can't get a signal after trying all of the above, the help desk should be called for further assistance. The help desk should contact the wireless gateway provider to find out if there is coverage in the merchant's area, or if a temporary tower problem is preventing the terminal from communicating with the network. (h) Also, the wireless gateway provider can verify that the SIM card is active, since an inactive SIM card will prevent the terminal from finding a signal. If the wireless network confirms that there is coverage at the merchant's location and the SIM is active, the terminal may have a defective modem. In that case it should be replaced. (i) Verify the APN in the terminal (press the blue Function key, then 6 Setup, 4 Comms, 2 Wireless, 3 APN. If the setting in the terminal is incorrect, change it and then power the terminal down and up to reset the modem.

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, momentarily remove and replace the battery, then power the terminal back up.

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. In this case the terminal must be replaced.

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. The help desk should contact the wireless gateway provider to find out if there is coverage in the merchant's area, or if a temporary tower problem is preventing the terminal from communicating with the network.

Unexpected shutdowns during transaction attempts: (a) If the terminal suddenly powers off during a transaction, power it back up and make sure the battery is not discharged (the battery icon should have at least one black bar in it, and "Low Battery" warnings should not appear during transactions). (b) If repeated unexpected shutdowns occur even with a fully charged battery, the terminal should be replaced.

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 is displayed during a transaction attempt in wireless mode: The wireless transaction did not complete. (a) Try it again. (b) If the problem persists, see under "Terminal is not getting a signal" above.

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 GPRS 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.

Data 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 host 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.

PED PIN Encrypted Device. The 9100 is a PED.

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.

SIM Subscriber Identity Module. Required for processing wireless transactions on a GPRS network.

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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