



Heartland

PAYMENT SYSTEMS®

MICROPAYMENTS



I5310 MoneyClip Account to Card User Manual

Thank You

I5310 MoneyClip Account to Card

Thank you for your purchase of a Heartland MicroPayments Electronic Cash System. Heartland MicroPayments brings the efficiency of high technology to your cashless transaction operations along with the added benefits of fewer service calls and shorter route times. The Heartland MicroPayments system may be integrated into many different applications, such as cafeteria check-out lines, vending machine operations, copiers, washers and dryers, printers, microfiche and microfilm readers and video games.

With Heartland MicroPayments, everyone benefits. Employees appreciate the convenience of a personalized card that eliminates the need for carrying cash and using bill changing Machines. Card operated vending machines work faster than coin operated Models. Cafeteria lines move more quickly when cash transactions are eliminated, resulting in greater employee satisfaction, increased sales and reduced labor expenses.

For employers, a Heartland MicroPayments system simplifies accounting and auditing. Detailed Reports are available in seconds, at the touch of a button. The elimination of cash handling increases security and reliability while decreasing labor requirements. Most importantly, cash inventory for your operation is increased.

The flexibility of the Heartland MicroPayments system allows as many as four different discounts to be given to employees automatically. In addition, special incentives and bonuses may be programmed for certain days or times of day. Programming is simplified using the Data Collector.

WELCOME

About Us

Heartland MicroPayments, a wholly owned subsidiary of Heartland Payment Systems, Inc. (NYSE: HPY), is the global leader and innovator in the manufacture and sale of electronic cash systems utilizing online and offline technology. Heartland MicroPayments offers smart (chip) card and magnetic stripe systems designed and developed to improve convenience and save time for its customers as well as their customers. Heartland MicroPayments' electronic cash systems can be found in corporate campuses, colleges and universities, correctional facilities, hospitals, hotels, cruise ships and laundry facilities. With expertise on 5 continents and over a 20-year track record of reliable, robust systems, you can be confident in your decision to install a Heartland MicroPayments Electronic Cash System. For more information on Heartland MicroPayments, visit our website at www.heartlandmicropayments.com.

Heartland provides credit and debit card, payroll and related processing services to restaurant, hotel, and retail merchants throughout the United States. Heartland has become one of the largest payment processors, with over \$40 billion of annual processing volume from current merchants. Heartland's success is the result of the combination of a superior long-term customer relationship sales model and its internally-developed, client-server based transaction processing platform.

Heartland is the founding supporter of The Merchant Bill of Rights, a public advocacy initiative that educates merchants about fair credit and debit card processing practices. For more information, visit www.heartlandpaymentsystems.com and www.MerchantBillOfRights.com.

About This Manual

This manual is a reference document for those who want to operate the **Ingenico 5310** loaded with the **Heartland MicroPayments MoneyClip Revalue Station Application**. It is intended to cover the main topics about the system and not to be the only source of information about the application. You may want to read through the entire manual when you first purchase the Heartland MicroPayments product and then use it as a reference guide.

If you need someone to provide assistance, please call our Customer Support at (423) 894-6177.

In this manual, we will explain the general procedures for installing, configuring and programming the I5310 Heartland MicroPayments MoneyClip Revalue Station. We will also explain how to retrieve reports and provide maintenance and troubleshooting tips.

Introduction

The I5310 is a secure, easy-to-use terminal for electronic transaction acceptance and processing. Its ergonomic design, large graphic display, wide choice of communication options, long magnetic stripe reader, easy loading and fast printer, all provide increased performance and convenience.

The Heartland MicroPayments MoneyClip Revalue Station Application is a state-of-the art software application that provides:

- menu-driven selection - financial and administrative transactions and configuration functions are initiated through menus that clearly describe the available options,
- terminal initialization and host parameters download capability,
- terminal configuration - allows customization of the terminal such as terminal language selection; terminal prompts and receipts can be either in English or French,
- trailer messages - trailer messages that print on the bottom of the cardholder copy of the receipt can be customized,
- debit and credit sales transaction processing,
- batch and transaction search capabilities - a transaction storage (draft capture stores up to 500 transactions) - enables transaction search, provides detailed transaction reports and facilitates settlement when there are any disputes,
- settlement and reporting capabilities - provide transaction receipts and reports that are required to be able to follow up on the financial aspects of the business such as: Transaction Inquiry, Current and Closed Batch Totals Inquiry, and Heartland MicroPayments DebUtil and TLog reports,
- Admin Access Card and password protection for selected administrative functions.

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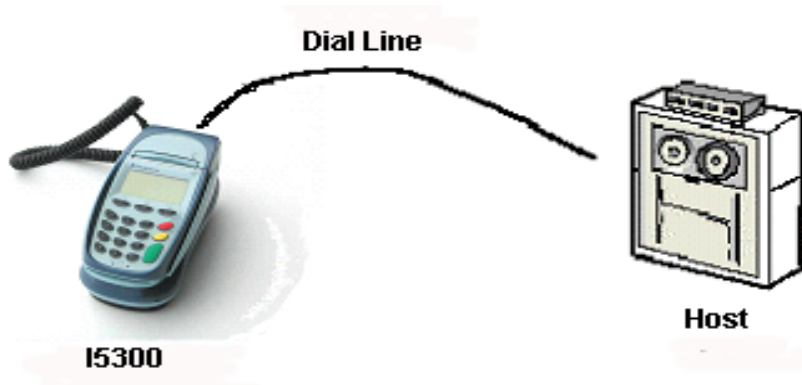
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Getting Started

Hardware Components

The Ingenico 5310 is also a SPED (Secure Pin Entry Device). Logical and physical security is included. The I5310 connects to the base via a curly cable. The base connects to the host via a dial line.



Real Time Clock

The real time clock is capable of keeping day, month, year, hour, minute and second. It is not reset when the terminal is unplugged.

Keyboard Layout



Screen-Addressable Function Keys:

Key	Description
[F1]	This function key can be used to select an option or menu text that is displayed on the screen, for example, the screen displays "BACKLIGHT" on the top line of the display and, on the bottom line, "YES" displays on the left and "NO" displays on the right. The F1 key would be pressed to select "YES". This key can also be used to scroll down when menus and the scroll arrows (▲ and ▼) are displayed.
[F2]	This function key can be used to select the middle option or menu text that is displayed on the screen, for example, the screen displays "BALANCE \$nn.nn" on the top line of the display, "SELECT AMOUNT" on the second line, "UP TO \$nn.nn" on the third line and "\$10 \$25 OTHER" on the bottom line. The F2 key would be pressed to select "\$25".
[F3]	This function key can be used to select an option or menu text that is displayed on the screen, for example, the screen displays "BACKLIGHT" on the top line of the display and, on the bottom line, "YES" displays on the left and "NO" displays on the right. The F3 key

would be pressed to select "NO". This key can be used to scroll up when menus and the scroll arrows (▲ and ▼) are displayed. This key can also be used to scroll to the right or left when a message and scroll arrow (▶) displays.

Other Function Keys

Key	Description
[CAN/ANN]	The Cancel (red) key cancels the current transaction or function. The Cancel key is disabled when the terminal is communicating with the host.
[CORR]	The Correction (yellow) key works as a data correction key and as a navigation key. When data is being entered, the Correction key erases the last entered character from the screen. If the last entered character has been cleared, pressing the Correction key causes the terminal to return to the previous prompt.
[OK/ENTER/ENTREE]	The OK (green) key is used to select an option that is displayed in reverse video on the screen, to confirm user-entered data and start data validation or to move to the next functional step without waiting for a message to time-out.
[]	Advances the paper roll one line. The Paper Feed key is only enabled when the Admin Access key is inserted in the Smart Card Reader and the terminal is in the administrative function mode.
[ADMIN]	The Admin key is used to access the Administrative Function Selections if the MoneyClip Card Setup has not been successfully performed. After that, the Admin Access Card will be required to access the Administrative Function Selections. In addition, at a prompt where alphabetic characters are accepted, the Admin key allows the entry of letters and special characters.

Data Entry Keys

Key	Description
[1 QZ]	Number 1, space and letters Q, Z.
[2ABC]	Number 2 and letters A, B, C.
[3DEF]	Number 3 and letters D, E, F.
[4GHI]	Number 4 and letters G, H, I.
[5JKL]	Number 5 and letters J, K, L.
[6MNO]	Number 6 and letters M, N, O.
[7PRS]	Number 7 and letters P, R, S.
[8TUV]	Number 8 and letters T, U, V.
[9WXY]	Number 9 and letters W, X, Y.
[0*#,.]	Number 0 and special characters "asterisk", "pound sign", "comma", and "period".

The letters in the table above are used only for those terminal prompts where alphanumeric data entry is performed. You do this by using the [ADMIN] key together with the data entry keys.

The following example shows how to enter the alphanumeric sequence "D1N33"

Key Pressed	Text Displayed	Description
	(Blank)	The initial display is empty in this example.
[3]	3	"3" is the digit key initially pressed when entering the letter D.
[ADMIN]	D	[ADMIN] displays the next letter in the sequence: D.
[1]	D1	
[6]	D16	"6" is the digit key initially pressed when entering the letter N.
[ADMIN]	D1M	[ADMIN] displays the next letter in the sequence: M.
[ADMIN]	D1N	[ADMIN] displays the next letter in the sequence: N.
[3]	D1N3	
[3]	D1N33	Data entry is complete: "D1N33".
[OK]	(Next Prompt)	[OK] is pressed to accept data entry, taking the terminal to the next prompt.

Base Unit

The terminal is connected to the base unit by a curly cable can be stretched to approximately 1.80 metres (6 feet). The following picture shows each part separately.



Enclosure

The base unit is secured in a key accessible stainless steel enclosure which allows for unattended operation (shown below without the optional card dispenser).



Input/Output Ports

The power and communication ports are located at the rear of the base.



- Counting from the left, the first connector, labelled as LINE, is not used;
- The second connector, labelled with a phone symbol (☎), is used to connect the telephone line;
- The third connector, labelled with a power symbol (⚡), is used to connect the power supply;
- The fourth connector, labelled COM2, and the fifth connector, labelled COM3. These two ports can be used to connect external devices that communicate serially with the terminal.

Display

The reflective LCD (Liquid Crystal Display) supports 4 lines by 16 characters. Backlighting is provided for all Ingenico terminals.

Internal Printer

The thermal internal printer has graphic capacity. Each line can have up to 24 characters. It supports double width and double height printing, upper and lower case, and reverse font printing. It uses the North American ASCII character set.

The printer is located behind the display at the back upper part of the terminal. An acrylic cover gives access to the thermal paper roll.

The printing speed is 15 lines per second for the Ingenico 5310. The Ingenico 5310 does **not** have paper end detection.

Dispenser

The optional card dispenser can dispense pre-valued MoneyClip cards to customers. The selling price for these cards is programmable. Customers purchase the card from the dispenser with either a debit or credit transaction. The dispenser is equipped with the maximum capacity of 115 cards.

Magnetic Stripe Reader [MSR]

The MSR can read card tracks 1 and 2 of the card, swiped in either direction. Its location is at the right side of the terminal.

Card Swipe Instructions:

- The magnetic stripe reader is bi-directional. The card can be swiped in either direction.
- The card must be swiped at constant speed and pressure, ensuring it remains in contact with the bottom of the track throughout the entire swipe action.
- The card magnetic stripe must face the terminal.

Smart Card Reader

The Smart Card Reader is used to read and write to MoneyClip cards. The MoneyClip card is embedded with a Heartland MicroPayments proprietary smart chip that is programmed with value for purchases. The card is inserted into the smart card reader and value is read, deducted or written to the chip.

Card Insert Instructions:

- Insert card into smart card reader with the smart chip facing up and foremost into the reader.
- Card must stay inserted for the duration of the transaction.

Remote Data Collection

The Remote data Collection feature will allow the 5310 terminal to call the Heartland MicroPayments remote host (on a predetermined schedule and totally outside of the BCE network) and upload its

DebUtil and Tlog audit files daily. The client will then be able to view these audit reports from any web enabled PC, and be able to consolidate multiple terminal reports into a unified form. This is a subscription-based service. For more information on how to use this feature, please contact your Heartland MicroPayments Sales Representative.

Maintenance, Care and Operating Conditions

Always use the system components within the specified conditions. Always use approved supplies. Misuse of the system components or the use of incorrect supplies may result in equipment damage.

The terminal is designed to for these conditions:

- *Operating Temperature:* +5 to +40 degrees Celsius (+41 to +104 degrees Fahrenheit).
- *Storage Temperature:* -20 to +70 degrees Celsius (-2 to +158 degrees Fahrenheit).

Terminal Cleaning

Clean the outside of the terminal with a soft cloth moistened with a mild detergent solution.

Never spray cleaning solution directly on the terminal or pin pad, as drops may enter the unit and damage it.

NOTE: Do *not* use alcohol-based cleaning products.

Paper Roll Replacement

The I5310 will not indicate that there is an out-of-paper condition or that the paper has been installed incorrectly. If a colored stripe begins appearing on the printed receipts or reports, it is time to replace the paper roll.

To replace the paper roll:

- Open the cover of the paper compartment by pressing back the release lever (behind the paper receipt).
- Lift up the empty roll and remove it.
- The end of the paper roll is usually glued to the rest of the new roll. Separate it so that it becomes loose.
- Place the new paper roll into the compartment. The loose end of the paper roll should come from the lower side of the roll.
- Close the paper compartment making sure that the paper end stays outside.
- With the Admin Access Card in the Smart Card Reader, press the paper feed button, to verify that the paper advance correctly.
- Tear off the excess paper coming out from the printer.

NOTE: Always use thermal paper having these specifications:

- Single ply thermal sensitive - POS or facsimile grade
- *Basis Weight:*
(lb/rm 17 ins. x 22 ins. - 500)---14.5+/-5%
(GSM)---55%+/-5%
- *Caliper:* 2.4+/-0.2 Mills or 60+/-5 Microns
- *Brightness:* Min. 85%
- *Smoothness:* (Bekk Minimum): 300s
- *Roll Width:* 2.25+/-0.020 in (58 mm +/-0.5 mm)
- *Roll Diameter:* 2.0 in (51 mm) maximum
- *Roll Core ID:* 0.500 in (13 mm) nominal
- *Roll Core OD:* 0.625 in (16 mm) nominal

NOTE: When stored, thermal paper should not be exposed to:

- Vinyl, plastics, adhesives, shrink-wraps, wet-toner copies or certain carbon papers
- Office light, UV light
- High humidity (above 65% relative humidity)
- Temperature above 25 degrees Celsius (72 degrees Fahrenheit)

Software Setup

This section describes the software setup to be performed after the hardware is installed. Refer to ACM User's Manual to create the system key card, the 5310 setup card, site code card, and the administrative access card. These cards will need to be created before proceeding to the Configuration and Initialization of the terminal.

New Terminal Configuration and Initialization

The terminal displays these messages after the power cord is connected:

** __*V06011* __** HSCL00WW0307	Displayed for a moment at power up.
TEST OPERATING SYSTEM	Operating System Check
SELFTEST NNNNN-NNNN	<i>Self Test</i>
I5310 NNNNN-NNNN 01.5x.00.YY	<i>"NNNNN-NNNN" The Application part and version number. "01.5x.00.yy" Software version for the MoneyClip application.</i>
PLEASE WAIT ?	<i>This screen displays allowing access to the System Function menu or key injection. The [F1] should only be pressed on the advice of the Help Desk. The [OK] key only on the advice of a Key Injection Facility.</i>

If nothing is pressed, a non-initialized terminal displays the Terminal Initialization Required Idle Prompt:

YYYY/MM/DD HH:MM TERMINAL INITIALIZATION REQUIRED	<i>Displayed if the terminal does not have working downloaded parameters. Date/Time displayed on line 1. Time is displayed in 24-hour format.</i>
--	---

For a non-initialized terminal, the manager password must be changed. Other terminal functions cannot be performed until this step is completed.

Change Manager Password

This function allows you to setup or change the manager password. Non-initialized terminals are setup up with the default password 123456. The manager password is your access key to sensitive transactions and functions. Disclose it *only* to the staff with permission to access those functions.

Perform these steps to change the manager password:

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.
2. On a new terminal, the only available option is the Change Manager Password.

ADMIN - SELECT	<i>The "Admin – Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

3. Use [F1] or [F3] to scroll up or down to highlight [CHANGE MGR PWD]. Press [OK]:

TERMINAL INIT
KEY EXCHANGE
TERMINAL CONFG
▼ CHANGE MGR PWD ▲

4. Enter the manager password. Press [OK]:

SUPER PASSWORD *****	<i>If the Super Password screen displays, please call the Help Desk. When the correct Super Password is entered, the new password screen displays.</i>
CURRENT PASSWORD *****	<i>If this screen appears, enter the current password, or if the terminal is new, enter '123456' (the default). Asterisks are displayed each time a security password is entered.</i>

5. Enter your own choice for the manager password (4 to 8 digits). Press [OK]

NEW PASSWORD *****	<i>The new password must be different than '123456'. Asterisks are displayed as the password is entered.</i>
------------------------------	--

6. Re-enter the password entered in the previous step. Press [OK]

REPEAT NEW PASSWORD *****	<i>Asterisks are displayed as the password is entered.</i>
---	--

7. After the new password is re-entered, or if the Cancel [CAN] key is pressed, the terminal returns to "Admin –Other" menu.

TERMINAL INIT KEY EXCHANGE TERMINAL CONFG ▼ CHANGE MGR PWD ▲	<i>Press the Cancel [CAN] key to return to the Idle Prompt.</i>
---	---

If the terminal is new and the manager password is being set for the first time, the terminal parameters must now be set. Perform the steps listed in Terminal Configuration.

NOTE: Depending on the way the terminal is configured, the manager password may not be used often. It is a good practice to write it down and keep it in a safe place, away from the terminal and not accessible to the persons who operate it.

Use a password that cannot be uncovered easily, for example: different digits not ordered in any logic sequence.

If you forget the manager password, call the Help Desk.

Terminal Initialization

The Terminal Initialization Function loads the terminal with configuration parameters coming from the host. You need to perform this function when the terminal displays the message **TERMINAL INITIALIZATION REQUIRED** or whenever instructed by the Help Desk to do so. Please make sure you are at the location and connected to the phone line before proceeding to the next step.

Follow these steps to initialize the terminal with the host:

1. The Terminal Initialization Required Idle Prompt:

YYYY/MM/DD HH:MM TERMINAL INITIALIZATION REQUIRED	<i>Press [ADMIN]. NOTE: After MoneyClip card setup is successfully performed, Admin Access card must be inserted instead of pressing [ADMIN] key.</i>
--	---

2. The "Admin - Select" menu is displayed:

ADMIN - SELECT REPORTS OTHER	<i>Select [OTHER].</i>
--	------------------------

3. The "Admin - Other" menu is displayed:

TERMINAL INIT KEY EXCHANGE TERMINAL CONFG ▼ CHANGE MGR PWD ▲	<i>Press [OK] key while Terminal Initialization is highlighted.</i>
---	---

4. Enter Manager Password:

MANAGER PASSWORD *****	<i>Asterisks are displayed as the password is entered.</i>
--	--

5. If the terminal is new, the Retain Settings screen will not display:

RETAIN SETTINGS? YES NO	<i>Select [YES] to keep the current merchant and terminal IDs (Proceed to next step).</i> <i>Select [NO] to change the current settings.</i>
MERCHANT ID 1234567890	<i>Enter the 10 digit Merchant ID or press [OK] to keep the one displayed (1234567890 in this example). The validity of the Merchant ID is checked at the host.</i>

TERMINAL ID 12345678	<i>Enter an 8 digit Terminal ID number (12345678 in this example). Press [OK] key.</i>
INIT PHONE # 18772705938	<i>Enter the 11 digit phone number to be dialed for initialization with the host (18772705938 in this example).</i>

6. The terminal begins host communications and displays DIALING, SENDING, RECEIVING and PROCESSING.
7. If the merchant or terminal ID has been changed, storage is cleared automatically and this screen is not displayed:

CLEAR STORAGE? YES NO	<i>Select [YES] if you want to erase any transaction details and totals currently in the terminal memory or [NO] if you want to keep them.</i>
---	--

NOTE: The transaction storage is the terminal memory area containing approved financial transactions. It can hold a maximum of 500 transactions. No warning message is displayed when the storage area becomes full. New transactions automatically replace the old ones. The terminal keeps in its memory the totals for the last seven closed batches.

8. The terminal returns to the Idle Prompt. A Key Exchange should be performed at this time.

Key Exchange

NOTE: Must be at the location, on the phone with Emergis to complete the next step. Be prepared to provide them with the Merchant ID number and the 16 digit terminal serial number to them on request. Emergis Help Desk phone number is 800-268-4280.

The Key Exchange Function loads the terminal with new security keys. This function is shown and enabled if the terminal is configured to process debit transactions.

This function needs to be performed:

- For a new terminal after performing host initialization;
- If the host starts to reject debit transactions repeatedly;
- Whenever instructed by the Help Desk to do so.

To perform a key exchange:

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [KEY EXCHANGE]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed as the password is entered.</i>
--	--

- The terminal starts to communicate with the host and displays DIALING, SENDING, RECEIVING and PROCESSING.
- The keys are exchanged and the terminal returns to the Idle Prompt. Other Terminal Settings should be set, if necessary. Heartland MicroPayments MoneyClip Card Setup should be performed. Please refer to the Heartland MicroPayments MoneyClip card section of this manual.

Terminal Configuration

This function allows the configuration of terminal parameters and allows the terminal to be customized to meet your needs. Press [ENTER] when a selection is highlighted and the setting is accepted and the terminal will continue with the next display.

- Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin – Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

- Use [F1] or [F3] to scroll up or down to highlight [TERMINAL CONFIG]. Press [OK]:

TERMINAL INIT KEY EXCHANGE TERMINAL CONFIG ▼ CHANGE MGR PWD ▲
--

- Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Press [OK]. Asterisks are displayed as the password is entered.</i>
--	--

- The "Config - Select" menu is displayed:

CONFIG - SELECT	<i>Select [COMM] to configure the communications parameters.</i>
COMM OTHER	

- The telephone prefix is defined:

CHANGE PREFIX *99 YES NO	<i>The current dial prefix is displayed on line 2 (*99 in the example). [YES] will erase the current prefix; a new one must be entered. Select [NO] if no change is needed.</i>
--	---

If [YES] is selected:

DIAL PREFIX *99	<i>Enter 1 to 4 characters.</i>
-------------------------------	---------------------------------

The terminal dials this prefix before the host telephone number. The line detection option affects this field. See the explanation for the line detection option below.

If connected to a PBX-type telephone system, the dial prefix is the digit sequence used to obtain an "external line". If the phone line is an analog line there is no prefix required.

Valid entries for a telephone prefix:

- digits 0 - 9;
- A comma "," to make a pause or delay before dialing the next digit;
- An asterisk "*" to disable any special telephone services of your dial line. For example, if you subscribe to the "Call Answer" service, entering an asterisk sets the line to the normal dial tone so that the terminal can dial out.

6. Dial Type is defined:

DIAL TYPE	<i>The current dial type is displayed (TONE in the example). Select the dial type.</i>
TONE	
PULSE	

Select [TONE] for a tone-type telephone or [PULSE] if the telephone line is pulse-type.

7. The Line Detection option is defined:

LINE DETECTION	<i>The current line detection option is displayed (YES in the example). Turn on/off line detection.</i>
YES	
YES	
NO	

Select [YES] if the terminal is to check if a telephone line is connected or [NO] if no check is needed.

8. Baud Rate is defined:

BAUD RATE	<i>The current baud rate is displayed (1200 in the example). Select the baud rate.</i>
1200	
1200	
2400	

9. Download Reports is defined:

DWLD REPORTS	<i>The current Download Type is displayed (SERIAL in the example) Select the type.</i>
TYPE	
SERIAL	
SERIAL	
MODEM	

If Modem is selected continue to next step, if serial is selected go to step #15.

NOTE: If modem is chosen, the terminal must have been registered previously with Heartland MicroPayments for Remote Data Collection.

10. Change Phone 1 for Reports is defined:

CHANGE PHONE 1 FOR REPORTS	<i>If [YES], enter new phone number, then press [OK] key. If [NO], continue to next step.</i>
	Phone # _____

YES	NO	(Provided by Heartland MicroPayments upon request.)
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11. Change phone 2 for Reports is defined:

CHANGE PHONE 2 FOR REPORTS	<i>If yes, enter new phone number, then press [OK] key. If [NO], continue to next step.</i>
YES	Phone # _____
NO	(Provided by Heartland MicroPayments upon request)

12. Change prefix for reports y or n then press [OK] key.

CHANGE PREFIX FOR REPORTS	<i>If [YES], enter prefix necessary to dial out on the phone to retrieve reports. If [NO], continue to the next step. (Example shown indicates no prefix requirement to dial out).</i>
YES	NO

13. Baud Rate

BAUD RATE REPORT	<i>The current baud rate is displayed (1200 in this example). Select the baud rate.</i>
1200	2400

14. Dial Type

DIAL TYPE REPORT	<i>The current dial type is displayed (TONE in the example). Select the dial type.</i>
TONE	
TONE	
PULSE	

15. The "Config - Select" menu is displayed:

CONFIG -	<i>Select [OTHER].</i>
SELECT	
COMM	OTHER

16. Terminal Date is defined:

TERMINAL DATE (YYYYMMDD)	<i>Enter the current date (to set the internal clock) or press [OK] to keep the displayed date (20040215 in the example).</i>
20040215	

17. Terminal Time is defined:

TERMINAL TIME (HHMM)	<i>Enter the current time or press [OK] to keep the displayed time (1345 in the example). The time is entered in a 24-hour format.</i>
1345	

18. Close Batch Start Time is defined:

CLOSE BATCH START TIME HHMM	<i>Enter the time (in 24-hour format) that the 'Close Batch' process should automatically begin (0315 in the example).</i>
0315	

The 'Close Batch' process will start at the Close Batch Start Time if a manual close has not been done within the current day. If there is a communications error, there will be 3 retries at 5 minute intervals. If the terminal is not idle at the time set to start the automatic 'Close Batch' process, the terminal will start the Close Batch process within 30 minutes after the Idle Prompt is displayed.

19. Download Reports start time type is defined:

DWNLD REPORTS START TIME HHMM 0345	<i>Enter the time (in 24-hour format) that the 'Remote Reporting' process automatically begins (0345 in the example). This time must be different than the setting for 'Close Batch' process by a minimum of 30 minutes.</i>
---	--

20. Download Reports interval time is defined as the time lapse between the each automatic download in hours. (2400 in the example below reflects that reports will download once per 24 hours):

DWNLD REPORTS INTERVAL TIME 2400	<i>Press [OK]</i>
---	-------------------

21. The First Preprogrammed Revalue Amount is defined:

CHANGE FIRST REVALUE AMOUNT? \$10 YES NO	<i>To keep the default amount (\$10 in this example) enter [NO]. To change amount enter [YES].</i>
---	--

If [NO] is selected, go to the next step.

If [YES] is selected:

FIRST PREPROGRAMMED REVALUE AMOUNT 15	<i>Enter 1 to 3 digits. The amount entered must be in whole dollars, no cents are accepted and the amount must not exceed the card maximum, as defined by Administrative Card Maker.</i>
--	--

22. The Second Preprogrammed Revalue Amount is defined:

CHANGE SECOND REVALUE AMOUNT? \$25 YES NO	<i>Enter a second amount that a customer can select to revalue the MoneyClip Card or press no to keep the displayed amount. \$25 is the default amount.</i>
--	---

If [NO] is selected, go to the next step.

If [YES] is selected:

SECOND PREPROGRAMMED REVALUE AMOUNT 50	<i>Enter 1 to 3 digits. The amount entered must be in whole dollars, no cents are accepted and the amount must not exceed the card maximum (example shown at \$50).</i>
---	---

23. The Third Revalue Amount is defined:

THIRD AMOUNT TYPE	<i>Select type. If variable press [OK].</i>
------------------------------	---

VARIABLE	
FIXED	VARIABLE

If "VARIABLE" is selected, go to Step 24. If fixed value is selected:

CHANGE THIRD REVALUE AMOUNT 50	<i>Select [YES] or [NO]. If NO, continue to next step. If YES, enter amount for fixed value. Press [OK] key. (Example shown: 50).</i>
YES	NO

24. Change Minimum Transfer amount is defined:

CHANGE MINIMUM TRANSFER AMOUNT? \$1	<i>Select [YES] to change current setting.</i>
YES	<i>Select [NO] to keep current setting (the example shown is \$1).</i>
NO	

If no, continue to next step. If yes, enter new minimum transfer amount then press [OK] key.

25. Change Text Idle1 English is defined:

CHANGE TEXT IDLE1 ENGLISH TEXT 1 LANG 1	<i>Select [NO] to keep current setting ("Text 1 Lang 1" is example shown).</i>
YES	<i>Select [YES] to change current setting.</i>
NO	<i>Changes to this section will affect the first 16 character text line displaying on the terminal.</i>

If yes, enter new text then press [OK] key.

The terminal display contains two 16 character lines for inserting text. When configuring the terminal for initialization, text must either be entered, or the default text will continue to display during live transactions. When adding text, if the process is not completed within the allotted 60 second timeframe, then the system will "timeout" and the text entry step will have to be performed again.

Data Entry Key codes (text codes) are explained under the section 'GETTING STARTED' as well as, in the section 'CONFIGURATION WORKSHEET' at the end of the manual. Please refer to these codes in order to enter text. 'CONFIGURATION WORKSHEET' also offers a graph similar to the example below to assist you with in configuring text to be entered for display.

Sp	Sp	Sp	Sp	I	N	S	E	R	T	Sp	Sp	Sp	Sp	Sp	Sp
----	----	----	----	---	---	---	---	---	---	----	----	----	----	----	----

26. Change Text Idle2 English is defined

CHANGE TEXT IDLE2 ENGLISH	<i>Select [NO] to keep current setting.</i>
YES	<i>Select [YES] to change current setting.</i>
NO	<i>Changes to this section will affect the second 16 character text line displaying on the terminal.</i>

If yes, enter new text then press [OK] key.

Refer to the explanation detailed under step #25 for instructions on entering Text (See example below).

M	O	N	E	Y	C	L	I	P	Sp	C	A	R	D	Sp	Sp
---	---	---	---	---	---	---	---	---	----	---	---	---	---	----	----

Based on the example text entered, the display will read as follows:

Sp	Sp	Sp	Sp	I	N	S	E	R	T	Sp	Sp	Sp	Sp	Sp	Sp
M	O	N	E	Y	C	L	I	P	Sp	C	A	R	D	Sp	Sp

28. Change Text Idle1 French is defined:

CHANGE TEXT IDLE1 FRENCH TEXT 1 LANG2	Select [NO] to keep current setting ("TEXT1 LANG2" is example shown).
YES NO	Select [YES] to change current setting.

If yes, enter new text then press [OK] key.

Refer to the explanation detailed under step #25 for instructions on entering Text.

29. Change Text Idle2 French is defined:

CHANGE TEXT IDLE2 FRENCH TEXT2 LANG2	Select [NO] to keep current setting.
YES NO	Select [YES] to change current setting.

If yes, enter new text then press [OK] key.

Refer to the explanation detailed under step #25 for instructions on entering Text.

30. Change Asset Number is defined:

CHANGE ASSET NUMBER 00000048	Select [YES] to change current setting.
YES NO	Select [NO] to keep current setting ("00000048" is example shown).

If "MODEM" was selected on Step #9, the Asset number must be assigned by an authorized Heartland MicroPayments representative. Please contact the Heartland MicroPayments Customer Service.

NOTE: If a 'Price and Configuration' card is inserted after this point, the asset number entered will be over-written.

31. Change Dispenser Message English #1 Line is defined:

CHANGE DISP MSG	Select [YES] to change current setting.
------------------------	---

ENGLISH #1 LINE TEXT1 DISP ENG YES NO	Select [NO] to keep current setting (Text example field is empty).
---	--

If yes, enter new text then press [OK] key. Refer to the explanation detailed under step #25 for instructions on entering Text

32. Change Dispenser Message English #2 line is defined:

CHANGE DISP MSG ENGLISH #2 LINE TEXT2 DISP ENG YES NO	Select [YES] to change current setting. Select [NO] to keep current setting (Text example field is empty).
---	---

If yes, enter new text then press [OK] key. Refer to the explanation detailed under step #25 for instructions on entering Text

33. Change Dispenser Message French #1 line is defined:

CHANGE DISP MSG FRENCH #1 LINE TEXT1 DISP FRE YES NO	Select [YES] to change current setting. Select [NO] to keep current setting (Text example field is empty).
--	---

If yes, enter new text then press [OK] key. Refer to the explanation detailed under step #25 for instructions on entering Text

34. Change Dispenser Message French #2 line is defined:

CHANGE DISP MSG FRENCH #2 LINE TEXT2 DISP FRE YES NO	Select [YES] to change current setting. Select [NO] to keep current setting (Text example field is empty).
--	---

If yes, enter new text then press [OK] key. Refer to the explanation detailed under step #25 for instructions on entering Text

35. The "Config - Select" menu is displayed:

CONFIG - SELECT COMM OTHER	Press [CAN] to return to the "Admin - Other" menu.
--	--

36. The "Admin - Other" menu is displayed:

TERMINAL INIT KEY EXCHANGE TERMINAL CONFG ▼ CHANGE MGR PWD ▲	Press [CAN] to return to the Idle Prompt.
---	---

If the terminal configuration is complete and the terminal is new, perform Terminal Initialization.

Other Terminal Settings

Backlight

Backlight

To turn backlight on or off:

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [BACKLIGHT]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed as the password is entered.</i>
--	--

4. Select Backlight on or off:

BACKLIGHT YES	<i>Select [YES] to turn the backlight on. [NO] turns the backlight off.</i>
YES NO	<i>The default is [YES].</i>

5. The "Admin - Other" menu is displayed:

TERMINAL INIT KEY EXCHANGE TERMINAL CONFG ▼ CHANGE MGR PWD ▲	<i>Press [CAN] to return to the Idle Prompt.</i>
---	--

Printer Setup

Printer Set-up allows the footer line to be customized. Footer lines are printed on customer receipts. There are no separate English and French footers. The footer lines are automatically printed in the center of the customer receipt.

To configure the printer settings:

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN – SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [PRN SET-UP]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed as the password is entered.</i>
--	--

4. Change the Footer:

CHANGE FOOTER YES NO	<i>[YES] allows any of the footer lines to be changed. [NO] returns to the "Admin - Other" menu.</i>
--	--

5. Change Line 1 of the footer:

CHANGE LINE 1 CHECK OUR SPECIALS YES NO	<i>The terminal displays the current content of footer line 1 (CHECK OUR SPECIALS in this example).</i>
---	---

[YES] erases the current footer line 1 and allows entry of a new one. Select [NO] if no change is needed. Proceed to the next step.

FOOTER LINE 1 HAPPY HOLIDAYS	<i>Enter 0 to 24 letters for the new footer line 1. The terminal displays the characters entered (HAPPY HOLIDAYS in this example).</i>
---	--

Refer to the 'CONFIGURING TEXT' section at the back of the manual for instructions on entering Text.

6. Change Line 2 of the footer:

CHANGE LINE 2 COME AGAIN SOON YES NO	<i>The terminal displays the current content of footer line 2 (COME AGAIN SOON in this example).</i>
--	--

[YES] erases the current footer line 2 and allows entry of a new one. Select [NO] if no change is needed. Proceed to the next step.

FOOTER LINE 2 BIG SALE DAY	<i>Enter 0 to 24 letters for the new footer line 2. The terminal displays the characters entered (BIG SALE DAY in this example).</i>
---	--

Refer to the 'CONFIGURING TEXT' section at the back of the manual for instructions on entering Text.

7. Change Line 3 of the footer:

CHANGE LINE 3 REAL BARGAINS YES NO	<i>The terminal displays the current content of footer line 3 (REAL BARGAINS in this example).</i>
--	--

[YES] erases the current footer line 3 and allows entry of a new one. Select [NO] if no change is needed. Proceed to the next step.

FOOTER LINE 3 SPECIALS EVERY DAY	<i>Enter 0 to 24 letters for the new footer line 3. The terminal displays the characters entered (SPECIALS EVERY DAY in this example.)</i>
---	--

Refer to the 'CONFIGURING TEXT' section at the back of the manual for instructions on entering Text.

8. The "Admin - Other" menu is displayed:

TERMINAL INIT KEY EXCHANGE TERMINAL CONFG ▼ CHANGE MGR PWD▲	<i>Press [CAN] to return to the Idle Prompt.</i>
--	--

Terminal Language - English or French

The terminal language is used for displays directed to the merchant and reports. Terminal language does not affect displays directed to the customer or cardholder or the customer receipts; those use the language of the customer card or the language selected on the INSERT MONEYCLIP CARD screen.

To change the terminal language:

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [CHG TERM LANG]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed as the password is entered.</i>
--	--

4. Select Terminal Language:

TERM LANGUAGE ENGLISH ENGLISH FRANCAIS	<i>The terminal displays the current terminal language setting (ENGLISH in this example). Select the desired terminal language.</i>
---	---

5. The "Admin - Other" menu is displayed in the selected language

English Menu
French Menu

6. Press [CAN] to return to the "Admin - Select" or "Admin - Choisir" screen.

7. Press [CAN] to return to the Idle Prompt.

Terminal Configuration List

A list of the terminal configuration settings may be printed.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [REPORTS] by pressing the [F1] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [TERM CNFG LIST]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed as the password is entered.</i>
--	--

4. PRINTING is displayed while the terminal prints the report.
A sample report follows:

CONFIGURATION PARAMETERS

BY-THE-LAKE COTTAGES Merchant name and address
1001, CLEARWATER RD
HUNTERSTOWN, ONTARIO
CANADA, A1A 2B2

HOST INITIALIZATION PARMS

TERM ID ABCD1234 Terminal ID
MERC 1234ABCD Merchant ID

TERMINAL CONFIGURATION

TERMINAL DATE 20040225 Current Terminal Date
TERMINAL TIME 1328 Current Terminal Time
BACKLIGHT YES YES if Backlight is on or NO otherwise
SURCHARGE YES YES if configured NO otherwise
SURCHARGE ON SALE \$0.75 Configured amount for the surcharge
REVALUE AMOUNT 1 010 Pre-programmed revalue amount
REVALUE AMOUNT 2 025 Pre-programmed revalue amount

PRINTER CONFIGURATION

PRINTER YES YES if printer is on or NO otherwise
FOOTER LINE 1 Shows the contents of each footer line
CHECK OUR DAILY SPECIALS
FOOTER LINE 2
COME BACK SOON
FOOTER LINE 3
THANK YOU

DIAL CONFIGURATION

```

PREFIX          *99,   Dial Prefix
INIT #          18885555555 Initialization phone number
DIAL TYPE       TONE   The telephone line, PULSE or TONE
LINE DETECTION  YES    YES if line detection enabled or NO
BAUD RATE       1200   Baud Rate 1200 or 2400

```

HEARTLAND MICROPAYMENTS CONFIGURATION

```

VERSION      01.52.00.00   Software version

```

```

-----
END OF REPORT
YYYY/MM/DD HH:MM
-----

```

5. The "Admin - Reports" menu is displayed:

TERMINAL INIT KEY EXCHANGE TERMINAL CONFG ▼ CHANGE MGR PWD▲	<i>Press [CAN] to return to the Idle Prompt.</i>
--	--

Heartland MicroPayments MoneyClip Card Setup

For a new terminal, after the terminal initialization is complete, the Heartland MicroPayments MoneyClip Card Setup must be performed.

System Error Messages:

SYSTEM ERROR 62 displays when a System Key Card has not been read successfully and processed by the terminal:

OUT OF SERVICE SYSTEM ERROR 62 NO SYSTEM KEYS	<i>Insert the Heartland MicroPayments MoneyClip SYSTEM KEY CARD to program the System Keys.</i>
--	---

The System Key Card *must* be inserted first. The encrypted keys are stored on the System Key Card. Inserting the System Key Card again after successful processing will deactivate the keys and System Error 62 will display again. Deactivating the system keys will not remove other programming done with other Heartland MicroPayments MoneyClip Admin cards.

SYSTEM ERROR 60 displays when a Price and Configuration Card has not been read successfully and processed by the terminal:

OUT OF SERVICE SYSTEM ERROR 60 NOT PROGRAMMED	<i>Insert the Heartland MicroPayments MoneyClip PRICE AND CONFIGURATION CARD to program the configuration.</i>
--	--

The Price and Configuration Card is used to configure the asset number and MoneyClip Card maximum. If the Price and Configuration Card has never been successfully loaded, the following screen displays:

ASSET # NEW: 87654321 ENTER	<i>The asset number from the Price & Config card displays (87654321 in the example). Press [ENTER] to continue the configuration.</i>
--	--

If the Price and Configuration Card has been loaded previously, the following screen displays:

NOTE: If using Remote Data Collection feature, terminal operator must enter the asset number provided by Heartland MicroPayments. If this feature is not being used, choose to accept the old asset number or use a new number.

SELECT ASSET # OLD: 12345678 NEW: 87654321 OLD NEW	<i>The OLD Asset # displayed is the one previously programmed on the terminal. NEW is the one from the Price & Config card. Select [OLD] or [NEW]. If Modem was selected in Step #9 / Page 14, then the terminal asset number must be reset manually.</i>
--	---

After a selection is made, the remaining values from the card are loaded.

SYSTEM ERROR 63 displays when a Sitecode Card has not been read successfully and processed by the terminal:

OUT OF SERVICE SYSTEM ERROR 63 NO SITECODES	<i>Insert the Heartland MicroPayments MoneyClip SITECODE CARD to program the Sitecodes.</i>
--	---

A Sitecode is a number between 0001 and 9899 that is recorded on each MoneyClip card. Up to 32 Sitecodes may be programmed onto a terminal. As long as the Sitecode on a MoneyClip Card is on the reader list, the card will be accepted for transactions. Once the final setup card has been successfully inserted, the 5310 will default to the idle screen. At this point, the ADMIN key will be locked and will no longer work. To access the admin functions, you must now use an ADMIN ACCESS card, which can be created using ACM.

Optional Heartland MicroPayments Admin Cards:

A Heartland MicroPayments MoneyClip Message Definition Card may be inserted during the Heartland MicroPayments MoneyClip Card setup or it may be entered after the initial setup of the system. This card defines the contents of the field that defines the Location of the terminal for DebUtil and TLog reports. This card may be inserted at any time after the System Key Card. Each time a Message Definition Card is inserted, the values from the card are loaded are used for subsequent transactions. No error message is displayed if the Message Definition Card has not been inserted.

A Heartland MicroPayments MoneyClip TLog Wrap Toggle Card will set the TLog Wrap to either STOP or WRAP. A TLog entry is generated for each transaction as well as for many events (power up, Price and Configuration Card use, DebUtil download, etc.). Inserting the TLog Wrap Toggle Card will display the following screen:

TLOG MEMORY FULL WRAP STOP	<i>[WRAP] will overwrite the oldest TLog records in memory. [STOP] will display System Error 128 until TLog records are collected.</i>
--	---

The default setting is WRAP. No error message is displayed if the TLog Wrap Card has not been inserted.

SYSTEM ERROR 128 will only be displayed when the terminal is in production mode:

OUT OF SERVICE SYSTEM ERROR 128 TLOG IS FULL	<i>This means that there is no room in the Heartland MicroPayments transaction memory for any more TLog records. This error is only displayed if TLog Memory Full has been set to STOP.</i>
---	---

Financial Transactions

Revalue Transaction

1. The revalue transaction begins at the Idle Prompt:

INSERT MONEYCLIP CARD ENGLISH FRANCAIS	<i>Customer begins transaction by selecting language or inserting MoneyClip Card. (Idle prompt text that displays was entered on step 25 of Terminal Configuration).</i>
---	--

2. The customer can choose to print a receipt or not:

BALANCE \$NNN.NN PRINT RECEIPT? YES NO	<i>The MoneyClip Card balance is displayed.</i>
---	---

3. The customer selects the amount to revalue the MoneyClip Card:

BALANCE \$15.00 SELECT AMOUNT UP TO \$85.00 \$10 \$25 OTHER	<i>The MoneyClip Card balance is displayed (\$15 in the example).</i>
--	---

The customer can select:

- The first preprogrammed revalue amount (\$10 in the example).
- The second preprogrammed revalue amount (\$25 in the example).
- OTHER. The customer can enter an amount up to the card maximum taking into account the balance already on the card (\$85 in the example).

BALANCE \$15.00 ENTER AMOUNT UP TO \$85.00 AMT = \$30.00	<i>Using the number pad, the customer can enter up to a three digit dollar amount to revalue the MoneyClip Card (30 in the example).</i>
---	--

4. The customer swipes the credit or debit card:

BALANCE \$15.00 SWIPE CARD	<i>The MoneyClip Card balance is displayed.</i>
---------------------------------------	---

5. The revalue transaction continues with Credit Card Transaction or Debit Card Transaction, depending on the type of swiped card.

Credit Card Transaction

After beginning with Revalue Transaction, a credit card transaction continues with the following steps.

1. The customer confirms the total amount of the transaction:

BALANCE \$15.00 SALE TOTAL \$30.00 YES NO	<i>The customer selects YES to continue the revalue transaction, NO to cancel the revalue transaction.</i>
--	--

2. The terminal starts to communicate with the host and displays DIALING, SENDING, RECEIVING and PROCESSING. The MoneyClip Card balance is displayed.

NOTE: Card must remain in the reader during the whole process. Removal of the card before prompting will result in loss of value on the card.

3. If a receipt is required, the receipt is printed:

BALANCE \$45.00 PRINTING	<i>The revalued MoneyClip Card balance is displayed.</i>
---	--

Sample Receipt:

```

BY-THE-LAKE COTTAGES  Merchant name and address
 1001, CLEARWATER RD
 HUNTERSTOWN, ONTARIO
 CANADA, A1A 2B2

MER #           ABCD1234  Merchant ID
TERM #          1234ABCD  Terminal ID
B:152           Batch number
AUTH#:678901    Authorization #
TRANS#:0120     S  Transaction #/Swipe/Manual Indicator
-----
CARD *****9012  Masked debit card #
CREDIT/VISA      Acct type
DATE             2004/04/18  Transaction date
TIME             10:08:33    Transaction time
RECPT 01234567-901-0120  Receipt number

PURCHASE
AMOUNT          $30.00  Transaction amount
-----
MONEYCLIP CARD  *123456  Card serial #
BALANCE         $45.00  Card balance
-----
TRANSACTION
01 - APPROVED - 025  Host approval message
  THANK YOU
CARDHOLDER WILL PAY  Agreement Text
CARD ISSUER ABOVE TOTAL
PURSUANT TO CARDHOLDER
AGREEMENT
  
```

4. The customer is prompted to take their receipt:

BALANCE \$45.00 PLEASE TAKE RECEIPT	<i>The revalued MoneyClip Card balance is displayed.</i>
--	--

5. The terminal displays:

- The Idle Prompt if there is no longer a card in the card reader:

INSERT MONEYCLIP CARD ENGLISH FRANCAIS

- The Remove Card screen if there still is a customer card in the card reader:

BALANCE \$45.00 REMOVE CARD	<i>The Idle Prompt will display after the card is removed.</i>
--	--

Debit Card Transaction

After beginning with Revalue Transaction, a debit card transaction continues with the following steps.

1. This optional prompt displays if the terminal is configured for debit sales surcharge:

BALANCE \$15.00 SURCHARGE \$1.00 YES NO	<i>The MoneyClip Card balance is displayed.</i> <i>The customer selects YES to continue the transaction or NO to cancel the transaction.</i>
--	---

2. The customer confirms the total amount of the transaction:

BALANCE \$15.00 SALE TOTAL \$31.00 YES NO	<i>The customer selects YES to continue the revalue transaction, NO to cancel the revalue transaction.</i>
--	--

3. The customer selects the account:

BALANCE \$15.00 SELECT ACCOUNT CHQ SAV	<i>The customer selects the checking or savings account.</i>
---	--

4. The customer enters PIN;

BALANCE \$15.00 ENTER PIN & OK PIN=*****	<i>The customer enters a 4 digit PIN. Asterisks are displayed each time the secure password is entered.</i>
---	---

5. The terminal starts to communicate with the host and displays DIALING, SENDING, RECEIVING and PROCESSING. The MoneyClip Card balance is displayed.

NOTE: Card must remain in the reader during the whole process. Removal of the card before prompting will result in loss of value on the card.

6. If a receipt is required, the receipt is printed:

BALANCE \$45.00	<i>The revalued MoneyClip Card balance is displayed.</i>
PRINTING	

Sample Receipt:

```

BY-THE-LAKE COTTAGES   Merchant name and address
 1001, CLEARWATER RD
 HUNTERSTOWN, ONTARIO
  CANADA, A1A 2B2

MER #           ABCD1234   Merchant ID
TERM #          1234ABCD   Terminal ID
B:152                               Batch number
AUTH#:678901      Authorization #
TRANS#:0120       S       Transaction #
-----
CARD *****9012   Masked debit card #
DEBIT/CHQ                Acct type
DATE           2004/04/18   Transaction date
TIME           10:08:33    Transaction time
RECPT  01234567-901-0120   Receipt number
REFERENCE      0019010120   Host reference #

PURCHASE
AMOUNT           $30.00    Transaction amount
SURCHARGE        $1.00    Surcharge amount
TOTAL            $31.00    Total amount
-----
MONEYCLIP CARD *123456   Card serial #
BALANCE          $45.00   Card balance
-----
TRANSACTION
01 - APPROVED - 025   Host approval message
  THANK YOU
  
```

7. The customer is prompted to take their receipt:

BALANCE \$45.00	<i>The revalued MoneyClip Card balance is displayed.</i>
PLEASE TAKE RECEIPT	

8. The terminal displays:

- The Idle Prompt if there is no longer a card in the card reader:

INSERT MONEYCLIP CARD
ENGLISH FRANCAIS

- The Remove Card screen if there still is a customer card in the card reader:

BALANCE \$45.00	<i>The Idle Prompt will display after the card is removed.</i>
------------------------	--

REMOVE CARD	
--------------------	--

PURCHASE A CARD

1. The terminal displays:

PRESS F2 TO BUY A CARD ENGLISH FRANCAIS	<i>Press [F2] key</i>
--	-----------------------

2. The card price displays with an option to print a receipt (*Please note that the card price amount is set in Administrative Card Maker*):

CARD PRICE \$5 PRINT RECEIPT? YES NO	<i>Select [YES] or [NO]</i>
--	-----------------------------

3. Terminal will prompt customer to swipe credit card:

CARD PRICE SWIPE CARD	<i>Swipe card vertically in swipe sleeve on the right side of the terminal with the Magnetic Stripe to the left.</i>
--	--

4. Terminal then indicates 'Sale Total' to be charged to the credit card. Customer has the option of accepting or cancelling the transaction.

CARD PRICE 5.00 SALE TOTAL 5.00 YES NO	<i>Select [YES] to proceed.</i>
--	---------------------------------

5. System communication displays:

DIALING CONNECTING RECIEVING	<i>System will display as the communication process proceeds.</i>
---	---

6. Authorization displays:

AUTH 00000 APPROVED	
---	--

7. Card is dispensed for customer use.

DISPENSING CARD REMOVE CARD	<i>Remove new card from the dispenser.</i>
--	--

Canceling a Transaction

Press [CAN/ANN] to cancel a transaction at any time while performing data entry.

After the terminal starts to communicate with the host, the transaction can no longer be cancelled.

NOTE: If card is removed, this does not cancel the transaction after the dialing process initializes. This will result in loss of value on the card.

Host Authorization, Approved and Declined Transactions

After data entry is complete, transactions must go to the host for approval. The terminal displays the messages DIALING, SENDING, and RECEIVING while communicating with the host. PROCESSING is shown while the terminal is processing the host response.

When an approved credit or debit host response is received, the terminal does not display a message from the host.

When a declined credit host response is received, the terminal displays:

INVALID CARD	<i>The merchant declined message text (INVALID CARD in the example).</i>
REFER CUSTMER TO CREDIT CARD ISSUER >	<i>If the declined message text is larger than the screen, the terminal displays:</i> <ul style="list-style-type: none"> • <i>The TRANS DECLINED message.</i> • <i>The declined message text (REFER CUSTOMER TO CREDIT CARD ISSUER in this example).</i> • <i>An arrow appears on the side of the truncation.</i> <i>Press one of the Function keys indicated by the arrow to scroll the message.</i>
REFER CUSTMER TO EDIT CARD ISSUER	<i>The message is scrolled and the arrow switches to the side of the truncation.</i> <i>Press one of the Function keys indicated by the arrow to scroll the message.</i>

When a declined debit host response is received, the terminal displays:

INCORRECT PIN	<ul style="list-style-type: none"> • <i>The declined message text (INCORRECT PIN in the example) which is associated with the ISO response code in the response.</i> • <i>If the ISO code is not valid, CANNOT PROCESS is shown.</i>
----------------------	--

While the approved or declined message is displayed, the terminal prints the receipt. The receipt will include a 2 -4 digit code. If Help Desk assistance is needed, this code number may be requested.

Business Functions

Transaction Inquiry

Transaction Inquiry is a terminal memory search for transactions matching the criteria you define. The terminal has transaction memory storage that keeps approved financial transactions.

Transactions are stored in transaction memory storage until they are settled with the host and can be listed using two options:

- All transactions;
- Transactions for a specific date.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [REPORTS] by pressing the [F1] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [TRANS INQUIRY]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password Asterisks are displayed as the password is entered.</i>
--	---

4. Select [ALL] to print all of the stored transactions (up to 500). Select [DATE] to print transactions for a specific date:

TRANS INQUIRY	<i>[ALL] starts to print the report. [DATE] will display the next screen.</i>
ALL DATE	
ENTER DATE (YYYYMMDD) 20040226	<i>Displayed if the [DATE] option was selected. Enter the date of the transactions to be printed (20040226 in the example).</i>

5. PRINTING is displayed while the terminal prints the report.

Sample Report:

```

STORED TRANSACTIONS
LIST
-----

BY-THE-LAKE COTTAGES   Merchant name and address
1001, CLEARWATER RD
HUNTERSTOWN, ONTARIO
CANADA, A1A 2B2

TERM          ABCD1234   Terminal ID
BATCH 001     04/02/26   Batch number/Date (1)

SALE          CHQ Transaction type/Account type (2)
*****0987    Masked card number (3)
A09032        0226 10:43 Transaction auth #/date/time
$35.00        0200124556 Transaction amt/batch#/number (4)

MONEYCLIP CARD *123456   MoneyClip card serial number
BALANCE        $45.00   MoneyClip card ending balance

-----

END OF REPORT
2004/02/26  11:32   Date and time the report was printed
  
```

Notes:

- (1) If [ALL] was selected, the date is the current date. If [DATE] was selected, the date is the date entered at the terminal (YY/MM/DD).
- (2) Account type is CRD (credit card), CHQ (debit card, chequing account), SAV (debit card, savings account).
- (3) Masked credit or debit card number (only last 4 digits printed).
- (4) Following the transaction amount, the batch number is the first three digits; the transaction number is the last 7 digits.

6. The "Admin - Reports" menu is displayed:

Press [CAN] to return to the Idle Prompt.

Current Batch Totals Inquiry

Terminal totals are the printed totals for the current batch. The totals are local totals, printed from the terminal transaction memory storage.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

Press [CAN] to return to the Idle Prompt.	<i>The "Admin - Select" menu is displayed</i> <i>Select [REPORTS] by pressing the [F1] key</i>
--	---

2. Use [F1] or [F3] to scroll up or down to highlight [CLOSE BATCH]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed as the password is entered.</i>
--	--

4. Select [PRN/TOT] to print current terminal batch totals:

BATCH CLOSE PRN/TOT CLOSE	<i>[PRN/TOT] starts to print the report.</i>
---	--

5. PRINTING is displayed while the terminal prints the report.

Sample Report:

```

CURRENT BATCH TOTALS
INQUIRY
-----

BY-THE-LAKE COTTAGES   Merchant name and address
1001, CLEARWATER RD
HUNTERSTOWN, ONTARIO
CANADA, A1A 2B2

TERM                    ABCD1234   Terminal ID

BATCH 001              04/02/26   Batch number/current date
20 NET TOT             $400.00   Batch totals
    
```

 END OF REPORT
 2004/02/26 11:32 Date and time the report was printed

6. The "Admin - Reports" menu is displayed:

<i>Press [CAN] to return to the Idle Prompt.</i>

Close Batch

Batch Close is automatic and is initiated by the terminal at the preprogrammed time (see Close Batch Start Time in Terminal Configuration). Batch Close closes the current batch and settles the transactions with the host. Selecting [CLOSE BATCH] > [CLOSE] will manually perform the same Batch Close process as the automatic Batch Close.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [REPORTS] by pressing the [F1] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [CLOSE BATCH]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed each time the secure password is entered.</i>
--	--

4. Select [CLOSE] to manually perform the Batch Close process:

BATCH CLOSE	
PRN/TOT	CLOSE

5. The terminal starts to communication with the host and displays DIALING, SENDING, RECEIVING and PROCESSING.
6. After a successful close, the current batch totals are stored in the closed batch totals, the current batch totals are cleared, and a new batch is opened with a new batch number.
7. The "Admin - Reports" menu is displayed:

<i>Press [CAN] to return to the Idle Prompt.</i>

Closed Batch Totals Inquiry

After the Close Batch process has been completed, the Closed Batch Totals may be printed. The Closed Batch Totals Inquiry provides information from the Closed Batch Totals stored in the terminal.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [REPORTS] by pressing the [F1] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [CLSD BTCH TOTS]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed each time the secure password is entered.</i>
--	--

4. Select [ALL] to print all of the closed terminal batch totals (maximum of 7) and [BATCH #] to select a specific batch to print:

CLSD BTCH TOTS	<i>[ALL] begins to print the report. [BATCH #] displays the next screen.</i>
ALL BATCH #	
ENTER BATCH NUMBER 010	<i>Displayed if the [BATCH #] option was selected. Enter the batch number that you want to print (010 in the example). The report begins to print.</i>

5. PRINTING is displayed while the terminal prints the report.

Sample Report:

CLOSED BATCH TERM TOTALS

BY-THE-LAKE COTTAGES Merchant name and address
1001, CLEARWATER RD
HUNTERSTOWN, ONTARIO
CANADA, A1A 2B2

TERM ABCD1234 Terminal ID

BATCH 001 04/02/25 Batch number/current date
20 NET TOT \$400.00 Batch totals

BATCH 002 04/02/26 If [ALL] is selected, all stored
10 NET TOT \$55.00 closed batches will print

END OF REPORT
2004/02/26 11:32 Date and time the report was printed

6. The "Admin - Reports" menu is displayed:

**Press [CAN] to return to
the Idle Prompt.**

Deposit Totals - Current Host Totals

This report prints the current batch totals from the host.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [REPORTS] by pressing the [F1] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [DEPOSIT TOTAL]. Press [OK]:
3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed each time the secure password is entered.</i>
--	--

4. The terminal begins communications with the host and displays DIALING, SENDING, RECEIVING and PROCESSING.
5. PRINTING is displayed while the terminal prints the report.

Sample Report:

```
BATCH TOTALS INQUIRY
-----

BY-THE-LAKE COTTAGES   Merchant name and address
1001, CLEARWATER RD
HUNTERSTOWN, ONTARIO
CANADA, A1A 2B2

TERM          ABCD1234   Terminal ID

BATCH 001     04/02/25   Batch number/current date
20 NET TOT    $400.00   Batch totals

-----

END OF REPORT
2004/02/26 11:32   Date and time the report was printed
```

6. The "Admin - Reports" menu is displayed:

**Press [CAN] to return to
the Idle Prompt.**

Reprint Receipt or Report

The reprint functionality is used:

- When a receipt or report is not printed correctly during the first attempt (printer short of paper, jammed, etc.);
- If an additional copy is needed for any other reason.

Only receipts or reports that have been printed can be reprinted:

- If the printer was turned off during the original transaction, you cannot reprint the receipt by turning the printer on and then attempting to perform a receipt reprint;
- If the printer was out of paper during the original transaction, then you can reprint it after replacing the paper roll, but only if no other transaction has been processed.

Reports that do not make a host connection (local reports) cannot be reprinted. If you need an additional copy, just perform the report function again.

A reprinted receipt or report contains the message *****DUPLICATE*****. Other than this warning line, the reprint is the same as the original. All approved and declined transactions can be reprinted.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [REPORTS] by pressing the [F1] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [DUPL RECT/REPT]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed each time the secure password is entered.</i>
--	--

4. PRINTING is displayed while the terminal prints the receipt or report.
5. The "Admin - Reports" menu is displayed:

<i>Press [CAN] to return to the Idle Prompt.</i>

Data Exchange

This selection allows communication and data exchange with the Heartland MicroPayments Data Collector (Palm OS Device). DebUtil and TLog reports may be collected when Data Exchange is selected.

1. Press the [ADMIN] key on a new terminal or insert the Admin Access Card.

ADMIN - SELECT	<i>The "Admin - Select" menu is displayed</i>
REPORTS OTHER	<i>Select [OTHER] by pressing the [F3] key</i>

2. Use [F1] or [F3] to scroll up or down to highlight [DATA EXCHANGE]. Press [OK]:

3. Enter the manager password:

MANAGER PASSWORD *****	<i>Enter the manager password. Asterisks are displayed each time the secure password is entered.</i>
--	--

4. The terminal displays the following when [DATA EXCHANGE] is selected:

DATA EXCHANGE PROCESSING	<i>The terminal is ready for communication with the Heartland MicroPayments Data Collector.</i>
-------------------------------------	---

5. The following error message displays if there is no communication within 30 seconds:

DATA EXCHANGE TIMEOUT	<i>The error message displays for 3 seconds.</i>
----------------------------------	--

When communication is complete or if the error message times out, the terminal returns to the Administrative Other Menu

Issues and Solutions

Frequently Asked Questions

I forgot my manager password. What should I do?

You need to call the Help Desk to obtain a master password that will allow you to change your password back to one you know.

Which cards does the terminal accept?

The card types depend on what is specified at the host for each merchant. The terminal can be configured via host parameter download to accept all major brand credit cards and direct payment cards (that is, debit cards).

What do I do if the totals reported by the host do not match the ones I have?

Call the Help Desk.

If a receipt was not printed correctly, do I need to perform the transaction again?

Do not perform the transaction again. If the approved transaction message was displayed, the host processed the transaction regardless of the receipt being printed or not.

If the problem is the paper roll, follow the replacement instructions and perform a receipt reprint (see Reprint Receipt or Report) after you get the printer working. The reprint *must* be done before the next transaction or function is performed.

However, if the printer was turned off during the original transaction, the receipt *cannot* be reprinted.

Terminal Error Messages

The following is an alphabetic list of the error messages generated by the terminal. Error messages sent by the host are not listed here:

Message Possible Causes and Solutions

ADMIN ACCESS DENIED CALL HELP DESK	<i>The wrong manager password was entered too many times. Removing the Admin Access card will allow customer transactions; however, no administrative functions are available until the password from the Help Desk is entered.</i>
CANCELLED	<i>This message is displayed when a transaction is cancelled or when the terminal times out (that is, if it stays too long at a prompt). When this message is displayed, press [CAN/ANN] to return to the idle prompt.</i>
COMMUNICATIONS ERROR (03)	<i>This message is displayed when there is no host response or a bad host response is received. Call the Help Desk.</i>
COMMUNICATIONS ERROR (09)	<i>This message is displayed when the terminal is unable to connect to the host. An unplugged phone line or an empty phone number field are examples of this situation.</i>
FAILED TO INIT CALL HELP DESK	<i>The terminal did not finish initialization successfully. Retry initializing it 2 or 3 times and check for incorrect settings in your communications parameters. See these sections:</i> <ul style="list-style-type: none"> • <i>Terminal Configuration List to print a configuration list;</i> • <i>Terminal Configuration to change the configuration.</i> <i>If the problem persists, call the Help Desk.</i>
FAILED TO READ CARD	<i>This message is displayed when the terminal cannot read the card magnetic stripe. Clean the card and refer to the card swipe instructions:</i> <ul style="list-style-type: none"> • <i>The magnetic card reader is bi-directional. The card can be swiped in either direction;</i> • <i>The card must be swiped at constant speed and pressure, ensuring it remains in contact with the bottom of the track throughout the entire swipe action;</i> • <i>The card magnetic stripe must face the terminal.</i>
FUNCTION NOT AVAILABLE	<i>This message is displayed when the option you selected is not supported by your current configuration. some of the possible reasons are:</i> <ul style="list-style-type: none"> • <i>If the terminal is not initialized with the host, certain options are not available. Perform an initialization. See Terminal Initialization.</i> • <i>If the printer is not configured and you attempt to select an option requiring printing.</i>
INVALID CARD	<i>The card number is invalid. Some possible reasons are:</i> <ul style="list-style-type: none"> • <i>You swiped a debit card during a transaction that accepts only credit;</i> • <i>The credit card - even if a valid credit card - is not accepted by your business.</i>
INVALID DATE	<i>You typed in an invalid date. Valid dates follow these rules:</i> <ul style="list-style-type: none"> • <i>The date is in the format "YYYYMMDD";</i> • <i>The year is in the format "20XX";</i> • <i>The month is from "01" to "12";</i>

	<ul style="list-style-type: none"> The day is a valid one. <p>Note that the terminal date and time are re-synchronized with the host clock every time a transaction is performed.</p>
INVALID TIME	<p>You typed in an invalid time. Valid times follow these rules:</p> <ul style="list-style-type: none"> The time is in the format "HHMM"; The hour is from "00" to "23" (that is, a 24-hour clock format); The minute is from "00" to "59". <p>Note that the terminal date and time are re-synchronized with the host clock every time a transaction is performed.</p>
MAXIMUM AMOUNT EXCEEDED	<p>The total transaction amount exceeds the limit. If needed, call the Help Desk to find out about the transaction limits applying to your case.</p>
MUST ENTER AMOUNT	<p>The preprogrammed revalue amounts are set to a \$0.00 value. A value greater than 0 must be entered.</p>
NO KEY LOADED	<p>Master Keys have not been injected in the terminal.</p>
NO LINE DETECTED	<p>The terminal cannot detect a telephone line attached while attempting to call out:</p> <ul style="list-style-type: none"> Check if there is a line connected; Check if the line connected has a normal dial tone by plugging a telephone into the wall jack and checking the dial tone coming from it; Telephone company services that change the dial tone may cause this message to appear. If you subscribe to services as "Call Waiting" or "Call Answer", you may need to change the dial prefix configuration. <p>If your terminal dials through a PBX-type system:</p> <ul style="list-style-type: none"> You may need to disable the line detection feature. some PBX-type systems cause this message because they do not use the same voltage levels; The "no" option of the line detection feature prevents this error message to be displayed (it does not mean your problem is solved, though).
NO RESPONSE FROM HOST	<p>The host response is not received in the specific time length. Retry the transaction or function 2 or 3 times. Call the Help Desk.</p>
NO TOTALS FOUND	<p>You typed in a batch number that does not match any of those stored in the terminal memory.</p>
NO TRANSACTION FOUND	<p>This message is displayed when the terminal searches the transaction memory storage, but there are no transactions matching the search criterion selected.</p>
NOTHING TO PRINT	<p>You performed a reprint, but there is no receipt or report to be reprinted. See Reprint Receipt or Report.</p>
PAPER OUT NO RECEIPT AVAIL CONTINUE? YES NO	<p>A user has attempted a transaction, but there is no receipt paper available. YES will continue the transaction and no receipt will print. NO will cancel the transaction.</p>
PAPER OUT PLEASE INSERT NEW PAPER ROLL PRESS OK TO EXIT	<p>An administrator selected REPORTS from the [ADMIN-SELECT/ REPORTS OTHER] menu and there is no paper available. The message will display until OK is pressed or the display dead man timer expires returning to the [ADMIN-SELECT/REPORTS OTHER] menu.</p>
TERMINAL INITIALIZATION REQUIRED	<p>The terminal must be initialized with the host to receive new parameters:</p> <ul style="list-style-type: none"> If your terminal is new, you must perform the steps to configure a new terminal, see New Terminal Configuration and Initialization; If you already performed the terminal configuration, see Terminal Initialization.
WRONG PASSWORD	<p>The wrong manager password was entered. Carefully re-</p>

PLEASE RE-ENTER	<i>type the manager password. See also the message ADMIN ACCESS DENIED, CALL HELP DESK.</i>
------------------------	---

Heartland MicroPayments MoneyClip Card Error List

For card related error messages, the terminal displays the following:

CARD ERROR 01 CARD IS BLANK	<i>The card error number displays on the first line (01 in the example). The card error message displays on the second line (CARD IS BLANK in the example).</i>
--	---

01	CARD IS BLANK	<i>Virgin Card</i>
02	PLEASE TRY AGAIN	<i>Bad balance certificate</i>
03	WRITE CARD ERROR	<i>Write card error, card present see below</i>
04	PLEASE TRY AGAIN	<i>No ATR</i>
05	PLEASE TRY AGAIN	<i>Read card error, card present</i>
06	WRONG CARD TYPE	<i>Bad ATR</i>
15	SEE MANAGER	<i>Verify card error, card present</i>
16	SEE MANAGER	<i>Bad SITECODE</i>
34	BALANCE TOO HIGH	<i>Balance Too High</i>
48	WRONG CARD TYPE	<i>Application ID error</i>
49	SEE MANAGER	<i>Card has expired</i>
50	SEE MANAGER	<i>CSC1 error counter at limit</i>
51	SEE MANAGER	<i>Card authentication error</i>
53	PLEASE TRY AGAIN	<i>Issuer/CIB error</i>
54	WRONG CARD TYPE	<i>Checksum error</i>
55	WRONG CARD TYPE	<i>Card status byte error</i>
57	SEE MANAGER	<i>Card is locked</i>
64	SEE MANAGER	<i>Hot card</i>
83	CARD PULLED	<i>Write card error, card not present see below</i>
85	CARD PULLED	<i>Read card error, card not present</i>
95	CARD PULLED	<i>Verify card error, card not present</i>

Card Error 83 or 03: If a card is removed after host communications have begun and before the new MoneyClip card balance is written to the MoneyClip card, the terminal displays Card Error 83. *A receipt is printed even if the customer has chosen to not print a receipt.* Card Error 83 or 03 will print on the receipt. The balance on the MoneyClip card may not be valid.

NOTE: Instructions posted on or near the terminal will inform the customer where to call in case of error.

Specifications

Terminal

Memory	1 MB SRAM and 4 MB Flash Upgradeable to 2 MB SRAM and 8 MB of Flash
Processor	16 and 32 bit ARM processors
Security	Visa PED approved, DES or 3DES DUKPT or MasterSession management keys

	Secure local and remote software downloading Secure key downloading
Printer	15 lines per second thermal printer Easy load with end of paper roll detection
Keypad	Full graphics printing capability 18 backlit keys including 3 screen addressable function keys
Display	LCD display, 128 x 64 pixels and graphics capability Backlit with adjustable contrast
Communication	V3.4 modem, transfers up to 33.6K bits per second (bps) Synchronous and asynchronous transmission TCP/IP
Magnetic card reader	Tracks 1 and 2 or tracks 2 and 3
Smart card reader	EMVco approved Level 1 reader UNICAPT 32 EMV Level 2 approved ISO 7816 1-2-3, Async/Sync. T=0 & T=1 Optional support for up to 3 Secure Access Modules (SAM) in SIM format
Connectivity	(2) RS232 ports for connecting peripherals or (1) RS232 port and (1) RS485 port
Programming	UNICAPT secure multi-application platform and development environment Programmable in C, C++ or Java
Environmental	Operating temperature: +5°C to +40°C (41F to 104F) Storage temperature: -20°C to +70°C (-2F to 158F)
Dimensions	Terminal: 20.9 x 9.6 x 6.0 cm (8.22 x 3.77 x 2.36 in.) Base: 20.2 x 9.1 x 4.0 cm (7.95 x 3.58 x 1.57 in.)
Weight	Terminal: 500 gr. (1.1 lb) Base: 910 gr. (2.0 lb)

Always use the system components within the specified conditions. Always use approved supplies. Misuse of the system components or the use of incorrect supplies may result in equipment damage.

Glossary

Alphabetic	<i>Alphabetic (data entry) means any letter is accepter (see also alphanumeric and numeric.</i>
Alphanumeric	<i>Alphanumeric (data entry) means any letter, digit or special character (see also numeric and alphabetic.</i>
Baud rate	<i>The baud rate is the speed data is transferred in a telephone line. It can be set to 1200 or 2400.</i>
bps	<i>Bits per second.</i>
Cardholder	<i>The customer with a MoneyClip or chip card.</i>
Card reader	<i>Device built into the terminal that reads the MoneyClip card.</i>
Customer	<i>The client using the MoneyClip Revalue Station.</i>
Download	<i>Set of configuration parameters coming from the host. See also initialization.</i>
Host	<i>The central computer interfacing with the terminal application. The tasks performed by the host are:</i> <ul style="list-style-type: none"> • <i>Initializing terminal parameters;</i> • <i>Approving financial transactions;</i> • <i>Approving a batch close for the business day.</i>

Initialization	<i>Host-downloaded parameter data used to configure the terminal. See also download.</i>
ISO	<i>International Standards Organization.</i>
LCD	<i>Liquid crystal display.</i>
Magnetic Stripe	<i>A stripe on one side of the card containing magnetically recorded information read by the Magnetic Stripe Reader.</i>
Magnetic Stripe Reader (MSR)	<i>Device built into the terminal that reads the card magnetic stripe when it is slid along the card reader slot.</i>
PIN	<i>Personal Identification Number. Secret number used by the debit card customer as identification during debit card transactions.</i>
Surcharge	<i>Transaction fee charged for debit sales. The surcharge setup is downloaded during host initialization.</i>
Terminal	<i>The Ingenico 5310 terminal.</i>
UV	<i>Ultraviolet.</i>

Work Space for Text Configuration

This work space is to assist you in configuring layout of text to display during live transactions.

Two 16 character lines are available for inserting text. Please use the graph below to layout text to be entered. Enter spaces according to the Data Entry Keys to center and align text.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Addendum I

SLIM-AC/DC, SLIM-Video and M-Series Reader Error Codes

Error Message	Cause(s)	Action
CARD IS BLANK CARD ERROR 01	Unformatted user card	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD BAL CERT Or PLEASE TRY AGAIN CARD ERROR 02	Invalid purse data; Bad balance certificate	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD WRITE CARD ERROR 03	An error occurred while writing to the card.	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD or NO ATR Or PLEASE TRY AGAIN CARD ERROR 04	Invalid card type; the card reader did not recognize the card.	Clean card contacts and TRY AGAIN. If error persists, see system administrator for card replacement.
BAD READ Or PLEASE TRY AGAIN CARD ERROR 05	An error occurred while reading the card.	Clean card contacts and TRY AGAIN. If error persists, see system administrator for card replacement.
LOW BALANCE CARD ERROR 12	Card balance is below minimum purchase price	Add more value to the card.
VERIFY CARD ERR or SEE MANAGER CARD ERROR 15	The Secret Code on the Card is bad or could not be verified.	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD SITECODE Or PLEASE TRY AGAIN CARD ERROR 16	SITECODE on card is not listed among the SITECODES on reader.	TRY AGAIN. If error persists, see system administrator. The reader may have to be programmed with the appropriate sitecodes, or the card may have to be replaced.
WIN PURSE ABSENT CARD ERROR 20	A single-purse card has been inserted into a dualpurse Charity Gaming video reader.	TRY AGAIN. If error persists, see system administrator for replacement with a dual-purse card.
WIN PURSE LOCKED CARD ERROR 21	The WIN purse status is not correct for operation.	TRY AGAIN. If error persists, see system administrator for replacement with a dual-purse card.
WIN PURSE UNUSED CARD ERROR 22	A dual purse card has been inserted into a singlepurse reader.	TRY AGAIN. If error persists, system administrator must enable Charity Gaming on this reader.
WIN PURSE > MAX CARD ERROR 23	The balance of P2 exceeds the allowable upper limit.	TRY AGAIN. If error persists, system administrator should increase CARD MAX for Purse 2 if appropriate.
CSC2err AT LIMIT CARD ERROR 24	Purse 2 is locked.	TRY AGAIN. If error persists, see system administrator for card replacement.
WIN BAD BALCERT CARD ERROR 25	Invalid purse 2 data; bad balance certificate	TRY AGAIN. If error persists, see system administrator for card replacement.
NO MORE ENABLES CARD ERROR 26	Charity Gaming Enable card exhausted.	Contact Heartland MicroPayments customer service for a freshly charged Charity Gaming Enable card.
BALANCE TOO HIGH CARD ERROR 32	Card balance is greater than the set maximum	TRY AGAIN. If error persists, see system administrator; increase CARD MAX for Purse 1 if appropriate.
KEY MISMATCH CARD ERROR 43	Incorrect System Key Card	A system key card was inserted into a reader with existing keys. The keys must match before the reader will execute this admin card's function. This error indicates that the keys did not match.

WRONG CONF CARD	Invalid Price and	See system administrator to determine if the
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CARD ERROR 44	Configuration card	Price and Configuration card needs to be replaced.
BAD APPL ID Or SEE MANAGER CARD ERROR 48	Invalid Application ID	TRY AGAIN. If error persists, see system administrator for card replacement.
CARD EXPIRED Or SEE MANAGER CARD ERROR 49	Card has expired	TRY AGAIN. If error persists, see system administrator. Either the card is expired, written incorrectly, or the clock in the reader is not set properly. Determine which and correct accordingly.
SOFT LOCK Or SEE MANAGER CARD ERROR 50	Card is at or near the maximum number of allowed verification attempts.	Take the card to the system administrator. The card can be read by the system administrator and may be reissued at the discretion of the system administrator.
BAD CARD AUTH Or PLEASE TRY AGAIN CARD ERROR 51	Card authentication failed	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD ISSUER CODE Or PLEASE TRY AGAIN CARD ERROR 53	Invalid issuer code or CIB	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD CSUM Or PLEASE TRY AGAIN CARD ERROR 54	Invalid card checksum	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD CARD STATUS Or SEE MANAGER CARD ERROR 55	The card status is not "active" (<>1).	TRY AGAIN. If error persists, see system administrator for card replacement.
BAD ADMIN CARD# Or SEE MANAGER CARD ERROR 56	Invalid admin card (99xx)	TRY AGAIN. If error persists, see system administrator. The card will have to be rewritten, or a new one will have to be issued.
CARD IS LOCKED Or SEE MANAGER CARD ERROR 57	Card is Locked	The User card has been previously Hotlisted and is now Locked. See system administrator for card replacement.
HOT CARD or SEE MANAGER CARD ERROR 64	Hot card	The card ID was found in the reader's hotlist, and has been rendered unusable. See system administrator for card replacement.
SYSTEM ERROR 60 NOT PROGRAMMED	Program data has not been loaded	Program reader using admin program card(s) or handheld.
SYSTEM ERROR 61	VMC Mismatch (MDB)	Attach the reader to the matching device type peripheral (VMC), or reprogram the reader to match the existing peripheral using admin card(s) or handheld.
SYSTEM ERROR 62 NO KEYS	System keys have not been loaded	Set reader system keys using admin system key card.
SYSTEM ERROR 63 NO SITECODES	Sitecodes have not been loaded	Set reader sitecode list with admin sitecode card or handheld.
SYSTEM ERROR 64 NO MACHINE DATA	Machine data has not been loaded	Set machine data using admin machine data card.
SYSTEM ERROR 65 *CALL ATTENDANT*	There has been a write error on a VIDEO payout.	Floor attendant must come and insert the proper admin card to ascertain the amount owed to the card holder and clear the OOS condition.
SYSTEM ERROR 66 BAD ASSET NUMBER	The ASSET NUMBER in the reader is not numeric	Reader must be reprogrammed with a numeric ASSET NUMBER.
SYSTEM ERROR 67	Reader is disabled for security reasons.	Use "Wakeup" admin card.
SYSTEM ERROR [71 through 77]	[hardware error] SDF and/or RTC and/or COMM failure	Call Heartland MicroPayments Customer Service.

CARD ERROR 83	The card was pulled from	TRY AGAIN. Leave card in place until
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	the reader during a write operation.	REMOVE CARD prompt appears in reader display.
CARD ERROR 85	The card was pulled from the reader during a read operation.	TRY AGAIN. Leave card in place until REMOVE CARD prompt appears in reader display
CARD ERROR 95	The card was pulled from the reader during verification.	TRY AGAIN. Leave card in place until REMOVE CARD prompt appears in reader display.
OUT OF SERVICE 128	TLOG is full.	Collect TLog report, clear Tlog data, or enable the Tlog Wrap function.
[chip error] CARD ERROR [200 through 216]	Internal chip card errors.	TRY AGAIN. If error persists, see system administrator for card replacement.
MUTE CARD CARD ERROR 221	Card not responsive	Clean card contacts and TRY AGAIN. If error persists, see system administrator for card replacement.
BAD ATR CARD ERROR 222	Card is not identified as MoneyClip card during error recovery	TRY AGAIN. If error persists, see system administrator for card replacement.
PULLED CARD CARD ERROR 223	Card pulled prematurely.	TRY AGAIN. Leave card in place until REMOVE CARD prompt appears in reader display.
FUNCTION NOT AVAILABLE	(When performing a debit transaction) valid key exchange was not successfully performed	Redo the key exchange