GENMEGA

ATM *Software*

V05 AP Manual

OPERATOR FUNCTION

00000

TODAY	: 12/10/2013
	09:55:09
GENMEGA	
LOCATION	: G2500,A5
AP VERSION	: GENMEGA
SERIAL #	: V05.00.08
TERMINAL #	: TYAH001234
ROUTING ID	: AH001234
BILL CNT1	: 003927
BILL CNT2	: 988
BILL CNT3	: N/A
BILL CNT4	: N/A

SETTLEMENT

JOURNAL

REPORT

DIAGNOSTICS

CUSTOMER SETUP

SYSTEM SETUP

HOST SETUP

TRANSACTION SETUP

CANCEL TO RETURN

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Updates / Revisions:

12/10/13 = First Release

12/27/13 = Added V05.00.09 features
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Genmega ATM Software

The purpose of this manual is to explain and detail the operations and functions of the software installed on your Genmega ATM. The main menu in the ATM is called the 'Operator Function Menu'

1.1 OPERATOR FUNCTION MENU

1.1.1 ACCESSING THE OPERATOR FUNCTION MENU

To access the Operator Menu, press these keys in order:
[ENTER] – [CLEAR] – [CANCEL] – [1] – [2] – [3].   Then enter your password.

If the ATM is already out of service, then press the 'OP' button next to the screen.

Note: The Operator Function menu can only be accessed when the machine is either in service ("insert your card" screen) or in an "out of service" condition. If the machine is attempting to connect to the host or initializing, you will not be able to use the key commands to access the Operator Function Menu.

If you have difficulty accessing the Operator Menu, power off the ATM and then either open the vault door or remove the cassette from the dispenser and then power back on. This will force the ATM to the Operator Menu.

Enter password,

then press "ENTER".

******
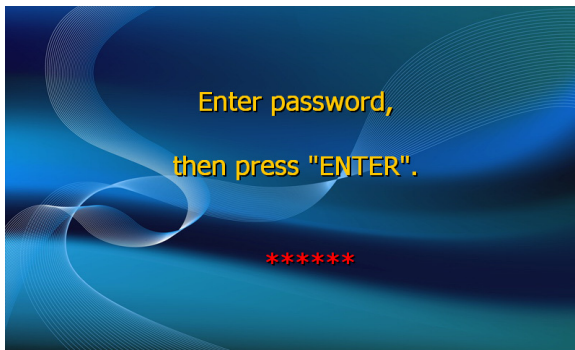
Once you successfully completed the key combination, you will be prompted to enter a password. There are 3 levels of passwords.

- Operator Password (allows access to basic menu structure)
- Service Password (allows access to basic and diagnostic menus)
- Master Password (allows access to all menus including setup parameters)

You must press ENTER key after typing the password!

Passwords are very important to maintaining security for your ATM. Your dealer/distributor will provide you with default password information.

WARNING: Genmega highly recommends changing your passwords from default as soon as possible. Keep all passwords safe and restrict access to non-authorized personnel.

Passwords are set and controlled in the System Setup Menu, later in this manual.

Shown below is the full Operator Function menu, depending on which password you entered (Operator, Service, or Master) you may not see certain functions.

For example, if you use an operator password you will not see the Host Setup button, as you will not have access to that menu.

Please note that if you are using a through the wall ATM with a Rear Service Panel, some of the menu options and functions will not be available.

For example, you must use the front screen and keypad to enter your Master Keys because they require an encrypting keypad.

Operator Function Menu – Main Menu
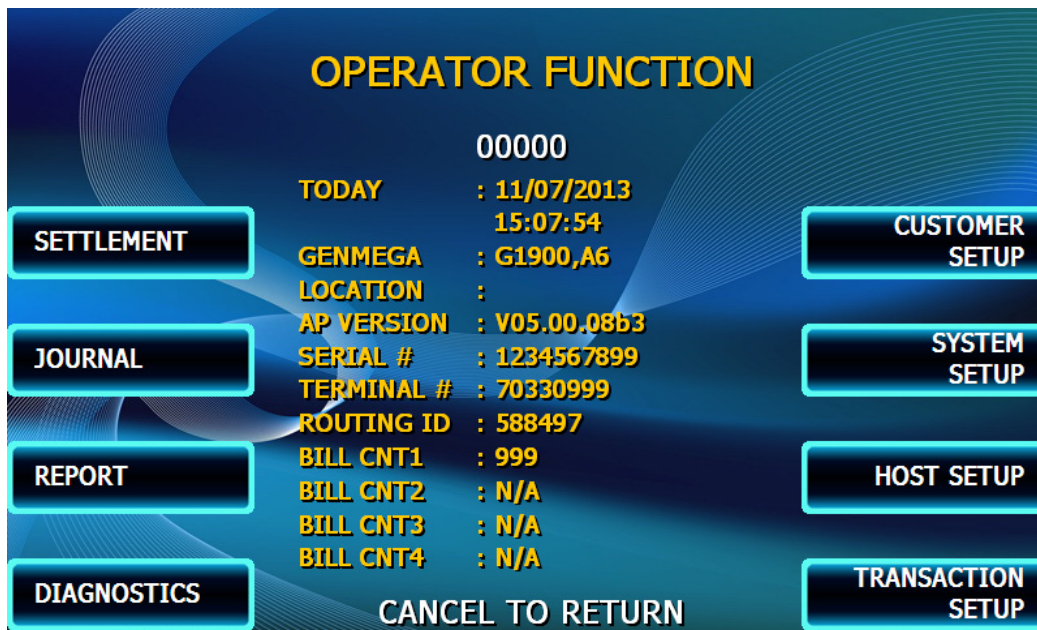
From the Main Menu, you can see basic status information in the center (yellow) section.

This includes:
The ATM Status Code – 000000 = Normal (no error)
The current ATM date and time
Location name (if programmed)
Current Application Software version
ATM Serial Number
Terminal ID and Routing ID numbers
Bill Counts for Cassettes 1-4 (if cassette not used then N/A appears)

1.1.2 ACCESSING THE MENU IN AN ERROR CONDITION

Step 1

From this screen, press (OP) Operator Menu, to access the Main Menu.

DEV INI - Will reinitialize the machine and reboot.

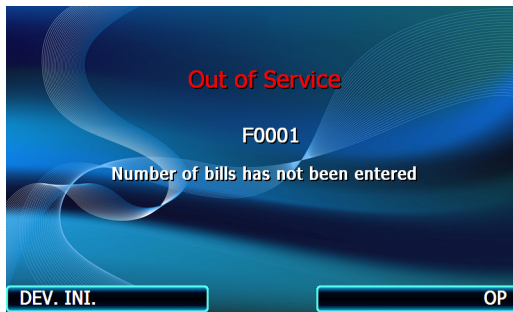**TIP**: When you are first programming a machine, if you are not sure if everything has been entered, press Cancel and back out of the menu. If there are required options not yet programmed, the Error code will let you know. Any codes in the Fxxxx range are required programming fields.
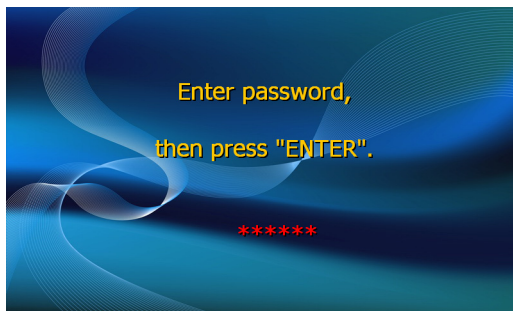
Step 2

When "ENTER PASSWORD" is displayed, you should enter the Master, Service or Operator Password to continue.

Contact your distributor for default passwords.

Remember to press the ENTER key after typing password!

Step 3

NOTE: If the ATM goes out of service, an error message may not appear on the screen.

If that occurs, you may need to use:
[ENTER] – [CLEAR] – [CANCEL] – [1] – [2] – [3] keys to access the menu.

If your ATM goes out of service and you do not see a reason or error code, enter the Operator Menu and it should be listed at the top of the screen for ATM Status shown on page 2.

You can also check the Journal or Error Summary Report, outlined later it this manual.

3

1.1.3 Menu Controls
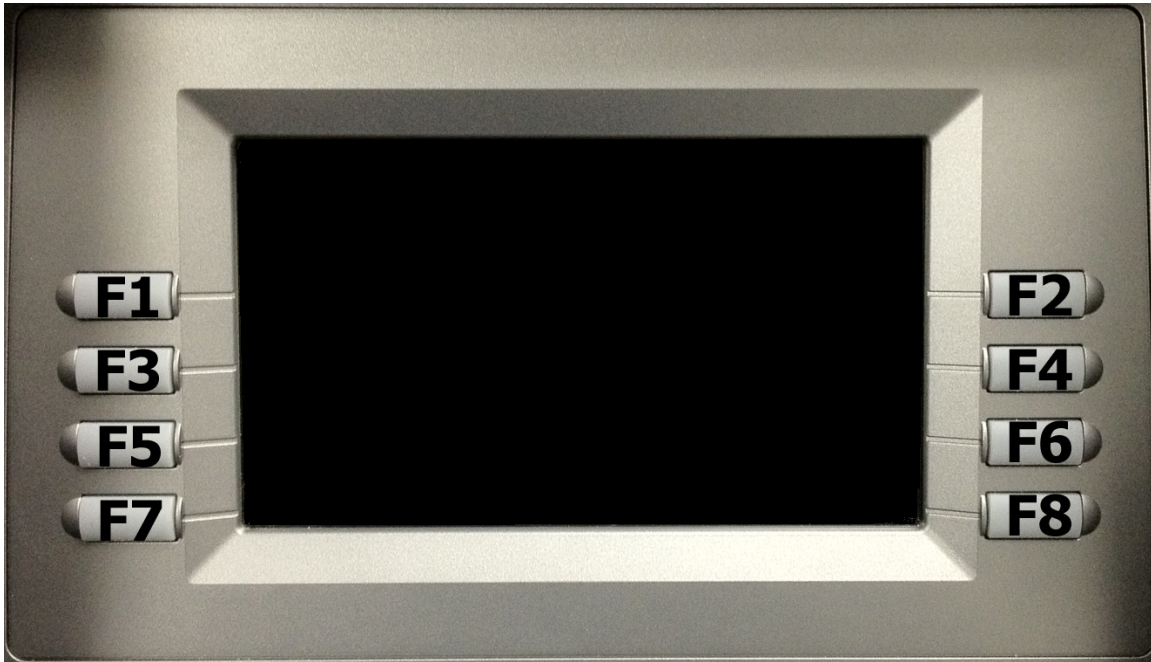
LCD display Function Key layout

This keypad layout and table below will help while learning how to input text and numbers while programming your Genmega ATM. When in a text entry screen, the F1, F3 and F5 keys are used to switch character maps between upper and lower case as well as special characters.

	0	1	2	3	4	5	6	7	8	9
F1 Alphabet Upper	+ - =	Space Q Z	A B C	D E F	G H I	J K L	M N O	P R S	T U V	W X Y
F3 Alphabet Lower	+ - =	Space q z	a b c	d e f	g h i	j k l	m n o	p r s	t u v	w x y
F5 Number Special	0 ( )	1 [ ]	2 { }	3 < >	4 , .	5 ! $	6 ' "	7 % *	8 : ;	9 ? /

The above table is displayed on screen when entering text, this is for reference only.

NOTE: When in any text entry screen, pressing the 'blank' key on the keypad will duplicate the last entered character. (beginning with AP version V05.00.09)

1.2 SETTLEMENT MENU
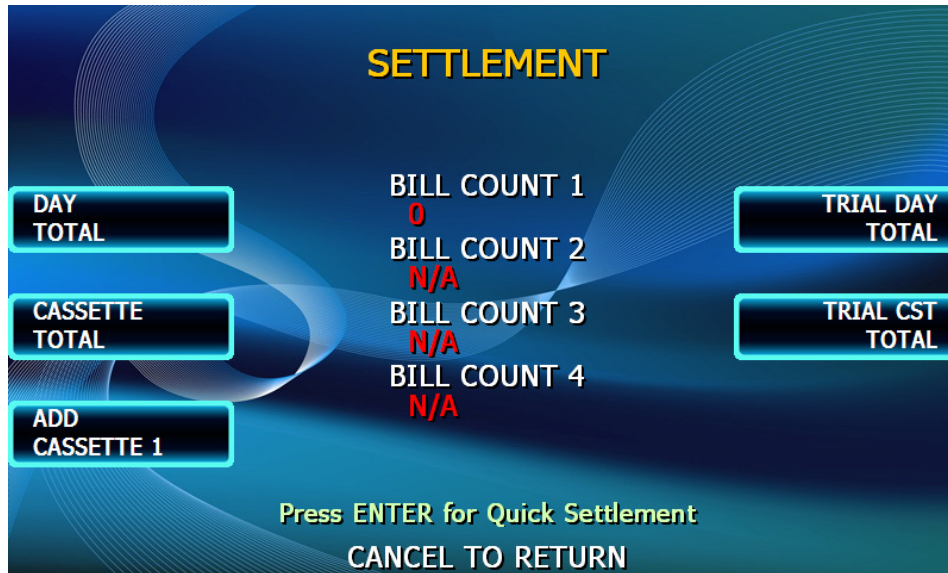
The Settlement menu controls how many bills have been added to the ATM as well as generating Day total and Cassette total reports. The ATM will communicate with the dispenser installed in your machine and represent the correct number of cassettes in the above menu.

NOTE: If your ATM cannot communicate with the dispenser, you must fix that before you can use this menu. Otherwise all Bill Count values will be N/A indicating no cassette detected.

1.2.1 ADDING CASH TO THE ATM

Step 1

Press the Add Cassette button (for the Cassette you are adding)

Step 2

Using the main keypad, enter the number of bills added to the cassette (not the amount of money).

Step 3

Press the enter key when finished to set the amount.

If you make a mistake and wish to zero out the current number of bills, you'll need to press Cassette total to do this. Anytime you press Add Cassette you will be adding on to the current number of bills already programmed.

For example:

There are 50 bills in the cassette and in the settlement menu it says Current # of Bills = 50. You wish to add 25 more bills to the same cassette, you press Add Cassette, then type 25 from the keypad and press enter. The current number of bills will now be 75.

(continued)

Now say there are 50 bills in the cassette and in the settlement menu it says Current # of Bills = 50. If you wish to remove 25 bills from the cassette, press Cassette Total. This will return the number of bills in both cassettes to zero and print a receipt showing remaining bills and loaded bills. Now press Add Cassette and enter 25 from the keypad, press enter to set. The current number of bills will now be 25.

1.2.2 DAY TOTAL

```
***     DAY TOTAL    ***
=================================

Start  : 09/04/2013,10:07:08
Today  : 11/13/2013,16:16:32
TERMINAL #  : PT00000

   ( TERMINAL TOTALS )
Count of Withdrawal : 0
Count of Balance    : 0
Count of Transfer   : 0
Count of Non-Cash   : 0
Amount of Dispense  : $0.00
Amount of Non-Cash  : $0.00
Amount of Surcharge : $0.00

   ( HOST TOTALS )
Count of Withdrawal : 321
Count of Balance    : 21
Count of Transfer   : 10
Amount of Dispense  : $3456.78
```

The Day Total function keeps a running total of the ATMs transaction activity. When you press day total, the ATM will print a report showing transaction totals starting from the last time a day total was done until now. At the same time, the ATM will dial into the Host Processor and retrieve their totals for the same time period. To the left is an example of a Day Total Report. Once the report is printed, the ATM will reset these values to 0 and begin recording from this point.

One thing to keep in mind when doing a Day Total is that the Host (or Processor) cuts off their transactions at a certain time every day. If you do a Day Total report before or after the processor has done their cut off, you may see discrepancies between what the terminal had reported and what the host reports.

To avoid this, talk to your dealer and find the approximate cut off time for your processor. Try to do your day totals at this same time. Remember that if you do not match your processor, the missing transaction(s) will usually appear on the next total. If you are unable to do your Day Total at the same time each day you can program the machine to do a "Trial Day Total" automatically.

After the Day Total has printed you will be prompted on the screen that the total has printed and to press the Enter key to return to the menu.

1.2.3 CASSETTE TOTAL

```
***    CASSETTE TOTAL    ***
 Start  : 11/13/2013,10:07:12
 Today  : 11/13/2013,16:16:13
 TERMINAL #  : 0000000

CST1 Loaded    : 100($20)
     Dispensed : 0
     Rejected  : 0
     Tested    : 0
     Remaining : 100($2000)
CST2 Loaded    : 0(N/A)
     Dispensed : 0
     Rejected  : 0
     Tested    : 0
     Remaining : 0(N/A)
CST3 Loaded    : 0(N/A)
     Dispensed : 0
     Rejected  : 0
     Tested    : 0
     Remaining : 0(N/A)
CST4 Loaded    : 0(N/A)
     Dispensed : 0
     Rejected  : 0
     Tested    : 0
     Remaining : 0(N/A)
```

The Cassette Total function prints a report detailing the number of bills that have been loaded into the cassette and how many bills were dispensed, either to the customer, the reject bin or used during a dispenser test. This report will show totals from the last time you ran a Cassette Total to the current date. After the Cassette Total has been printed, all the values will reset to zero.

NOTE: Running a Cassette Total is the only way to clear the Settlement value back to zero bills. After the Cassette Total has printed you will be prompted on the screen that the total has printed and to press the Enter key to return to the menu.

1.2.4 TRIAL CASSETTE TOTAL / TRIAL DAY TOTAL

These reports are identical to pressing Day Total or Cassette Total, the only difference being that they will not zero out the amounts. This report is useful if you wish to know current Total statistics without closing them out. To run these reports, simply press the button and the report will print. Press Enter when finished to return to the Settlement Menu.

NOTE: Trial Day Total can be set to process automatically at a preset time.
See Host Setup Menu → Scheduled Total

1.2.5 QUICK SETTLEMENT

Quick Settlement is a command that will perform the following steps in order:

1) ATM will perform a Day Total → and Print Report
2) ATM will perform a Cassette Total → and Print Report
3) ATM will prompt you to add cash to available cassettes
4) ATM will perform a Trial Day Total → and Print Report
5) ATM will perform a Trial Cassette Total → and Print Report.

The purpose of this command is to allow a fast way for cash loaders to close out the terminal, add cash and receive the necessary reports in one easy step.

1.3 JOURNAL MENU
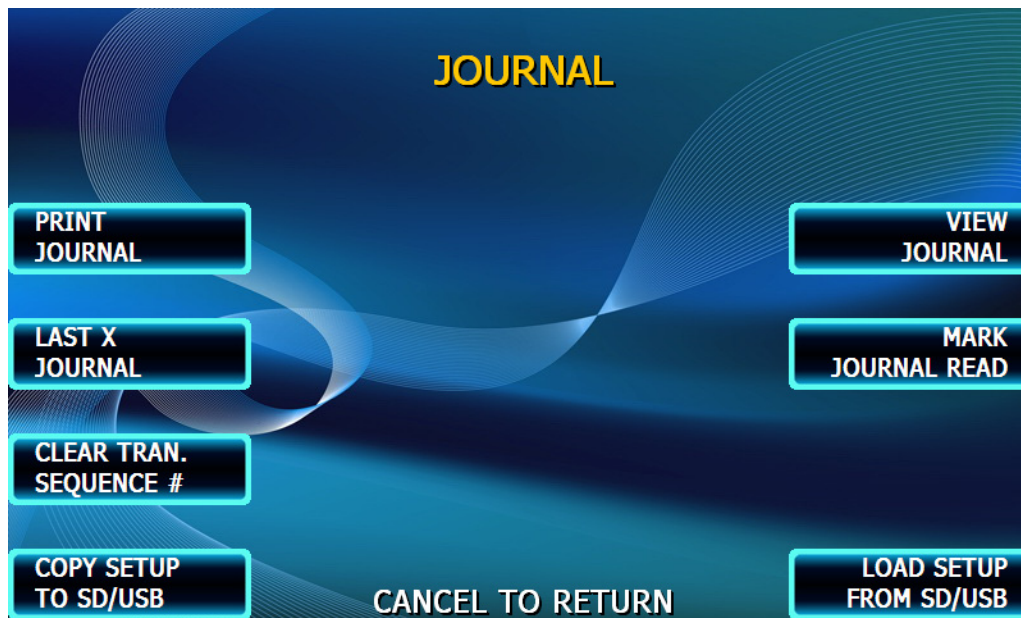
The Journal is an electronic record of all transactions, errors and some programming changes made to the ATM. Depending on the size of each entry, the memory can hold up to 40000 records. Each entry into the journal is indexed with a 5-digit sequence number starting with <00000>. Once the journal memory has reached it's maximum limit, it will begin to overwrite the oldest entries. You will not be warned of this, therefore it is critical to make sure to download or print your journal often enough to avoid loosing records.

The journal can be printed from the ATM in two different methods, Standard and Condensed. Standard will give complete information for each transaction (basically a copy of the customers receipt), whereas the condensed print will only show sequence number, date, time, what type of transaction and then amount requested / amount dispensed (in case of withdrawal).

1.3 1 PRINT JOURNAL

Step 1

To print the journal, press the Print Journal button.

Step 2

You will be prompted to choose standard (PRINT) or condensed (CONDENSED PRINT).

Step 3

The ATM will then print all journals in memory up to the last time you printed a journal. Each time you print a journal a marker is set at that point. The next time you print the journal, the ATM will print from that marker to the current time.
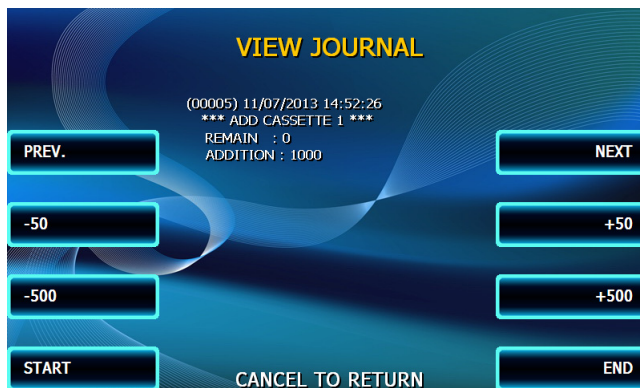
1.3.2 LAST X PRINT

The Last X Print option allows you to bypass the marker set when printing a journal and go back to recover an older record (so long as the record still exists in memory). For example, you print a journal and it includes sequence numbers <00001> to <00100>. If you wanted to go back and reprint journal number <00080> you would need to do a Last X Print for 20 records (100-20=80) this would give you records 100-80. To do a Last X Print, press the button and then enter a value of how many records you wish to go back.

1.3.3 CLEAR TRANSACTION SEQUENCE NUMBER

This function will reset the journal sequence number back to <00000>. This may be useful if you switch processing or switch Terminal ID numbers and want to keep new records.

1.3.4 VIEW JOURNAL

VIEW JOURNAL

(00005) 11/07/2013 14:52:26
*** ADD CASSETTE 1 ***
REMAIN   : 0
ADDITION : 1000

PREV.

NEXT

-50

+50

-500

+500

START

CANCEL TO RETURN

END

View Journal allows you to visually inspect the journal records. Press the View Journal button and you will see the screen to the left.

Use the function keys to scroll through the records. You can also use the buttons next to +50 and -50 to go forward or backwards 50 records at a time. Use the Enter button to print the journal entry currently displayed. Press Cancel to exit this menu.

1.3.5 MARK JOURNAL READ

Mark Journal Read causes all of the current journals to me marked as 'read' which means that after pressing this button, if you were to then press 'Print Journal' nothing would print. You would have to use Last X or View Journal to see the previous transactions.

1.3 6 COPY JOURNAL & SETUP TO EXTERNAL DEVICE (USB / SD)

For software V05.00.01 through V05.00.08, only the ATM Journal can be copied from the ATM in this menu. Beginning with V05.00.09, both the Journal and Setup information can be copied and loaded.

This option allows you to copy the contents of your electronic journal and ATM setup information to an external memory device including a USB Drive or SD Memory Card.

To Copy, insert a USB (any type) or SD card (2GB or less) into the memory slot on the back of the ATM LCD screen, along the top edge.

Then press 'Copy' to copy files to the memory device. Wait a moment and you'll see a message stating if the copy was successful or failed.

When copying the files from the ATM, they will appear on your memory device in a folder with the ATM serial number as the name. Inside you'll have the setup files and also the contents of the journal. To read this journal, you'll need to download a free utility from the Genmega website (or request from your ATM distributor).

This utility will allow you read / sort and print entries from the journal that was recovered from the ATM. The file that is saved on your memory device is named after the Serial number programmed at the terminal, so you can pull the journal from several ATMs onto the same memory device without worry of overwriting.

You can use the same memory device on multiple machines. Any information pulled from the ATM is always stored in a folder matching the ATMs serial number.

Note that it can take several minutes to copy the journal depending on how many records are stored in the ATM. So be patient when waiting for the files to copy.

COPY / LOAD ATM SETUP

You can also use this feature to 'clone' another ATM machine. For example, if you have to program 10 machines all with the same programming except for Terminal Number, you could use this feature to fully program one machine, then copy the setup information to a memory device and use that to pre-program the rest of the terminals.

Do the same procedure as above to copy the files. Then take the SD card or USB device and insert it in the next ATM. Press LOAD SETUP button in the journal menu and it will give you a list of folders containing setup information. Chose the serial number matching the info you want to load and then it will be copied.
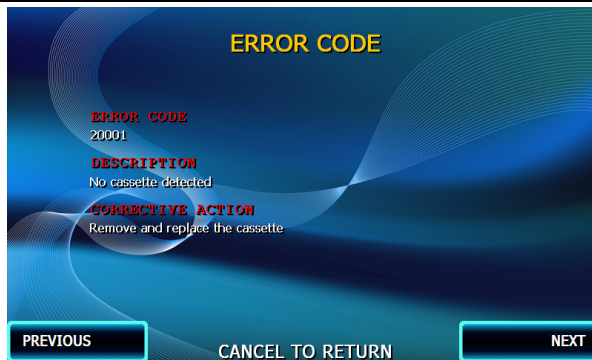
Note that the ATM Serial number / Terminal ID number and Passwords are not copied as part of this feature.

1.4 REPORTS MENU

The reports menu provides statistical information as well as troubleshooting and error information.

1.4.1 ERROR CODE

If the machine is out of service, and you are unfamiliar with the error code being displayed (or none is displayed), this screen will provide error descriptions as well as corrective action for the currently displayed code. Press the Error Code button to enter this screen. Use the function keys to scroll through all the possible error codes and descriptions the ATM can report. To the left is an example of an Error Code screen.

1.4.2 S/W VERSION

This screen provides the current revisions of software used in your ATM. This information may be used to troubleshoot a problem, or simply to make sure that the software being used is up to date. It is useful to have this information when reporting a problem to your dealer / distributor. Occasionally check with your dealer / distributor for software updates. Press the S/W Version button to view the current revisions. Press Enter key to print a copy of the displayed information.

1.4.3 PRINT ALL SETUP

The Print All Setup report is a complete listing of all the programming details for your ATM. It includes everything from software versions to message screens and host setup parameters. This report is extremely important when troubleshooting problems. It is highly recommended to keep a copy of this on hand for when you need to contact your service personal. To print the report, press the Print All Setup button, when the report is finished it will prompt you to press Enter to return to the Reports Menu.

1.4.4 ERROR SUMMARY

ERROR SUMMARY

START : 11/07/2013,14:37:51

NO.   ERROR CODE   COUNT
1   F0001   1
2
3
4
5
6
7
8
9
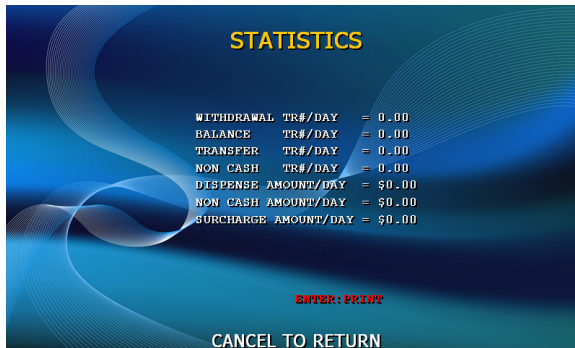10   CANCEL TO RETURN

PREV

NEXT

CLEAR

PRINT
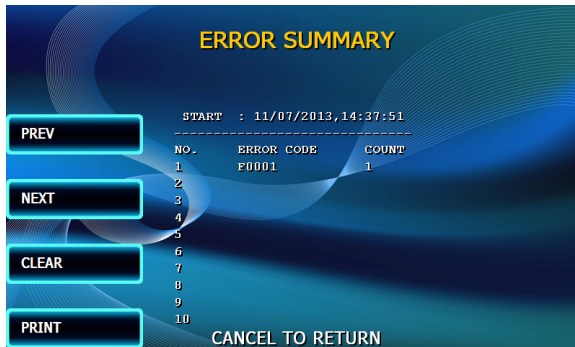
This report is a running total of all errors that have occurred to your ATM. It lists the errors by the number of times they occurred. Sometimes your machine can go out of service and no error code is displayed (usually with communications problems). If this happens, check the error summary, as the code will be displayed here. You can print these errors   To the left is a sample of an error summary report.

Please note that not all codes are 'errors' codes like F0001 – add money, or C0047 – cassette empty can be common.

Press Clear to clear the report and start over. This can be useful if you have a machine were multiple errors are occurring. If you clear the error codes and then attempt a transaction, if that transaction fails, the error summary will only show those errors that occurred during that last transaction. You can also print the error summary list by pressing the Print button.

1.4.5 STATISTICS

STATISTICS

WITHDRAWAL TR#/DAY   = 0.00
BALANCE   TR#/DAY   = 0.00
TRANSFER   TR#/DAY   = 0.00
NON CASH   TR#/DAY   = 0.00
DISPENSE AMOUNT/DAY = $0.00
NON CASH AMOUNT/DAY = $0.00
SURCHARGE AMOUNT/DAY = $0.00

ENTER:PRINT

CANCEL TO RETURN

This report keeps running averages of transaction information, including:

- Withdrawal Transactions per day
- Non-Cash withdrawals per day (if enabled)
- Balance Transactions per day
- Transfer Transactions per day
- Notes Dispensed per day
- Surcharge amount collected per day

1.5 DIAGNOSTICS

The ATM features built-in diagnostics features to assist you in troubleshooting any problems that may develop. Below is the main diagnostics menu.

1.5.1 CDU - CASH DISPENSER

This will test the ability of the cash dispenser to pull a note from one or both cassettes (based on how the CDU is programmed) and send it to the reject bin. You can choose from the first cassette, second cassette or both cassettes at once. This will NOT send money to the cash tray. Because all bills go to the reject bin, this test does not cover reject sensors.

NOTE: You must have bills entered into Settlement before running this test.

1.5.2 PRINTER

There are three functions: Initialize, Print and Eject.

Initialize   Will print and cut a receipt which says 'Test Print Ok'
Print   Will print characters to the receipt, but will not advance or eject the receipt
Eject   Will advance and cut the receipt

1.5.3 MODEM

The modem test will allow you to enter a phone number into the machine and test dial. To run the test, press the Modem button and then press Test Dial. Using the main keypad, enter a phone number to be dialed (for example your cell phone number) and then press <Enter>. The modem should dial out to the number you entered. To end the call press Modem Hang up. In most cases a failure during the modem test will relate more to phone line problems rather than the modem circuit itself.

1.5.4 PINPAD

This tests the keypads of the ATM. Press thePINPAD button and a map of all keys will display on the screen. Press the different keys on each keypad (main and LCD) and the appropriate key will blink on the screen. Pressing the <Cancel> key on the main keypad will stop this test and return to the diagnostics menu.

1.5.5 CARD READER

This will test the three tracks of the card scanner to ensure they are reading properly. Press the Card Scan Button, you will see a screen displaying the two ISO tracks. Swipe your ATM card (or any card with a magnetic stripe) and the information from that card will appear on the appropriate track. During normal operation of the ATM only ISO Track 2 is read, however during the card swipe test both tracks are read at once.

1.5.6 AGING

The aging test is used at the factory to test machines prior to shipping and for quality control. Selecting this test will cause the machine to perform all self tests for an unlimited amount of time.

You can select the options in the Aging Menu for which tests to perform what interval / number of times you want the tests to run.
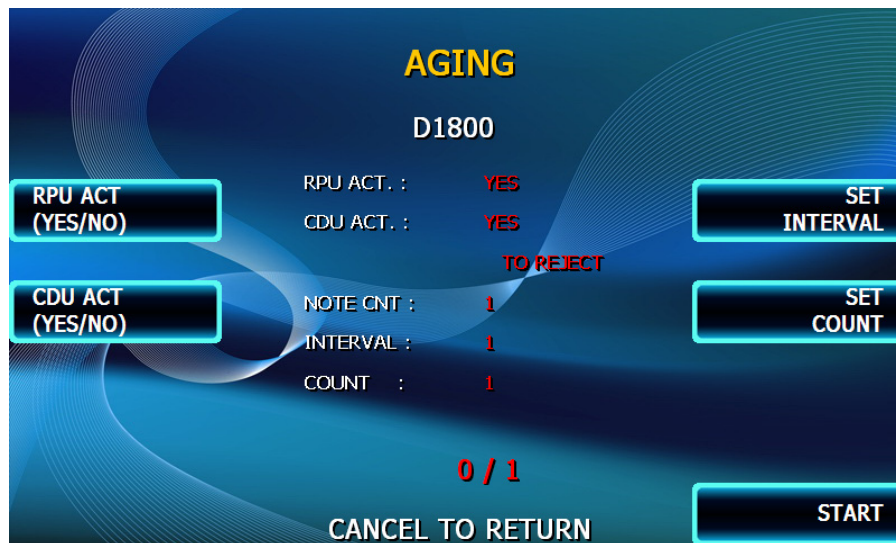
1.6 CUSTOMER SETUP MENU

The Customer Setup menu controls surcharge information, BIN lists, receipt options, advertisements and keypad lighting.
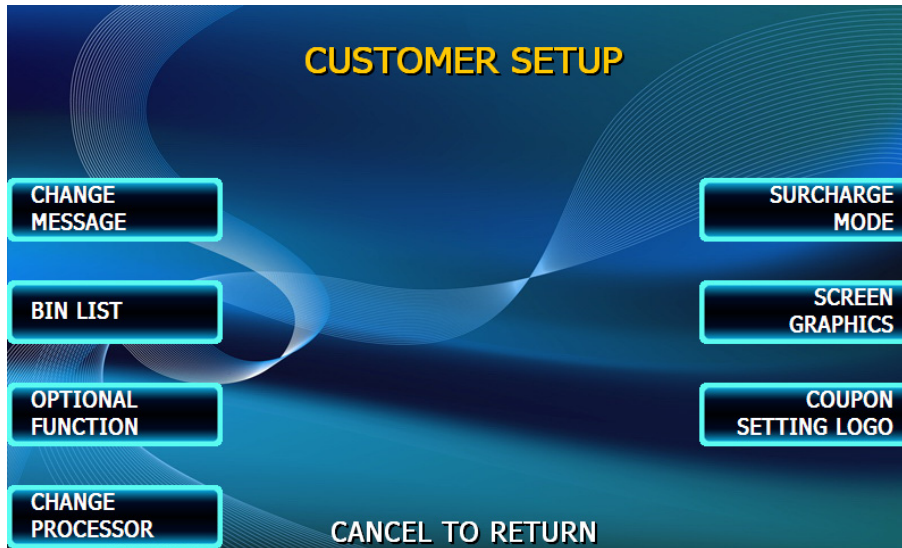
1.6.1 CHANGE MESSAGE

The Messaging options for the ATM are a welcome message and a receipt header message. The Welcome message allows line of 35 characters, which will appear at the top of the main screen (above the center graphic). The receipt header is up to 4 lines of 25 characters, which will appear at the top of each receipt.
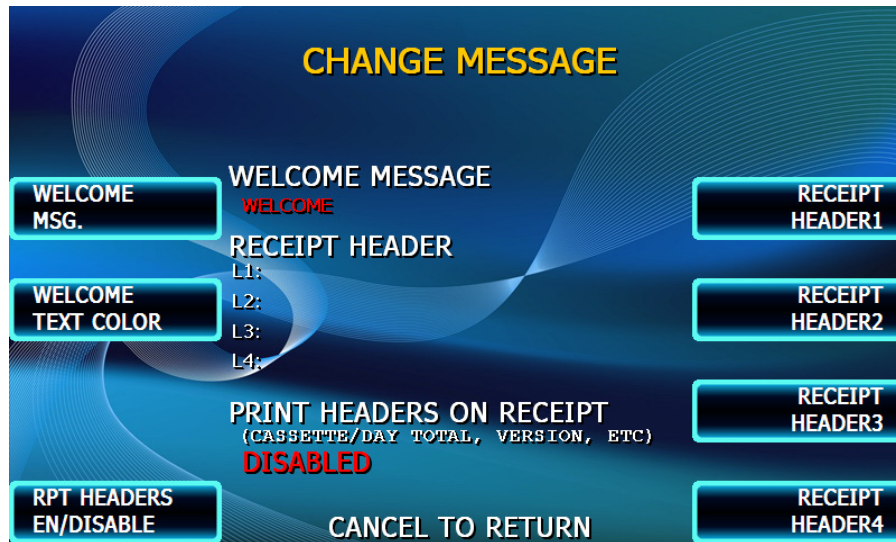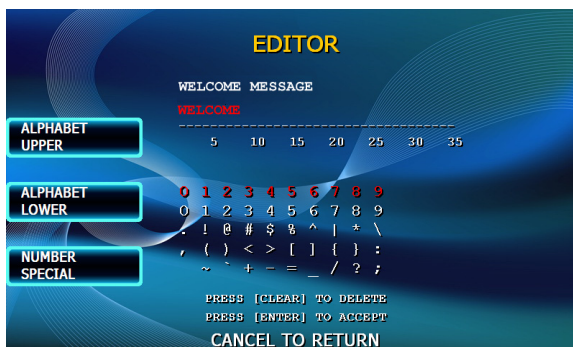
CHANGE MESSAGE

WELCOME MSG.

WELCOME TEXT COLOR

RPT HEADERS EN/DISABLE

WELCOME MESSAGE
WELCOME

RECEIPT HEADER
L1:
L2:
L3:
L4:

PRINT HEADERS ON RECEIPT
(CASSETTE/DAY TOTAL, VERSION, ETC)
DISABLED

CANCEL TO RETURN

RECEIPT HEADER1

RECEIPT HEADER2

RECEIPT HEADER3

RECEIPT HEADER4

WELCOME MESSAGE

EDITOR

WELCOME MESSAGE
WELCOME

ALPHABET UPPER

ALPHABET LOWER

NUMBER SPECIAL

5   10   15   20   25   30   35

0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
. ! @ # $ % ^ | * \
, ( ) < > [ ] { } :
~ ` + - = _ / ? ;

PRESS [CLEAR] TO DELETE
PRESS [ENTER] TO ACCEPT
CANCEL TO RETURN

Once you have selected Welcome Message from the Change Message Menu, you will be prompted with the Welcome Message editor screen screen.

Note that the Welcome message will display across all graphic or custom advertisement screens while the ATM is idle. If you would prefer not to have the message display over the top of your custom images, you would need to leave the Welcome message blank.

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WELCOME TEXT COLOR

You can change the color of the Welcome message from this menu. This can be helpful if you'd like to match or contrast against a custom graphic screen you've loaded.

Choose the number matching the color on the screen you'd like to use.

RECEIPT HEADER
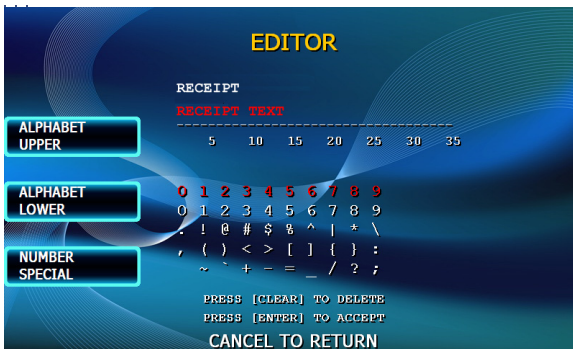
Once you have selected Receipt Header from the Change Message Menu, you will be prompted with the following screen. See the above instructions for navigating this menu.

1.6.2 BIN LISTS

BIN numbers are card numbers that you have preset with your processor to not be surcharged. You must set this up with your processor, who will then give you numbers to enter in the list. These numbers will reference cards that you wish to not be charged a surcharge for transactions. The ATM will hold up to 60 numbers.

Step 1
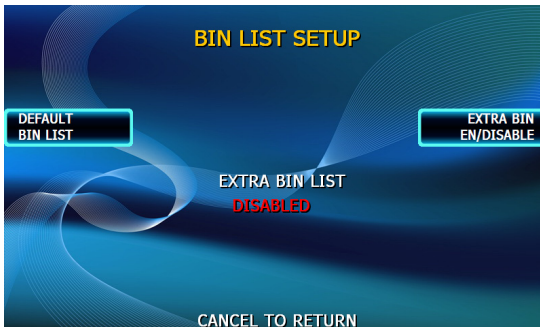
To enter the BIN numbers select DEFAULT BIN List from the Customer Setup menu. The list can hold 2 banks of 30 numbers for a total of 60. Bank 0 and Bank 1. Press the OTHER button to switch between the banks.
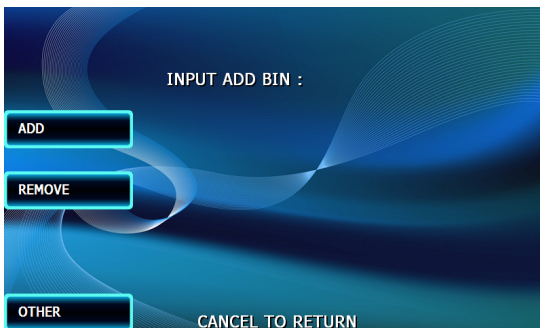
Step 2

To add a number, press ADD and input the BIN number with the keypad. To remove, press REMOVE and type in the BIN number you wish to delete from the list.

Press OTHER to switch between Bank 0 and Bank 1.

Step 3

If you wish to view the contents of the BIN list, use the Print All Setup report. From the Operator Function Menu, go to Reports, then Print All Setup. Any numbers added to the BIN list will be visible from this report. **NOTE:** Numbers loaded via the extra BIN file will not display on the Print Setup or any other report.

EXTRA BINs

If you need to support more than the 60 BIN numbers which can be loaded directly into the Operator Menu, the ATM will support an 'Extra BIN' list which can be loaded remotely either through an SD memory card, or with the GenRMS Program.

The Extra BIN file can support thousands of additional numbers.

Please see the Appendix section at the back of this manual for instructions on creating and loading additional BIN number.

If you do take advantage of this feature, the BIN screen will show that an Extra BIN file is loaded as well as a file date to help manage any future updates.
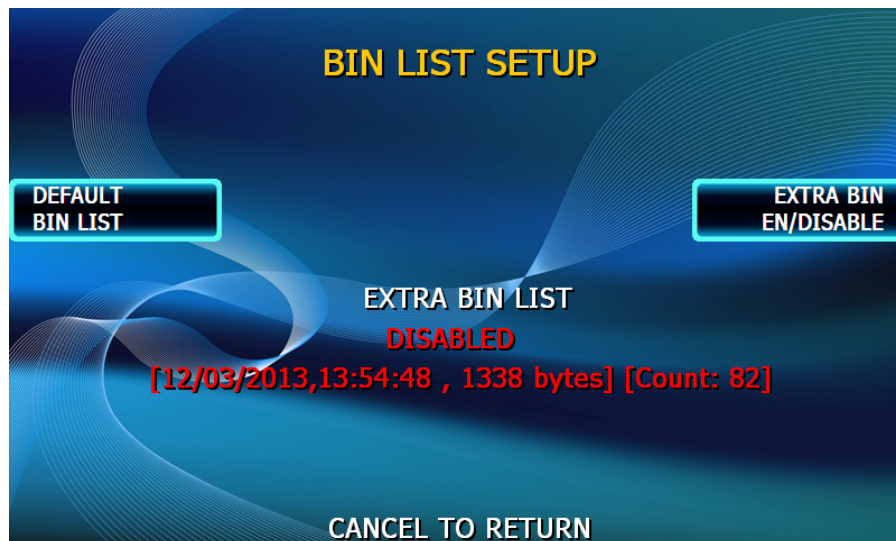
When an Extra BIN file is loaded, you'll see it listed as shown above with a date, time, file size and count (number of BINs contained in the file)

You can Enable or Disable the Extra BIN file using the button on the right.

1.6.3 OPTIONAL FUNCTIONS

LOCATION NAME

Adding a name to this location will print the name entered onto the journal records and print all setup. This is purely a convenience option and is not required.
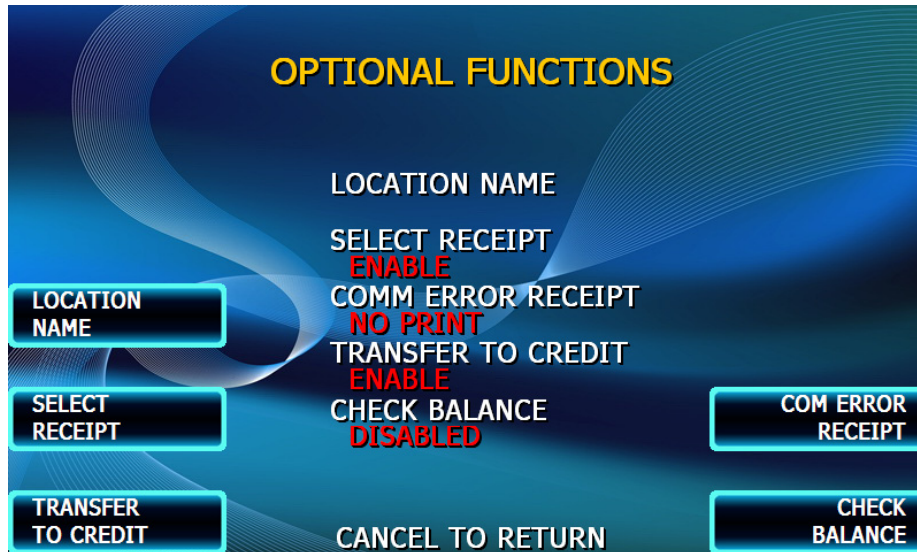
SELECT RECEIPT

This feature allows the ATM to complete transactions even though it may not be able to dispense a receipt. If the ATM experiences a paper jam, or runs out of paper, the customer will be asked if they would like to complete the transaction even though they will not receive a receipt. If the customer answers Yes, the transaction will continue. Following the transaction the customer's information (what would have appeared on the receipt) will display on the screen. The ATM will continue to operate without use of the printer until someone accesses the Operator Function menu. At that time the error must be corrected before the ATM will go back into service.

To enable the option, press Select Receipt, the lower portion of the screen will display the options status.

TRANSFER TO CREDIT

Some networks do not allow customers to transfer funds to or from their credit cards. By enabling / disabling this option you will add or remove the option button from the customer menus. Check with your Distributor / Processor as to whether or not they support fund transfer to or from credit cards. NOTE: If your network does not support such transfers and you leave the option enabled, the customer can choose it from the menu however the network will not authorize the transaction.

COM ERROR RECEIPT

Enabling this option will cause the machine to print COM errors on the bottom of the customer receipt.

CHECK BALANCE

Enabling this option will ask each customer if they would like to check their balance before each transaction.

1.6.4 CHANGE PROCESSOR

Host Processor selection changes the communications protocol to specifically match your particular processor. In most cases this is set at the factory when your machine is ordered, however in the event that the machine needs to be reprogrammed for a new processor, it may be necessary to change the processor mode.

To access the Host Processor mode, enter the Customer Setup menu using the Master Password.
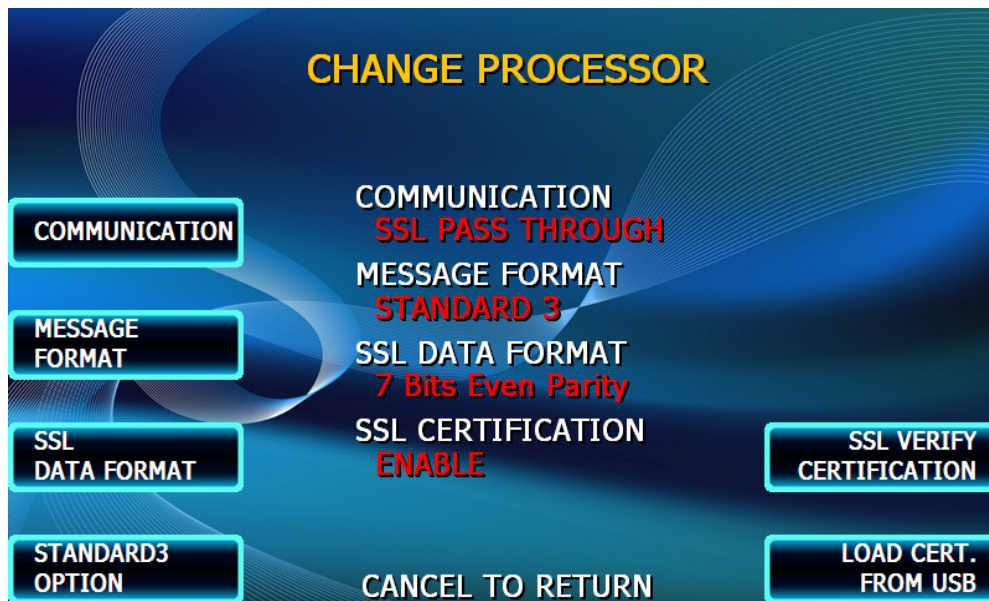
Communication modes are:

Modem –   Modem
             Modem with EOT Reversal

TCP/IP –   Standard TCP/IP
             VISA FRAME TCPIP
             ACK CONTROLLED TCPIP
             SSL PASS THROUGH
             SSL LENGTH PREFIX W/O ETX
             SSL LENGTH PREFIX WITH ETX

Use the Message Format button to select the appropriate Host Processing Mode.
Available formats are:

Standard 1
Standard 2 (CSP200 Emulation)
Standard 3 (Triton Emulation)
EPS

If Standard 3 is selected, you'll see a Standard 3 Options button which will give access to the Extended Messaging options.

Contact your distributor or processor for which mode is appropriate.

SSL Options

While SSL is supported on earlier versions of ATM software, the following options appear on your Operator Menu as of V05.00.08.

SSL (Secure Socket Layer) is a method of encrypting the data that's transmitted from your ATM to the host processor across the public internet.

If you are attaching your ATM directly to the internet, via your broadband connection then the transactions must be encrypted. Note that if you're using a wireless device or some other 3rd party box to connect your ATM to the processor, that device will likely control the encryption. Check the instructions included with your device.

SSL DATA FORMAT – (setting is based on the processor, in most cases the default is used)
7 Bits Even Parity
7 Bits Odd Parity
8 Bits

SSL VERIFY CERTIFICATION – Enabling this option will cause the ATM to verify the root security certificate with the host when establishing a secure connection. This is similar when you're connecting to a website and see the green strip or 'Locked' symbol which indicates you browsers encryption certificate has been verified.

If this option is disabled, the transaction information is still encrypted however the ATM will not require certificate verification with your host.

LOAD CERT FROM USB – In some cases your processor may require a special certificate file be loaded on the ATM. This allows the processor or host to control the encryption security.

This certificate file would be obtained by your processor and would need to be copied to a USB memory device. Insert the device into the USB port on the back of the ATM screen and press Load from the Operator Menu.

As of software version V05.00.08, we are loading our generic SSL certificate (4096-bit) and a 'Trustwave' 2048-bit certificate. The ATM will automatically try to verify all loaded certificate files when connecting to the processor.

Please note that if your processor requires loading a special certificate, they will typically expire after a period of up to 3 years. After that time a new version of that file may need to be loaded.

NOTE: The correct settings for these options depend entirely with the specific requirement of your host. Check with your processor or distributor before programming your ATM.

There are two new error codes associated with SSL connections / certificate verification:

D2600 – SSL Certification Read Error (cannot read the file being loaded)
D2601 – SSL Certicication Verify Error (file is not matching host)

1.6.5 SURCHARGE MODE

The Surcharge menu displays the current rate at which customers are charged per transaction, the person or account that the surcharge funds are sent to and whether or not the option to surcharge is enabled or disabled. The information programmed here must match the information given to the processor at the time the account was created. Because of features like Percentage Surcharge that require the surcharge value to be set at the ATM, it's possible for the ATM to override what the processor expects to surcharge (or not surcharge customers at all) if these settings are not correct.

Please review the following setting carefully and instruct your operators on the risks involved in changing surcharge settings.
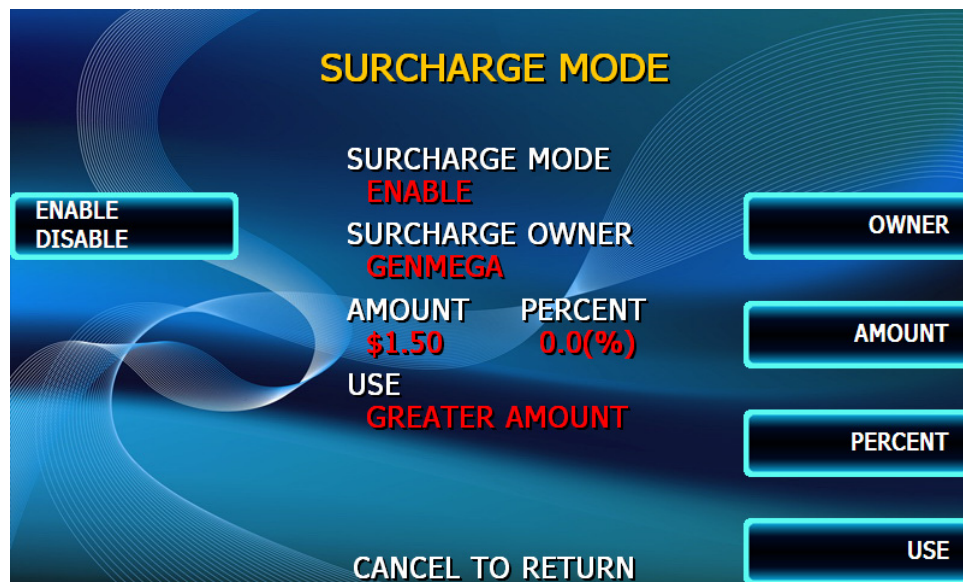
To set the surcharge parameters begin by entering the Surcharge Mode menu from the Customer Setup menu. The bottom of the screen displays the current status of each surcharge parameter.

DISABLE/ENABLE

This button toggles the surcharge option on and off.

SURCHARGE OWNER

Surcharge Owner is the text field that will display both on the surcharge authorization screen, but also on the customer receipt.

AMOUNT

To set the surcharge amount, press the amount button and type the dollar amount using the main keypad. Next set the decimal point using the Enter key on the keypad. Then type the cents using the keypad and finally press Enter to finish.

PERCENT

This allows you to set the surcharge amount as a percentage of the overall amount the customer is withdrawing per transaction. Check with your processor to make sure that they support this function. Note that as of V05.00.08 software, the percentage amount can include a decimal point. To use this, enter the percentage number followed by the ENTER key for the decimal, and then the other number. Same procedure as the Surcharge Amount.

USE

Use is a very important option and can negatively affect how your Surcharge is collected. Please see the warning notes below. Use selects between the percentage amount and the static surcharge to determine which should be used.

LESSER = Surcharge amount will be the LESSER amount between Surcharge and %
GREATER = Surcharge amount will be the GREATER number between Surcharge and %

As of V05.00.08 there is also an option for customers processing with RBS Worldpay, which allows the percentage function to work with their switch. It operates in the same way as described above accept has 'WORLDPAY' before the command.

WORLDPAY_LESSER
WORLDPAY_GREATER

WARNING: If you set the percentage surcharge mode from 'Greater' to 'Lesser' and leave the percentage value at 0%, then customers will not be surcharged.

Example - Surcharge set as follows:

Surcharge $1.50 or 0% whichever is 'Greater' = customer is charged $1.50.
Because $1.50 is a greater value than 0.

Surcharge $1.50 or 0% whichever is 'Lesser' = customer is not charged at all.
Because 0% is lesser than $1.50.

****** Please be very careful when setting your surcharge settings ******

Always test your settings to make sure your machine is surcharging correctly.

1.6.6 SCREEN GRAPHICS

The ATMs are capable of displaying up to 8 customized graphic screens.

To take advantage of this feature, the graphic files would be created on your computer using a graphics or 'paint' program and then are downloaded into the ATM either directly at the ATM using a SDRAM card or by using the Genmega Remote Management Software (GenRMS).

When the advertisements are loaded and enabled they will rotate in order while the ATM is waiting for a transaction and also while the transaction is processing. There is a timer, which allows you to set a delay before switching to the next graphic screen. Please see Appendix D at the end of this manual for detailed instructions for creating advertisements.
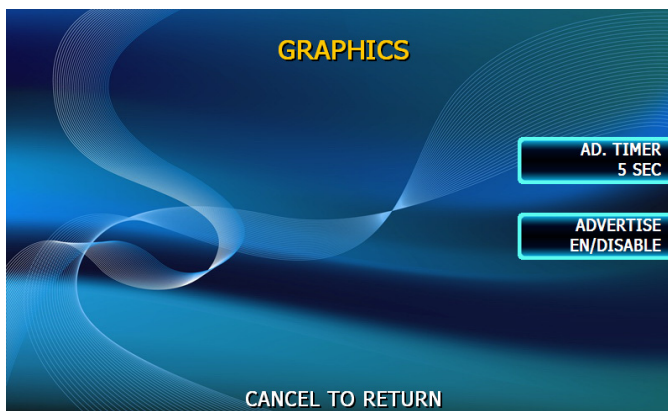
Enter the Graphics menu and choose "Advertise" enable or disable each loaded graphic.

By default, the ATM will come with several pre-made graphic screens (US and Canadian).

Press PREV. (Previous) or NEXT to toggle between the available screens and then press ON or OFF to select whether or not the screen should be displayed.

Press ON / OFF to toggle if the graphic will be displayed.

1.6.7 COUPON SETTING, LOGO
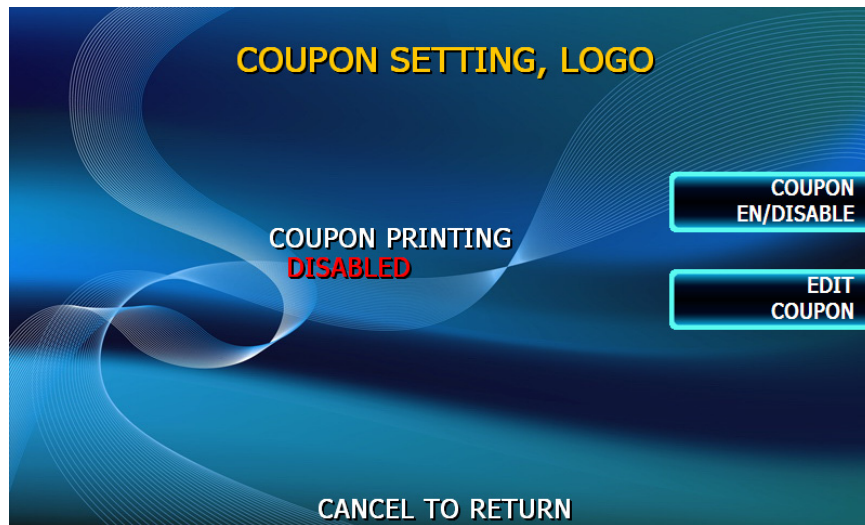
If your ATM was available with an optional 3" printer (G2500 / GT5000) then it is capable of displaying a graphic on the receipt. (the standard 2" printer cannot display graphics)

This would be a black and white graphic image (BMP) that is max of 576 x 222 pixels.

Once loaded it will display at the top of each receipt.

The example to the right shows an actual receipt printed with a custom logo and also a coupon.

See the Appendix section at the back of this manual for instructions on loading receipt graphics.

1.6.7.1 RECEIPT COUPON

Up to 4 separate text coupons can be programmed however only one will print on the bottom of each receipt at a time. If more than one coupon is programmed, then they will rotate through the coupons with each transaction beginning with the first.

Each coupon appears at the bottom of each receipt below a dashed line (see coupon sample).

The coupon contains:
- The current ATM date and time.
- The ATM Terminal ID number.
- Sequence number (journal)
- Reference number
  (generated number unique to that ATM)
- 2 lines of custom text, 25 characters per line

```
----------- CUT HERE -------------

11/11/2014,12:06:18
TERMINAL # = 70330999
SEQUENCE # = 0003
REF. #     = 123456789012


*******************************
*   THIS IS A SAMPLE OF A      *
*   RECEIPT COUPON !!!!         *
*******************************
```

.
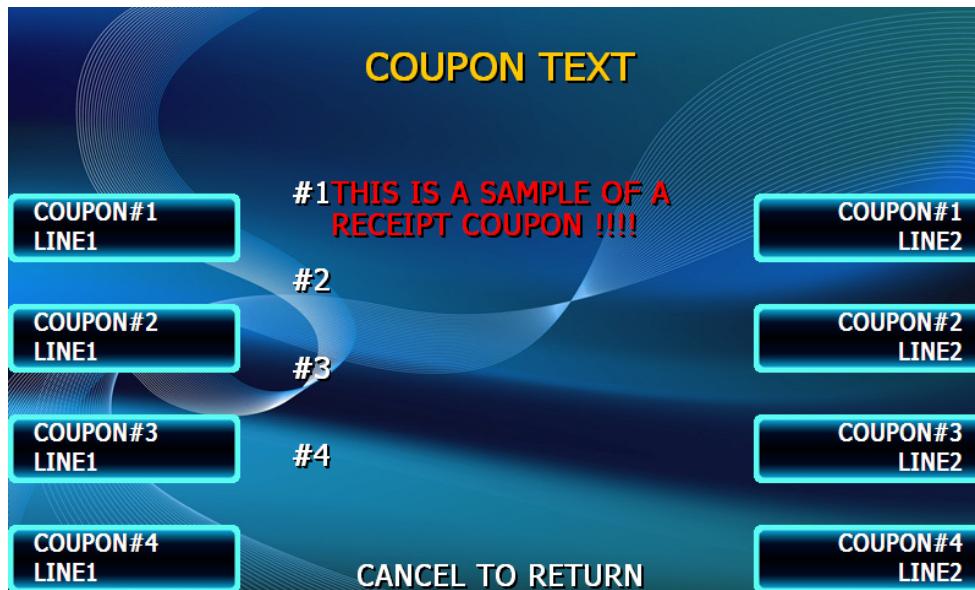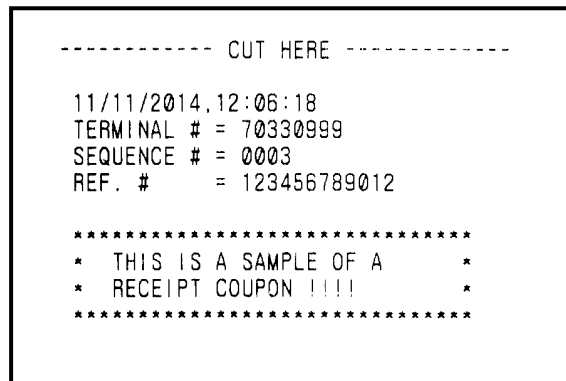
Choose Edit Coupon to enter the text for each optional coupon. Choose Line 1 to edit the top line and Line 2 to enter the bottom line for each coupon. If you leave the lines blank, then that coupon will not print in the rotation

1.6.8 CLEAR NVRAM – JOURNAL

There is a hidden menu within the Customer Setup screen.

If you press the lower right function key (F8) on the Customer Setup main menu, it will pull up the following menu:

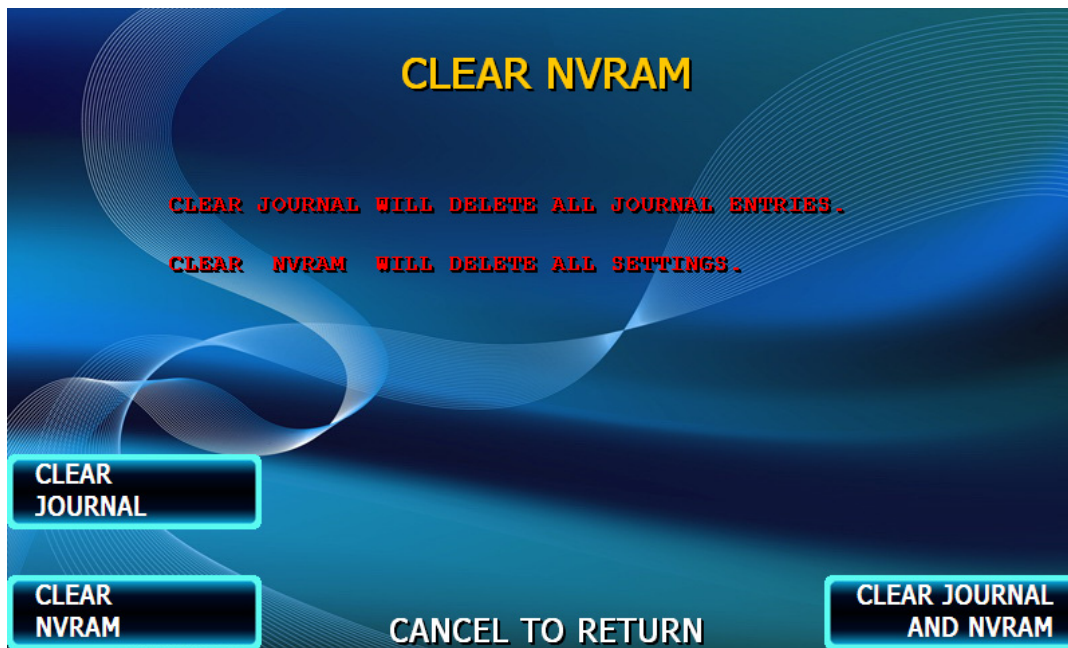**WARNING:** Any option selected in this screen is a permanent deletion of data. There is no way to recover once it's lost. DO NOT use this menu unless you are certain as to what you're doing.

CLEAR JOURNAL:

This will permanently delete all Journal records stored in the ATM.

CLEAR NVRAM:

This will delete all the programmed setup information in the ATM (including your passwords) and return the ATM back to factory default. However, your Master Keys and Secure Mode Passwords are not reset in this process (those values are stored in the keypad).

Any custom graphics or ExtraBIN files are also not erased. To clear those, you must reload software.

CLEAR JOURNAL AND NVRAM:

This option will wipe out both of the data sets listed above.

1.7 THE SYSTEM SETUP MENU
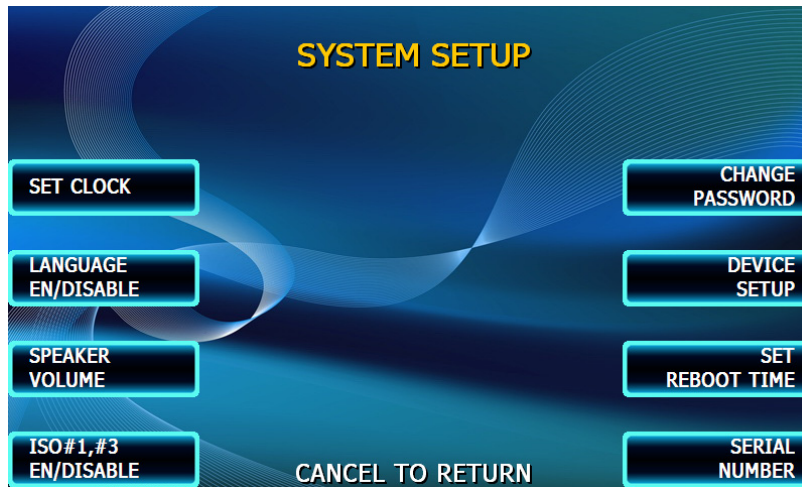
1.7.1 SET CLOCK

The Set Clock menu allows you to set the clock built into the ATM to the appropriate date and time. You should set this for local time in the area the machine is to be installed. Note that with each transaction you will see also see a "Host" time, this is the local time for the processor and may be different from local time at the ATM. To set the clock, simply press the Set Clock button and press the key corresponding to the function you want to set (month, day, year, etc.)

NOTE: The ATM will not automatically adjust for daylight savings time. You must set this manually if you wish it to change.

© Genmega 2013
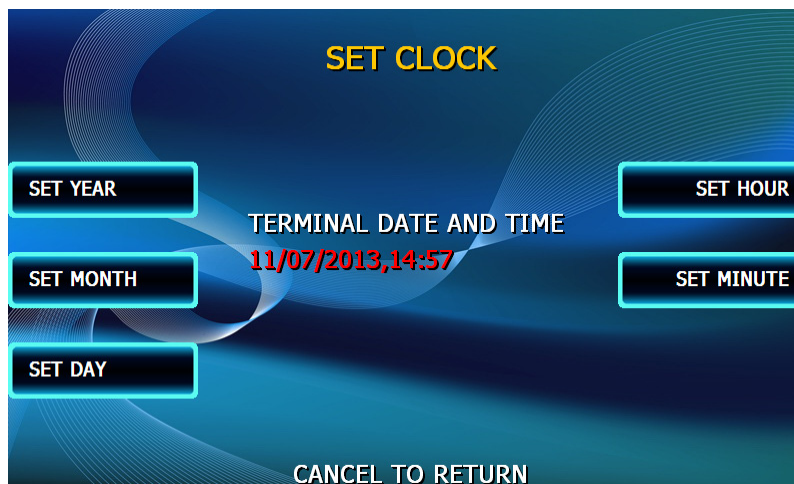
1.7.2 OPTIONAL LANGUAGES

The Genmega ATMs support 4 on screen languages: English, French, Spanish and Korean. The optional languages will display on the welcome screen, then the customer will be prompted to choose a language to be used for the rest of that transaction.

NOTE: The optional languages are displayed on screen only and do not print on the receipt or journal. Receipts, journals and operator menus are always in English. To enable or disable a language, simply press the button next to the language you wish to change.
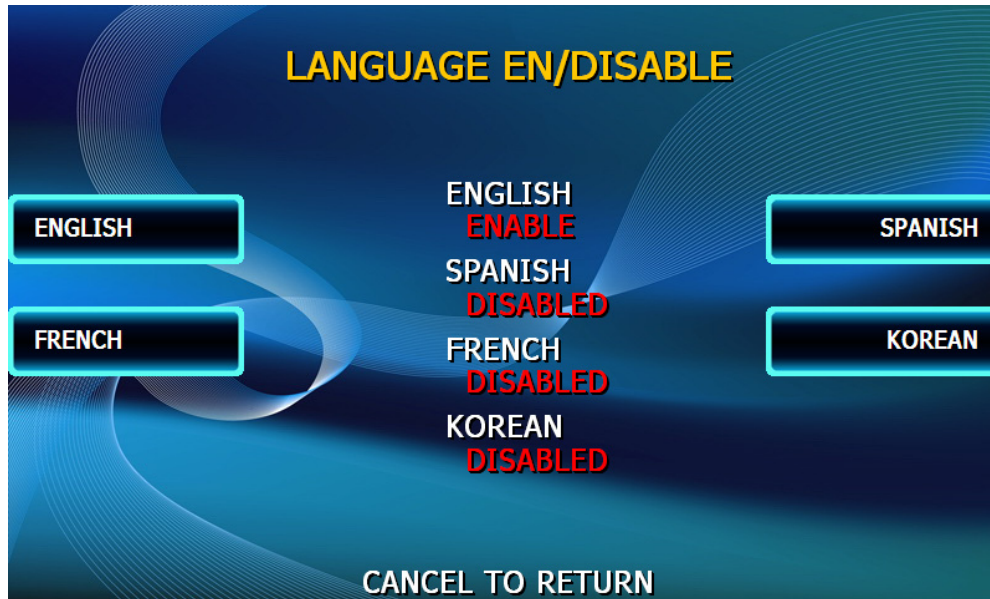
1.7.3 SPEAKER VOLUME

The speaker volume command controls the BEEP noise you hear when pressing keys.
It does not control the 'volume' up or down, but rather on or off.

ON = You can hear beep noise when pressing options in the menu (default)
OFF = No beep noise in the menus.

SET SPEAKER VOLUME

SPEAKER
ON/OFF

SPEAKER VOLUME
ON

CANCEL TO RETURN

1.7.4 ISO TRACK EN/DISABLE

The ISO Tracks are the three tracks available for the card swipe head to read. The ATM is already defaulted to read from Track #2 (which is why it's not shown). This parameter should not be changed. Changing the ISO tracks can cause the ATM to not read cards properly.

ISO #1,#3 EN/DISABLE

ISO #1

ISO1 EN/DISABLE
DISABLED
ISO3 EN/DISABLE
DISABLED

ISO #3

CANCEL TO RETURN
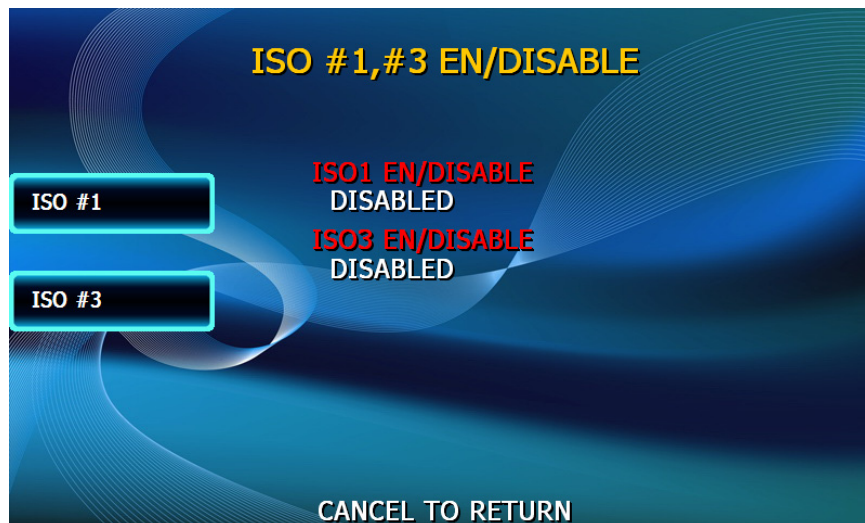
1.7.5 CHANGE PASSWORDS

The ATM uses three passwords to provide security to the operator menu system. These are Operator, Service and Master.

- Operator Password (allows access to basic menu structure)
- Service Password (allows access to basic and diagnostic menus)
- Master Password (allows access to all menus including setup parameters)

The Operator password can be changed by anyone with the current Operator password. The Service and Operator passwords can be changed by anyone with the Service password. The Master password can only be changed by someone with the current Master password. Any password can be changed using the Master password.

For example, if you have lost the Operator or Service password, you can use your Master password to change them. Simply enter the Master password when it requests the Operator or Service password and then enter the new password.
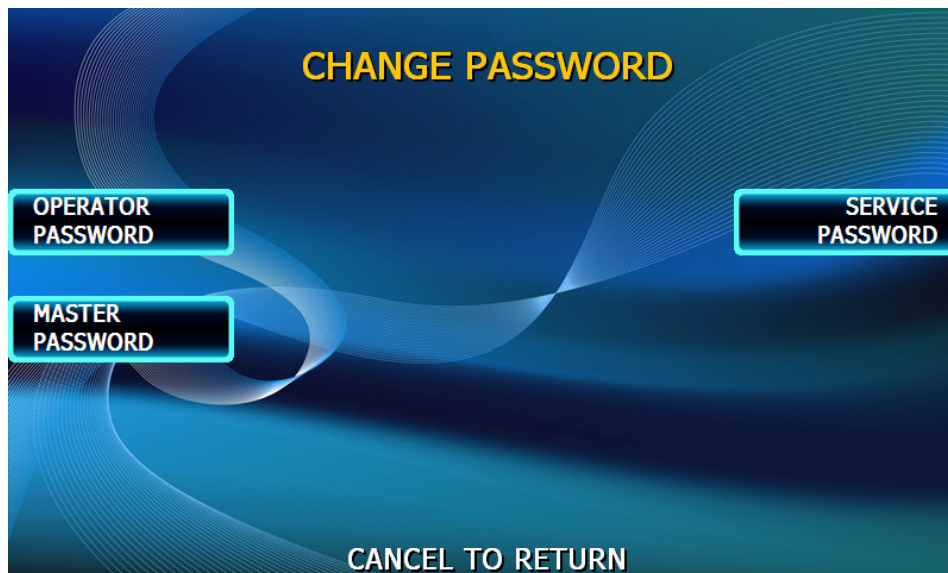
To change a password, press the button for the appropriate password. You will be prompted to enter the new password and then enter it a second time to verify.
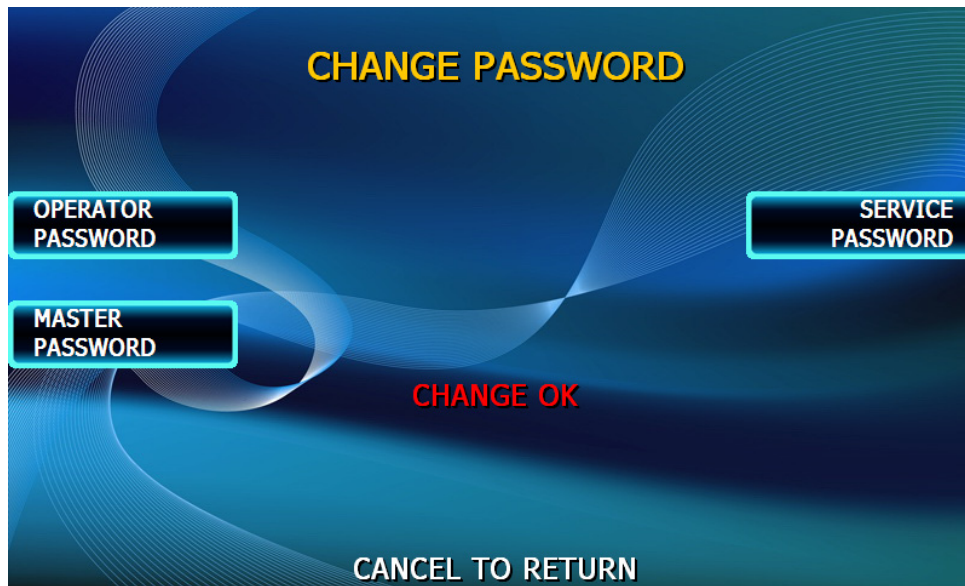
NOTE: All passwords <u>MUST</u> be 6 digits. If you use a password that is less than 6 digits, the passwords may default back to factory if the machine is power cycled. If your customer wants a 4 or 5 digit password, add zeros to the end to make it 6 digits.

WARNING: The ATM will NOT go into service with the default master password. You must change the master password from default! If you attempt to go in service with the default master password, you will receive a **F0016** Error, which will notify you that the master password has not been changed.

It is critical that you do not set the same password for each of the three levels. If you duplicate the password, the lower level permissions will be the default.

For example, if the Operator Password is set to 123456 and you also set the Master Password to 123456, then when you log in with that password, you'll only have access to Operator level commands.

In this example, you'd have to change the Operator Password to something else, and then 123456 would then allow you to log in as Master. If you forget the Master password, you'll need to reload the AP software to reset.

1.7.6 DEVICE SETUP

The Device Setup menu provides options to adjust parameters of the various peripherals. Under normal circumstances you should not need to make changes to these parameters. The default settings are optimized for your particular machine.
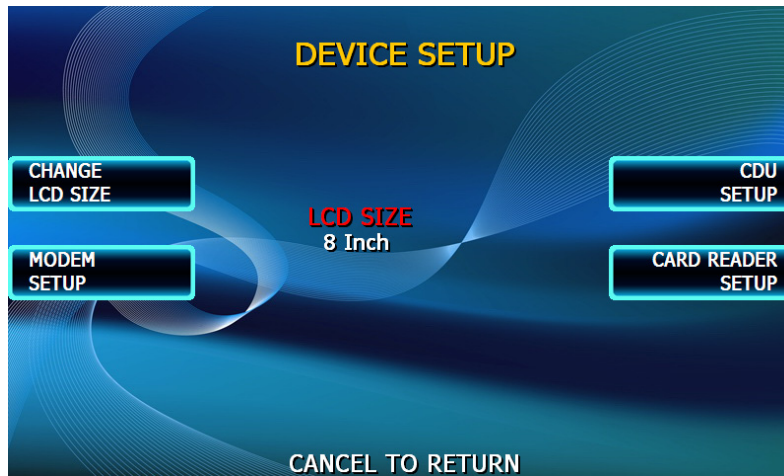
1.7.6.1 CHANGE LCD SIZE
If your ATM supports multiple screen size as an option during purchase (example = G1900) then you may have a setting for LCD size in the Device Setup menu as shown above.

If the value is not set correctly, the function keys next to the screen may not line properly with the graphics on the screen. Press the LCD Size button to toggle through the values, then restart the ATM. The menu buttons should then properly match the function keys.

1.7.6.2 MODEM SETUP
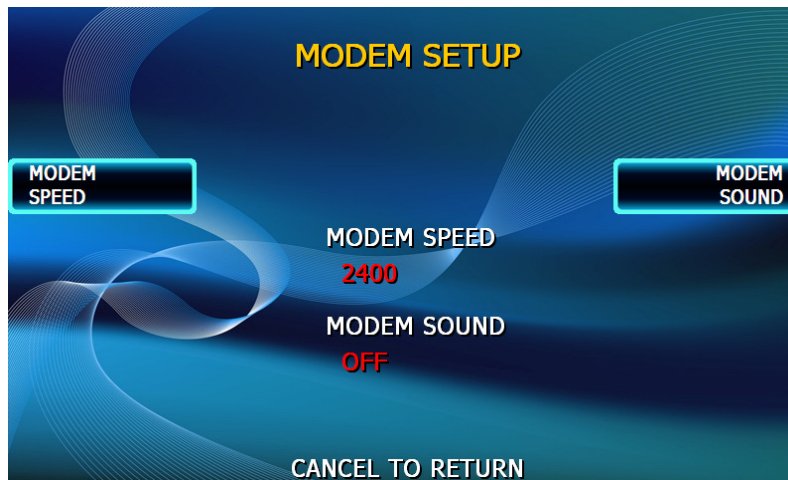
MODEM SPEED

This sets the speed at which the modem will begin communication with the host. The default speed is 2400.

Available settings : 1200, 2400

MODEM SOUND

This feature is not active on most Genmega ATMS, toggling the option from ON to OFF will have no effect.

1.7.6.3 ATM TCPIP SETUP

TCP/IP Setup is done in several menus. First you need to specify TCPIP from the Communications Menu: Check with your processor for which protocol settings they are expecting.

To change, go to:
Operator Function Menu → Customer Setup → Change Processor → Communication
Change this value to SSL PassThrough (or other depending on processor or wireless box)

Once you change from Modem, to one of the TCP/IP settings, several other menus change to support various network functions.

For Example:
Operator Function Menu → Host Setup → Host IP and Port #

Here you will set the Host Processor IP (or URL) address and port. For some processors an IP address (example = 121.212.1.21) is used and for others you'll enter a URL address (example = trans.mybank.processor).

In addition to the address, there will also be a port setting (example = 6543)
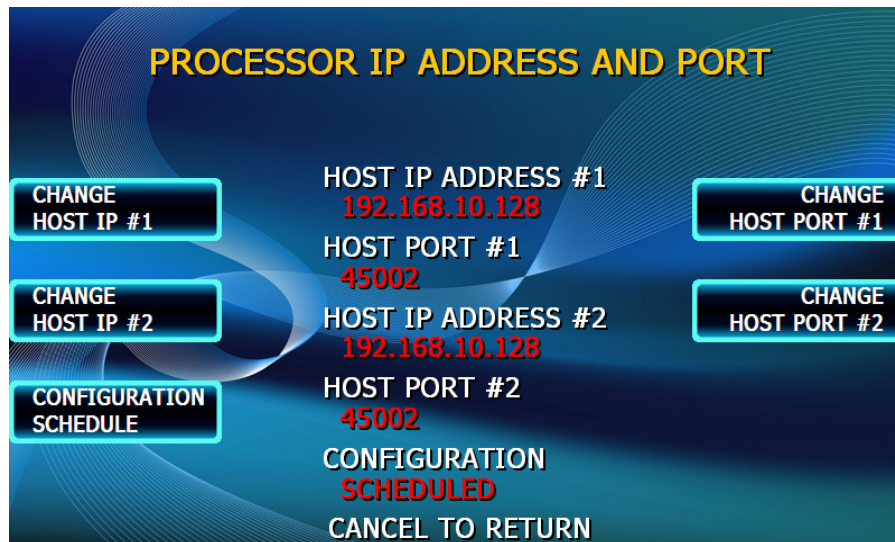
NOTE: Configuration Schedule allows you to force the ATM to update configuration with the host upon boot up. You might use this command if the terminal gets consistent Key Errors and you want to force download of a new working key.

Generally you should never have to change the Scheduled / Not Scheduled values.

The ATM IP information is set using the menu found at:

Operator Function Menu → System Setup → Device Setup → ATM TCP Setup

This menu is only active if you have the communication mode set to TCP
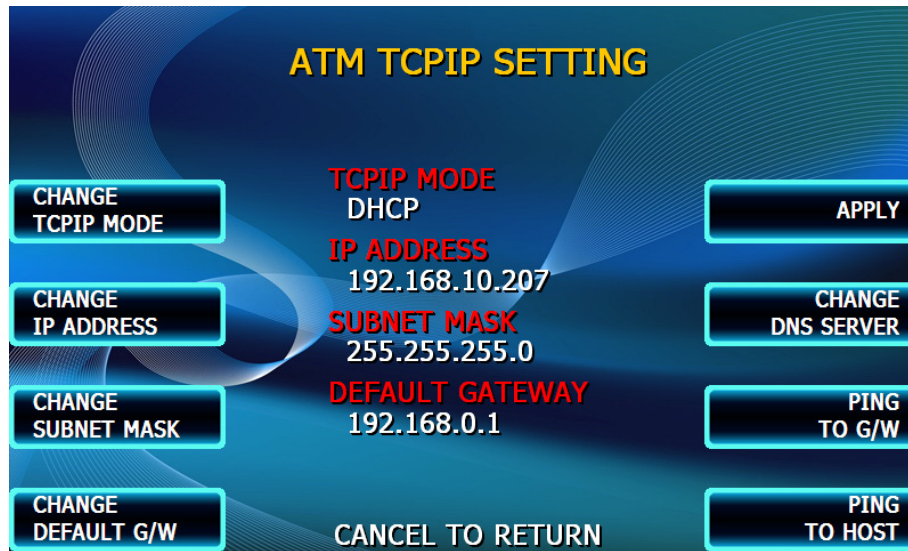
These settings will be dependant on the network connection available at the location where the ATM is deployed. It may be necessary to contact the ISP or Network provider for the location to determine how this should be set.

TCPIP Mode: DHCP or STATIC IP

NOTE: In almost all cases you will choose DHCP when setting up you machine on the internet. Uses for STATIC include ATMs on corporate networks (casino, hotel, store chain) or some wireless devices. Check with the locations IT staff, or the instructions provided with your wireless device for assistance.

In typical installations, for example a store or location with a DSL or broadband internet connection that you are tapping into, you will always use DHCP mode.

Change IP Address: Enter the ATM IP address here (for static IP) or this field will automatically populate if DHCP is used to obtain an IP automatically.

Subnet Mask and Gateway: These values will be provided by your ISP/Network Provider and refer to the Router that you'll be connecting to.

Ping to Gateway: This is a test which will 'ping' the Router and verify communication between the ATM and the network. If this test fails, then the ATM will not reach the host.

Ping to Host: This test attempts to verify communication with the IP address or URL that is programmed in the 'Processor IP Address' menu. Note that most processors or switches do not allow 'pinging' for security reasons.

TCPIP Troubleshooting

When trying to connect your ATM to the internet, there are two error codes which can occur.

2511 – This means that the ATM sent a request, however nothing responded.
Typically this means the ATM cannot get out on the internet.

To test this, we suggest replacing the Host IP number with one from a common public website like www.google.com or www.yahoo.com

Those 'public' IP addresses will allow pinging. So after entering it, you can go to the 'Ping to Host' button in the TCPIP setup menu and check that you can ping Google or yahoo. If you are unable to ping those sites, it's possible that the ATM cannot see the internet.

DSL Modems – some 'cheap' DSL modems will not allow the ATM to use DHCP and obtain an IP address, even though other computers or devices can. This is usually shown in the ATM TCPIP Setup Menu, where the Gateway value is 0.0.0.0. If this occurs, you will need to get a broadband router to place in between the ATM and the DSL modem. This will allow the ATM to get an IP address from the router, rather than the DSL modem.

2514 – This means that the ATM sent a message and received an unexpected or incorrect response.
Typically this means that one or more settings on the ATM are incorrect and should be compared against what the processor is expecting.

Network Cable:

When you connect the internet (Ethernet) cable to the ATM you should see a steady link-light (green) on the and also a flashing data-light (amber) as shown below.

Make sure you use a network 'patch' cable and not a 'cross-over' cable.
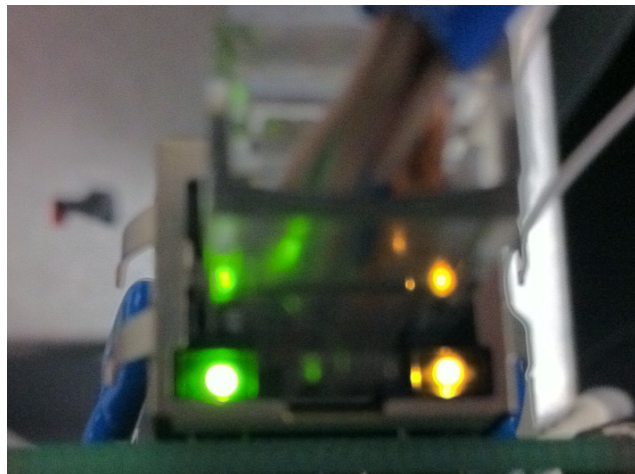
Also, there is a limit to how far you can run CAT-5 Ethernet cable, if your ATM is located more than 100 feet from the router, you may need to add a repeater to boost the signal.

1.7.6.4 CARD READER SETUP
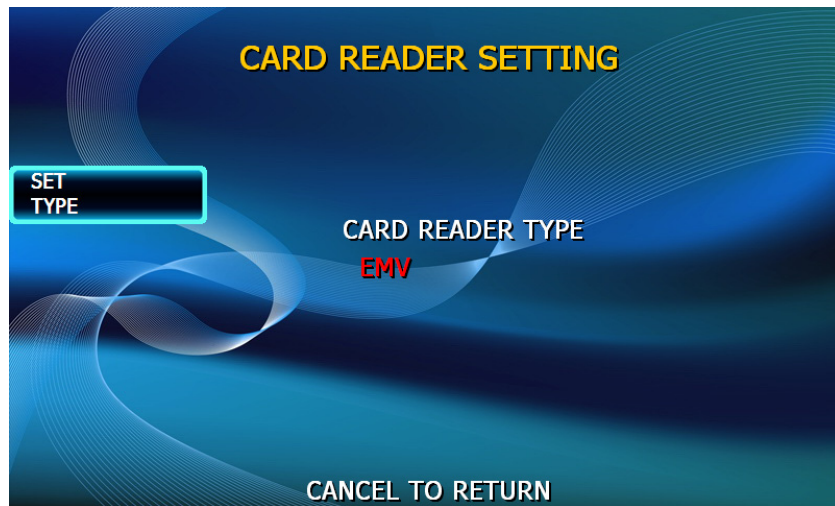
ATMs can be ordered with an optional EMV or 'Chip' compliant card reader or a traditional DIP/Swipe style reader depending on model.

It is important that this setting match the card reader installed in your ATM. If the setting is not correct, the card reader will not work at all.

After setting the MCR to the appropriate type reader, back out of the menus and then reboot the machine for the changes to take effect. Since these different card readers use alternate ways to communicate, it's necessary to reboot.

1.7.6.5 CDU SETUP

The CDU (Cash Dispensing Unit) or Dispenser contains programming relative to its application and country of destination. This programming does not need to be altered, however in the event that the dispenser looses its factory programming the CDU Setup application can correct any problems. NOTE: Incorrect programming of the dispenser will cause the machine to go out of service.
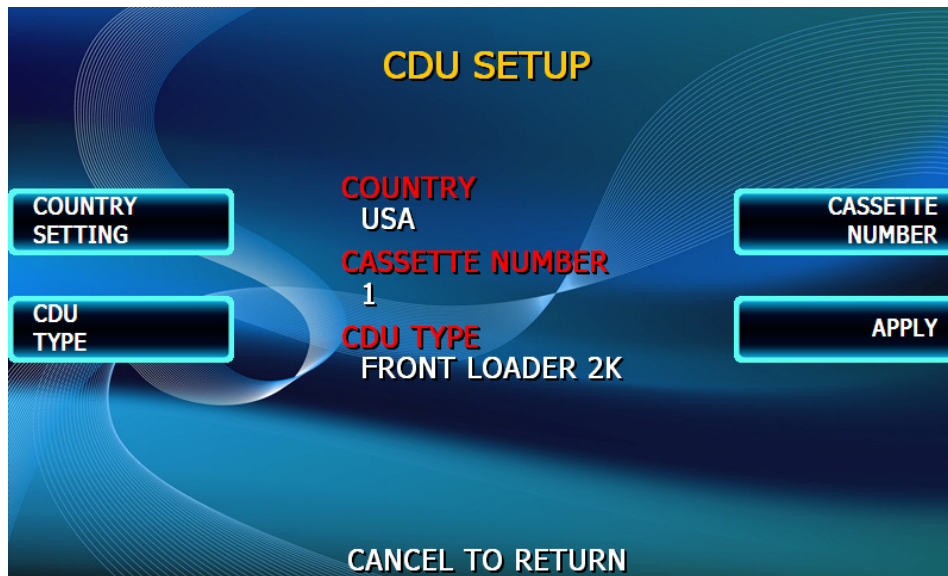
Country Setting: Set to USA or Canada

Cassette Number: Set to 1 or 2 depending on number of cassette

CDU Type:

CDU Model	Set CDU Type
TCDU / SCDU	Front Loader 1K
MCDU / HCDU	Front Loader 2K
Rear Load MCDU	Rear Loader 2K
De La Rue SDD	SDD-1700 / SDD-1700 WITH / SM
Teanam	GBM
Puloon	LCDM1000

Configuring Dispenser:

Once the settings are correct, press 'Apply' to configure the dispenser.
If you get the error 'No Comm' or CDNxx, it means that either the settings are incorrect for the dispenser type (for example if you try to program a SCDU as a De La Rue SDD, it will not work) or if there is a problem with the cables that connect the dispenser to the main control board. In the case of error C00XX when using De La Rue SDD-1700, try switching between SDD-1700 and SDD-1700 W S/M (Security Module). Back out and let ATM reinitialize after changing this setting.

Note: Installing different dispensers may require additional hardware, check with Support before installing if you are unsure.

1.7.7 SET REBOOT TIME

The Genmega ATMs contains a feature which automatically reboots the machine at a 24 hour interval. By default this will occur at 03:00 am. This adjustable in 1 hour increments.

Note that this reboot feature is required and cannot be disabled.
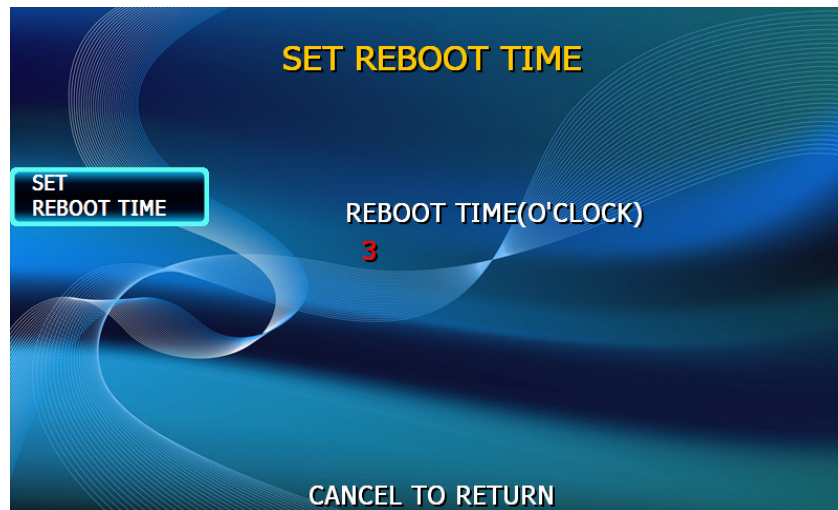
1.7.8 SERIAL NUMBER

The serial number is a unique number programmed into your machine at Genmega.
It not only identifies your machine for warranty purposes, but also for remote monitoring using RMS.
The first 4 digits refer to the model type, and the last 6 is production cycle. By default this number is programmed from the factory and we do not recommend changing it. However if you need to clear NVRAM for any purpose this number will be deleted. If you wish to re-enter the serial number, you'll find it on the sticker located inside of the upper cabinet.

G1900:   TYPW (7" LCD) / TYPX (8" LCD)
G2900:   TYPZ
G2500:   TYAH
GT3000:   TYAJ
GT5000:   TYAL

Example = TYAH001234

Keeping the serial number in the proper format will prevent problems when trying to connect for remote management.
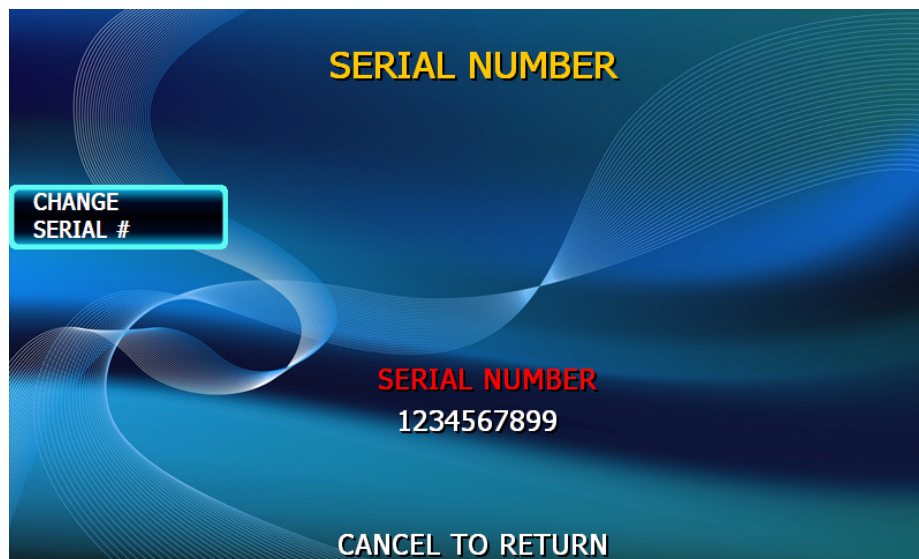
1.8 HOST SETUP
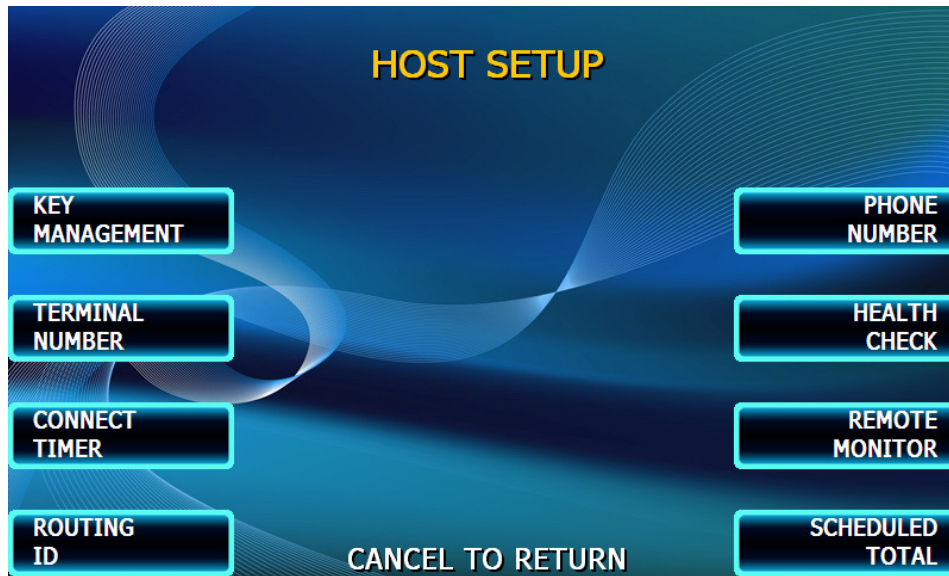
The Host Setup menu provides access to the parameters necessary to connect the ATM to the processor or 'Host'. The Master Password is required to access most of these options; however Service password allows basic access for troubleshooting purposes.

1.8.1 KEY MANAGEMENT

Access to Key Management requires entering a "Secure Mode" which engages additional security measures (per PCI specifications) to prevent Master Key tampering.

Entering Key Management requires two 6-digit passwords.
By default these will be "000000" for part #1 and "000000" for part #2.
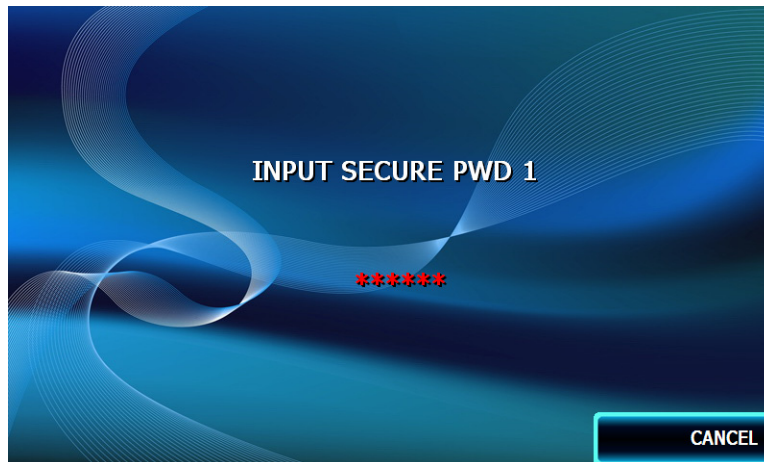
If a mistake is made entering the "Secure Mode" password, you will be prompted to wait 30 seconds to reattempt. Make sure you wait full 30 seconds. (look at your watch or phone)

NOTE: In compliance with PCI specifications, you must change the Secure Mode Passwords from default before any Master Keys can be entered. Please note that these passwords are only for the keypad and are not the same passwords used for the ATM management.
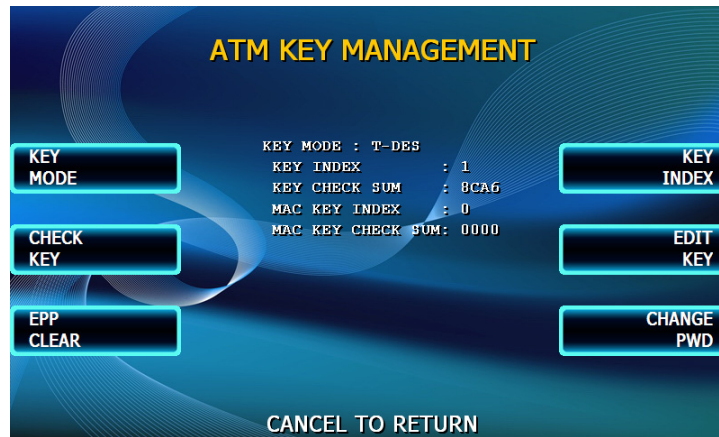
Step 1:
When you first enter the Key Management Menu, select 'Change PWD' from the menu and

Step 2:
Select Change Password 1 and when prompted, enter a new 6-digit password.
You'll be prompted to enter the new password a second time for verification.

Step 3:
Do the same steps for Change Password 2
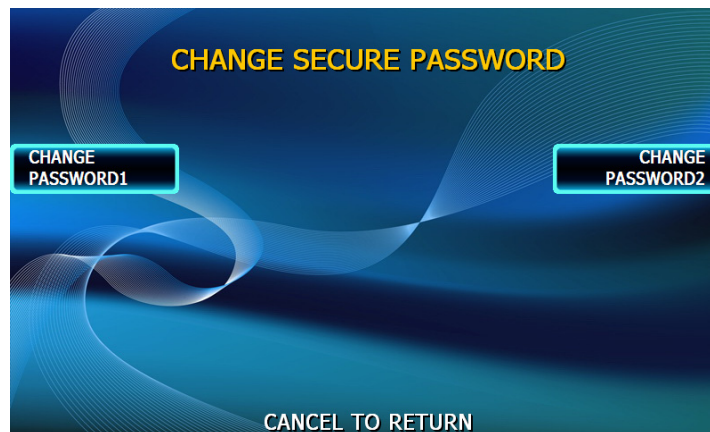
After changing the Secure Mode Passwords, you must exit completely out of the Operator Menu, and reboot the machine. Press [CANCEL] on your keypad until the machine reinitializes.

Once the machine has reset, wait 30 seconds before re-entering the menu to give the keypad a moment to reset.

After this step, you can go back to the Key Management menu with your new Secure Mode passwords and proceed with Master Key entry.

Once in the Key Management menu, a 5 minute timer begins. At the end of 5 minutes, regardless of what you are doing (entering a Master Key for example) the Key Management area times out and you will be taken back to the Host Setup menu. Making a mistake during this process can start a 30 second reset timer. When you are entering keys for the first time, this is common.

If you are ever forced to wait for the 30 second retry timer, back all the way out of the menus and wait a full 30 seconds before retrying or the timer will not reset.
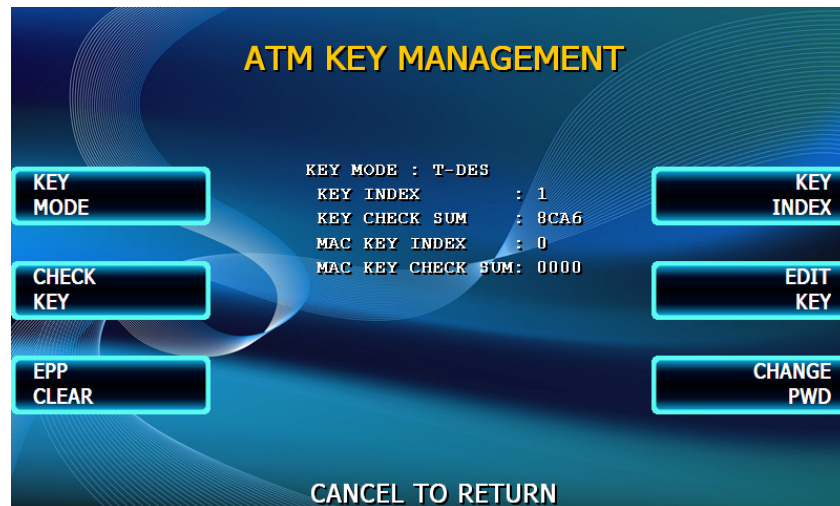
KEY MODE

This option sets the type of master key you will be loading (TDES, DES, MAC etc.) Refer to Addendum C for Key Mode descriptions and instructions.

MASTER KEY INDEX

The ATM will hold up to 16 individual Master Keys. Check with your processor to find if they are expected to be at a certain location. Most processors are installed at index #0 or #1. The ATM will only use the key that the index is set to regardless of how many keys are installed. To set the index simply press the button labeled Master Key Index and then enter the number you want it set to (enter as a 2 digit number ... 00, 01, 02, 10, 11 etc.) press Enter when done. Press Check Master Key to see a list of currently installed keys. Note that some indexes (12/15) are reserved for special functions like Unique Key and Mac'ing. You can ONLY select an index number from this menu if a key exists at the index you specify.

CHECK MASTER KEY

This will show the list of available master keys and their appropriate checksums. The checksum is a 4 digit number calculated from the two 16-digit numbers of your master key that provides a means to verify the master key is correct. When your processor provides your Master Keys, they will also give you the 4 digit checksum. If after entering your Master Key this checksum does not match, try reentering your master keys or contact the processor. If a partial key is entered (only Part A or Part B) you will see hashtags #### or asterisks ***** indicating that only half of the Master Key has been entered. In that case, you can enter the missing part to complete.

EDIT MASTER KEY

This is where you enter your two 16-digit Master Keys (provided by your processor). After pressing Edit Master Key, you will be prompted to enter an index where you want this key stored. If you do not know which index to use, contact your dealer or processor. Generally, you should use index 0 or 1 unless otherwise instructed.

CHANGE PASSWORD

This allows you to set each part of the "Secure Mode" Password. As with the other passwords used in the Genmega ATM, each must be a 6 digit number. If you change the password and cannot remember it, you can reset the password back to default from the Transaction Setup menu.

To Reset Keypad Passwords:
Enter Transaction Setup and then 'Denomination', you will see a warning message that proceeding will erase all master keys. Press Yes and the keypad will be reset back to factory default.

Entering Master Keys:
Use the chart below for entering Master Keys from the main pin pad.
Master Keys (or Key Management) cannot be entered from the optional Rear Service Panel.

   *** Please see Appendix at the end of this manual for detailed Master Key instructions.***

NOTE: The keypad above is EPP-B1 PCI / Interac certified EPP Device.

Previous models of Genmega EPP (PCI Only) had the Enter and Cancel keys reversed from what is displayed above. If entering keys on the PCI only keypad, remember that the Enter key is always F and the Cancel key is always D.

1.8.2 SET TERMINAL ID NUMBER

Step 1

From the Host Setup Menu, go to Terminal ID. Terminal ID number is provided by the processor and is individual for your ATM. It identifies your ATM on the network and any transactions done on your machine will be linked to that number. This number is obtained either through your dealer or processing company. This number is typically 8 characters long (max = 15).

TERMINAL NUMBER

CHANGE
TERMINAL #

TERMINAL NUMBER
70330999

CANCEL TO RETURN
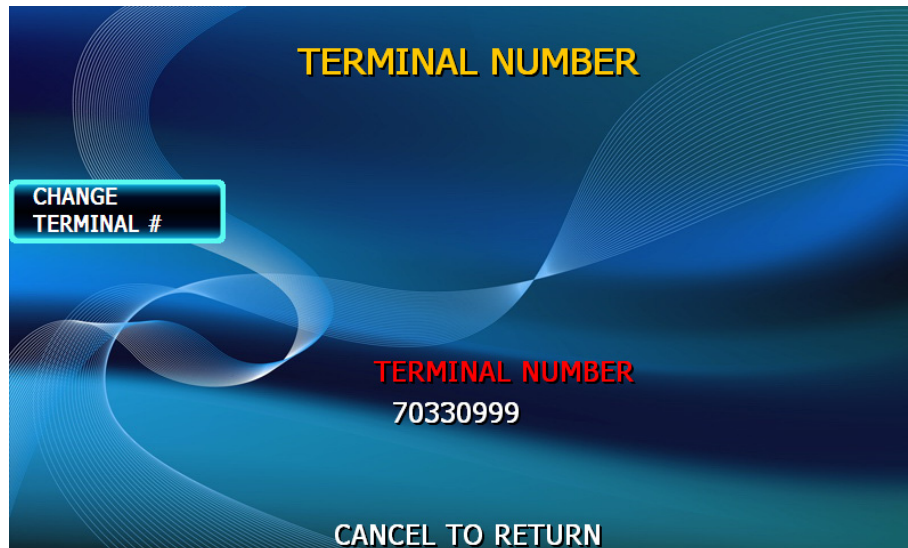
1.8.3 CONNECT TIMER

The connect timer is the setting which determines how long the machine will wait to connect when trying to dial into the processor. Default time is 60 seconds. Lowering this may improve connection speeds but at the risk of reliability. It is recommended that you not change this setting.

1.8.4 SET ROUTING ID NUMBER

From the Host Setup Menu, go to Routing ID. The Routing ID is unique to each processor and identifies the machine by processor. This number is obtained either through your dealer or processing company.

NOTE: If using Standard 3 (Extended Messaging) Routing ID becomes COMS ID

Host Phone Number / Host IP Address:
Your Genmega ATM can be configured to communicate to the host processor via telephone (modem), through the internet (TCPIP) or via a third-party Wireless Device. Communication device is set in the Customer Setup → Change Processor menu which is described later. The setting you chose will change the options in Host Setup to match.

1.8.5 SET HOST TELEPHONE NUMBER

Step 1

From the Host Setup Menu, go to Phone Number.

Step 2

You can enter a Primary (Host Phone 1) and a Secondary (Host Phone 2) for the machine to connect to the processor. These phone numbers are available from your dealer or the processor.

Step 3

Once you have selected Host Phone #1 or Host Phone #2 you will be prompted with the following screen. Using the numbers on the keypad press the first number of your phone number.

Configuration Scheduled: When this option is set to 'Scheduled', upon backing out of the menu and going back in service, the ATM will initiate a configuration request with the host and download a new working key. Because the ATM reboots itself every 24 hours, this option must be enabled manually to initiate the request.

NOTE: Unless you are having problems with key-sync issues, you should never need to enable configuration. If you make changes to the ATM programming that require an update, the ATM software will do this automatically. Generally you should not ever need to change this setting.
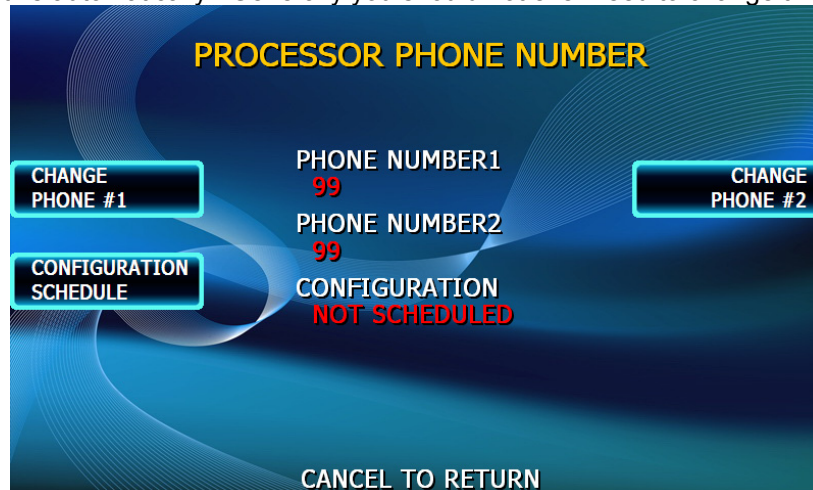
Step 4

Genmega always recommends using a dedicated, data-quality phone line for all ATM installations, however if you are using a phone line that is dialing out through a PBX type system (where you dial a number for an outside line), then you may insert commas (,) to create a pause between digits.

For example if you have to dial a 9 to get an outside line try the following:
9,,18005551212
(the 800 number being an example)

NOTE: Entering anything other than a number or a comma in the host phone number field will cause the ATM not to dial out. Make sure that Zero's and 'O's' are identified properly.

1.8.6 HEALTH CHECK MESSAGE

Health Check is an option that will send a system status signal to your processor at a set interval. Check with your dealer or processor to determine if they are prepared to receive this type of messaging.

To Enable, use the Host Send button to enable or disable the feature and the Message Send Interval button to set how often the machine will broadcast its status (in hours).
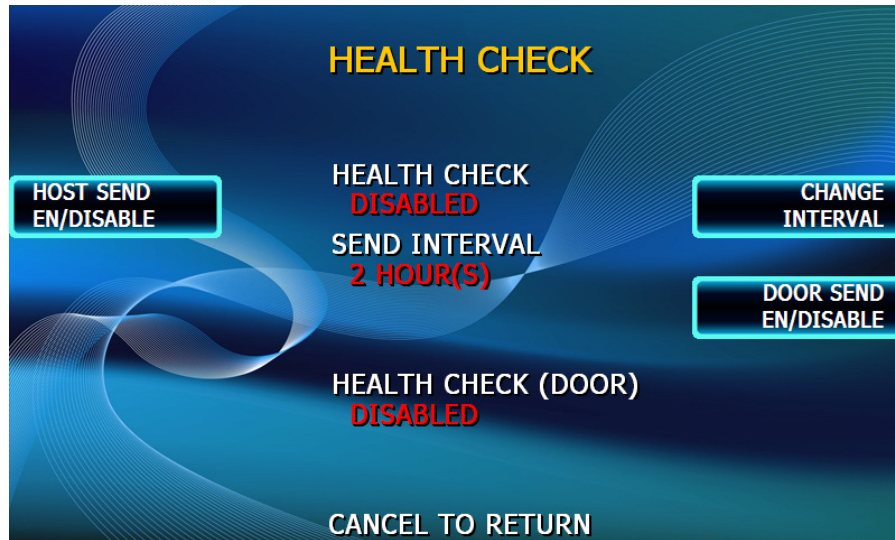
There is an option in this menu which will cause the ATM to perform a Health Check when the vault door is opened. This can be used during a cash load to send the terminal totals to the host after loading.

1.8.7 REMOTE MONITOR SYSTEM (RMS)

Remote Monitoring is the ability to remotely communicate with your ATM to send or retrieve information using the optional Genmega Remote Management Software (RMS).
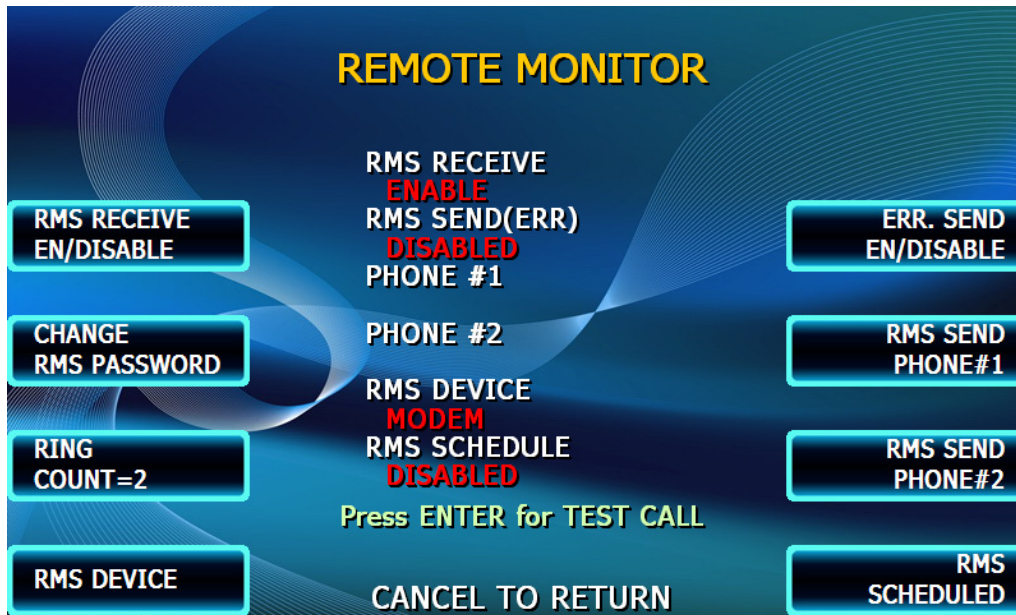
RMS EN / DISABLE

This will allow the ATM to be monitored remotely.

Enable   The ATM will answer incoming RMS calls.
Disable   The ATM will not answer any incoming calls.

RMS SEND

This feature enables the ATM to dial out to a computer running RMS software to report a malfunction, fatal error, out of service condition or to report status. Any time the ATM goes out of service for longer than 3 minutes, it will call the number (or IP address) programmed at Remote Phone #1 and then Remote Phone #2 if Remote #1 is busy. It will attempt this call 3 times. In order to use this feature you MUST have a PC with a modem and a dedicated phone line, or static IP address running RMS software available 24 hours a day.

Enable   The ATM will dial out to report out of service condition.
Disable   The ATM will NOT dial out to report out of service condition.

If you enable RMS Send, you MUST have phone numbers or IP address of a RMS computer.

RMS PASSWORD

Remote monitoring is protected by a password that is checked when incoming calls from RMS occur. If the password does not match from an incoming RMS call, the call will be disconnected. The default password for RMS access is 333333. To change the password, press the password button and you will be prompted to enter your Master password. After entering your Master password, you will be prompted to enter the new RMS password (must be 6 digits) and then enter it again for verification. If you ever forget the RMS password, press password and follow the procedure again.

RING COUNT (modem only)

This setting determines how many rings will elapse before the ATM will answer the phone. While this can be used in situations where the ATM phone line is shared with an additional device (like a fax or business phone) it's important to note that setting this value higher than 4 or 5 may result in monitoring software being unable to connect.

Default Value = 2 rings (recommended)

Note that if you are sharing the phone line with any other devices in the location, RMS will attempt to pick up all incoming calls. We highly recommend using a separate line for RMS.

RMS DEVICE

This setting allows you to choose between modem or TCPIP as your communications for RMS.

When selecting TCPIP, do not change the RMS Send Port number (18458) This should always be left at default. You may need to alert your IT staff to unblock ports 18456 and 18458 if there is a firewall blocking access to these ports. If you're communicating from a home network, this will likely not be an issue.

RMS Schedule

When RMS Schedule is enabled, it will cause the ATM to initiate a call to the RMS PC at pre-set intervals to upload information and perform preset tasks. The primary purpose of this is for ATMs using TCPIP over the internet (or cellular/wireless), which cannot be contacted by RMS because they have a private IP address. Rather than try to provide each ATM with a publically addressable IP address, if you provide one address for your RMS PC, you can have the ATM call your RMS computer.

Public IP versus Private IP: If your ATM communicates through the internet, you can see the ATMs IP address in the TCPIP Setup Menu [System Setup Menu → Device Setup → ATM TCPIP]

If the ATM IP Address = 192.168.xxx.xxx or 10.xxx.xxx.xxx then these are 'private' IP address and therefore RMS cannot contact them remotely unless the RMS PC is in the same network.

To enable the RMS Schedule options, you must first enable RMS Send, and input the phone number or IP address of your RMS PC. Remember that for Internet communications you MUST have a publicly addressable IP address for your RMS computer so the ATMs can contact it. Talk to your internet provider or IT personal about how best to do this.

With RMS Send Enabled, you can now set the RMS Schedule Options
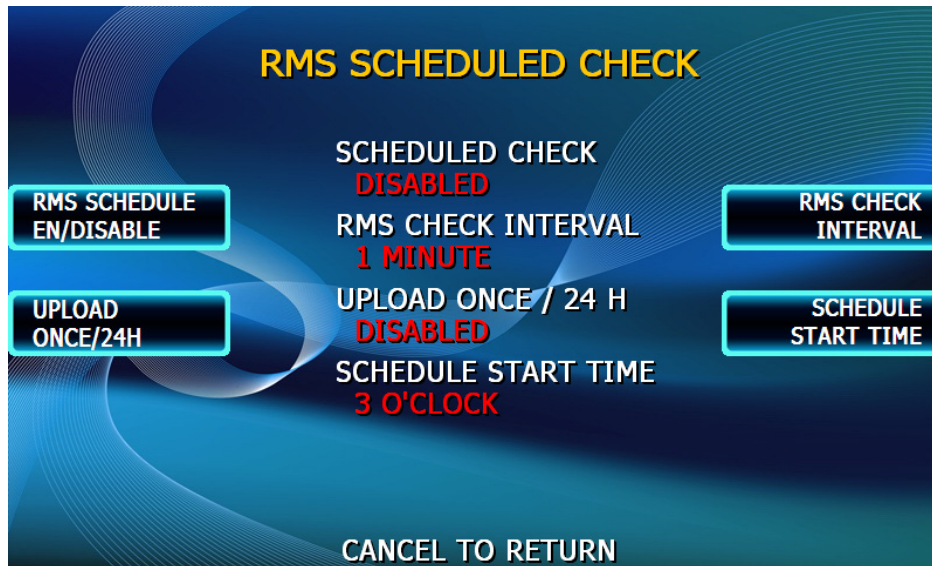
RMS Schedule: (Enable/Disable) this turns on and off the Schedule system.

RMS Check Interval: Enter a value in minutes, from 1 to 1400 (1400=23 hours)
This is how often the ATM will attempt to connect to you RMS PC and perform whichever tasks you specify in RMS. Note that if you set the value to 1 minute, the machine will attempt to connect to RMS every 60 seconds.

If the system is unable to connect with the RMS PC, then it will reattempt the call again. If that second attempt fails, then it will wait again until the next Check Interval before trying again (twice).

Upload Once / 24 Hours: When this is enabled, once the ATM can successfully connect to RMS and perform the preset tasks, then the ATM will not attempt to connect again for 24 hours.

If you set this to Disabled, then the ATM will continue to connect to the RMS PC at each Check Interval time

Schedule Start Time: The ATM will begin the counter for 'Check Interval' starting from this time.

RMS Send: Remember that the Schedule system is independent of RMS Send. Which means that if your ATM goes out of service, and is still hours away from the next Check Interval, the ATM will always send it's status alert via RMS Send. See page 3.11 for details on how RMS send works.

Test Call

Once the RMS Settings have been set, you can press the ENTER key on the keypad to perform a test call from the ATM to your RMS Computer. If you are using GenRMS Pro version this will allow you to remotely register an ATM with RMS.

1.8.8 SCHEDULED TOTAL

This feature allows you to schedule a Trial Day Total or Day Total report automatically. The report (when run at scheduled time) will record to the electronic journal.

This is useful if you are doing accounting of your ATM on a day-to-day basis. Your processor cuts off its transactions each day at a set time. By scheduling a Trial Day Total or Day Total report at the same time, your day's balance should match the host. This information will appear as a journal record, so you will need to access your journal to print or view the totals. Your dealer or processor can provide you with the appropriate cut off time.

Schedule Mode	Day Total (zeros out value with the host)
	Trial Day Total (does not zero out value)
	Disable (turns off function)
Change Time	Sets the time for the ATM to total itself
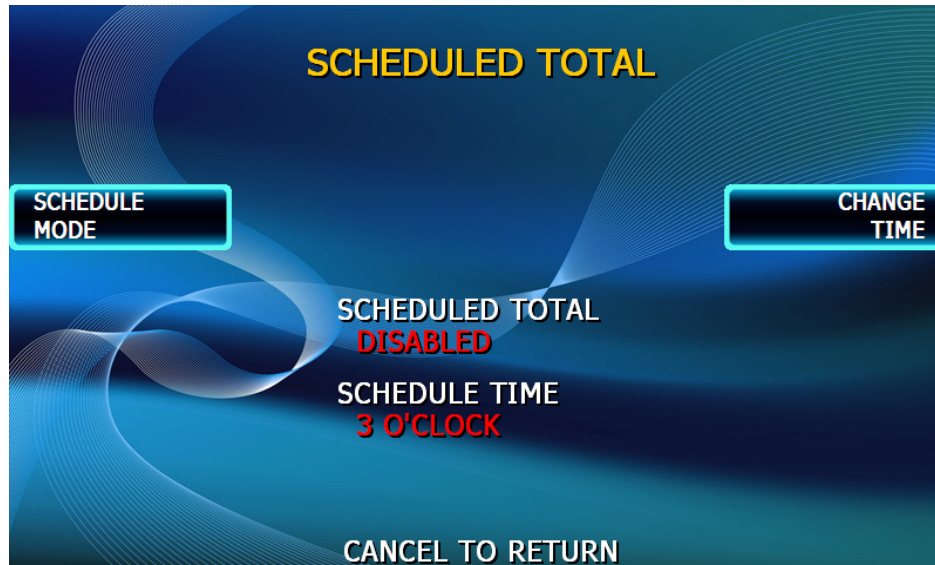
1.9 TRANSACTION SETUP
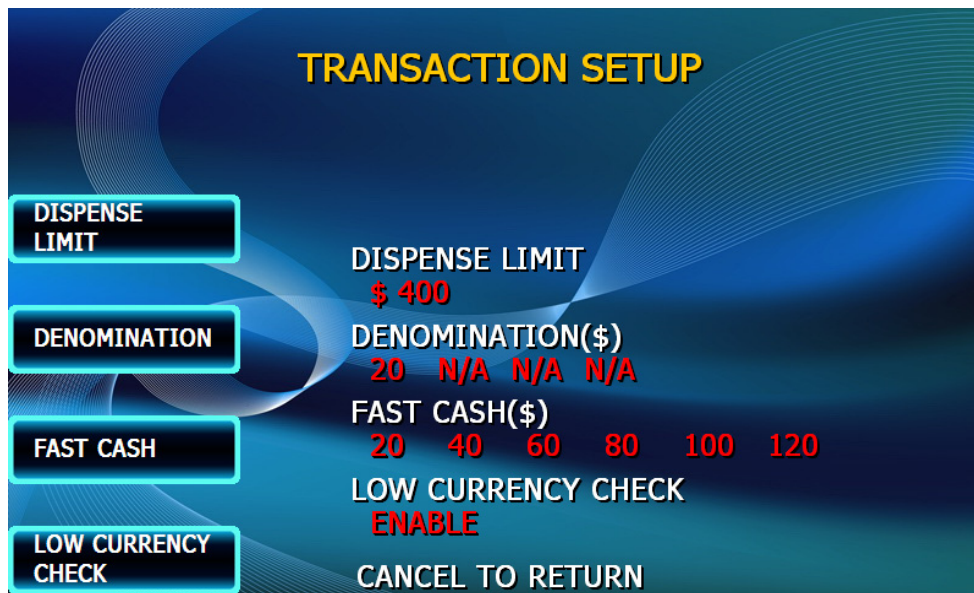
1.9.1 DISPENSE LIMIT

The dispense limit is the maximum amount of money a customer can withdraw in a single transaction. The ATM will dispense a maximum of 40 notes per transaction. So the dispense limit can be a maximum of 40 times the denomination of notes your using.

For example:

>   If you are dispensing $10 bills the maximum dispense limit is $400
>   If you are dispensing $20 bills the maximum dispense limit is $800
>   Maximum is $900 (using either $50 or $100 bills)

To set the dispense limit, press the Dispense limit button and then enter the number using the keys on the main keypad. Press Enter key to set the value.
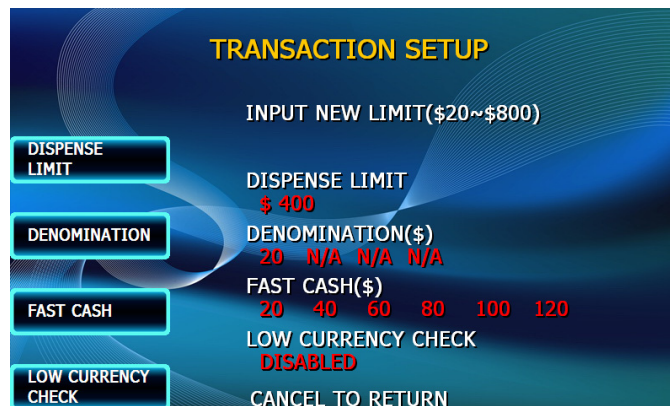
1.9.2 DENOMINATION

The Denomination is the type (value) of note that each cassette will be dispensing. If you are programming your ATM with different denominations, note that the ATM will attempt to balance the value of money between cassettes as money is dispensed.

WARNING: Any change to the denomination will cause all master keys to be deleted from the EPP keypad. If you attempt to enter the denomination setup menu, you will be prompted and warned that continuing will cause all master keys to be erased. The purpose of this is to prevent unauthorized changes to this critical setting.
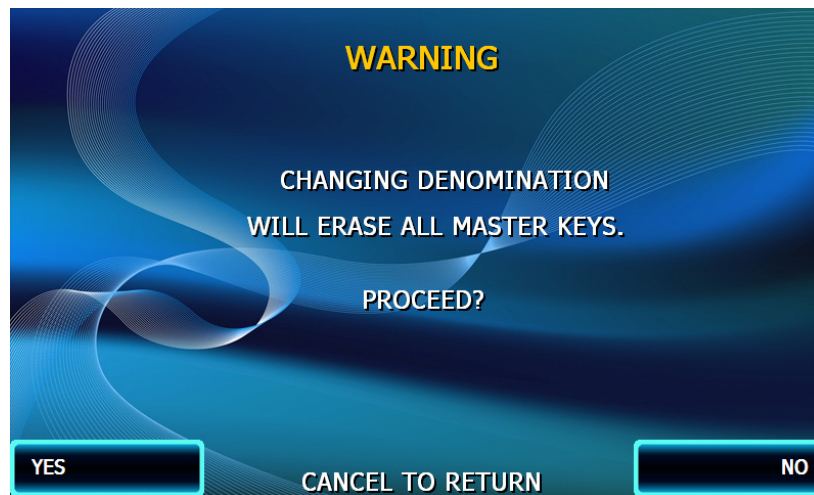
When programming the ATM, make sure to make any changes to the denomination setting BEFORE you program master keys. Once keys are erased, they cannot be recovered. New master keys will have to be loaded.

> When programming the ATM, make sure to make any changes to the denomination setting BEFORE you program master keys.
>
> Once keys are erased, they cannot be recovered. New master keys will have to be loaded.

To set denomination on the first cassette, press the First Cassette Denomination button and then using the main keypad enter the type of bill. Options are $1, $5, $10, $50 and $100.

To set denomination on the second cassette, press the Second CST Denomination button and then using the main keypad enter the type of bill. Options are $1, $5, $10, $50 and $100.

Follow the same procedure for 4 Cassette dispensers if your machine supports them.

NOTE: If you are unable to set a denomination for any reason, it is because the ATM cannot communicate with the dispenser you have installed. Resolve that before trying to change the denomination.

1.9.3 FAST CASH

Fast Cash amounts are presented to the customer if they choose a Withdrawal transaction. These amounts appear on screen as an easy method of selecting how much cash they wish to withdraw for that transaction. The amounts must be multipliers of the denomination amount.

For Example:

> If your dispensing $10 bills then you can use $10, $20, $30, $40, $50 etc.
> If your dispensing $20 bills then you can use $20, $40, $60, $80, $100 etc.

To set the fast cash amounts, select Fast cash from the Transaction Setup menu and then choose from the 6 possible keys to program. Select a button and then enter the value from the main keypad. Press Enter to confirm the setting.

FAST CASH SETUP

LB 1		RB 1
	LEFT RIGHT	
LB 2	20 80	RB 2
	40 100	
LB 3	60 120	RB 3

CANCEL TO RETURN
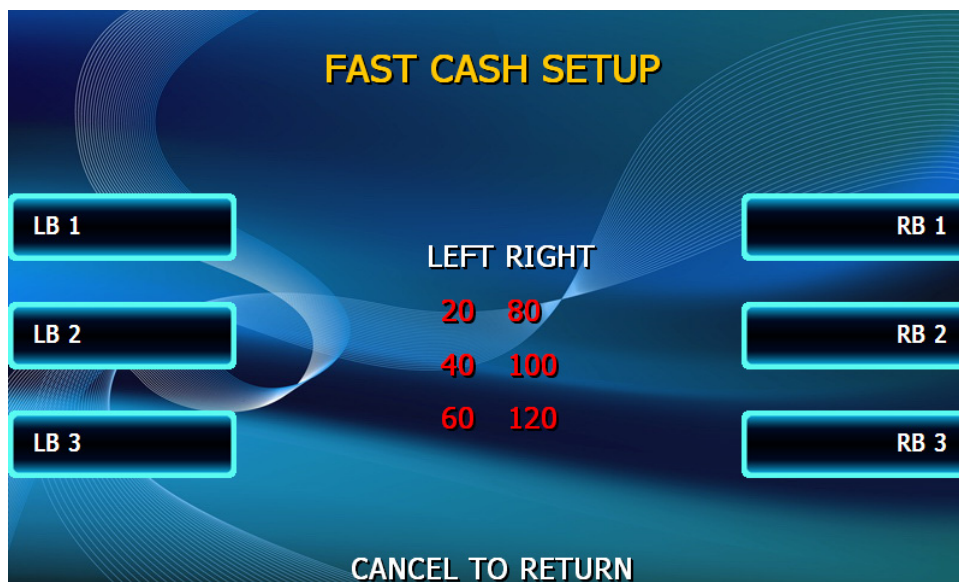
APPENDIX

Appendix A = ATM Error Code List

Appendix B = Master Key Entry Instructions

Appendix C = Extra BIN list

Appendix D = Advertisement Graphics

Appendix A – Error Code List

ERROR CODE	DESCRIPTION	CORRECTIVE ACTION
0	Normal	No Error
20001	No cassette detected	Remove and replace the cassette
20002	Low cash level	Add more cash in the cassette
20003	Reject bin full	Remove the notes from the reject bin, then do CST Total
20004	Vault Door Open	Close the vault Door / Check Vault Door Sensor
20005	CDU type mismatch	Check CDU type - System Setup - Device Setup
20010	Receipt Paper Jam	Clear printer of any paper, then reinstall roll
20012	Receipt Printer Feed Lever Open	Close the printer feed lever
20013	Receipt Paper Empty	Replace the receipt roll
20014	Thermal print head overheated	Check thermal print head, may require service
20016	Note detected in outlet of CDU	Clear notes at outlet of CDU or check outlet sensor
20215	CDU detects blocked sensor prior to dispense	Check for blocked sensor - Clean Sensors
21315	CDU detects blocked sensor prior to dispense	Check for blocked sensor - Clean Sensors
21A15	CDU detects blocked sensor prior to dispense	Check for blocked sensor - Clean Sensors
21B15	CDU detects blocked sensor prior to dispense	Check for blocked sensor - Clean Sensors
24A15	CDU detects blocked sensor prior to dispense	Check for blocked sensor - Clean Sensors
24B15	CDU detects blocked sensor prior to dispense	Check for blocked sensor - Clean Sensors
A0101	Receipt Printer Feed Lever Open	Close the feed lever
A0102	Thermal print head overheated	Check thermal print head, may require service

A0103	Receipt Paper Jam	Clear printer of any paper, then reload roll
A0104	Paper load error	Remove and reinstall the receipt roll
A0105	Paper check error	Remove Jammed paper and road again
A0108	Cutter S/W check error	Inspect printer for paper jam
A0801	Receipt printer feed lever open	Make sure feed lever is closed
A0802	Thermal print head overheated	Check thermal print head, may require service
A0803	Receipt paper jam	Clear printer of any paper, then reinstall roll
A0804	Paper setting error	Reinstall paper roll
A0805	Paper check error	Clear printer of any paper, then reinstall roll
A0808	Cutter S/W check error	Inspect printer for paper jam
ADN01	No response from printer in 30 sec. after send command	Check Cable from mainboard to printer, check DIP switch
ADN0F	No response from printer in 30 sec. after send command	Check Cable from mainboard to printer, check DIP switch
ADN11	No response from printer after 3 retries	Check Cable from mainboard to printer, check DIP switch
ADN12	No response from printer (ENQ-ACK after 5 retry of ENQ)	Check Cable from mainboard to printer, check DIP switch
ADN13	No response from printer	Check Cable from mainboard to printer, check DIP switch
C0010	No notes before presenting or sensor(PCAM) error	Check path before Presenter or PCAM sensor
C0014	Base of Stacker close failure at PCDU/HPCDU	Check Presenter unit
C0015	Base of Stacker Open failure at PCDU/HPCDU	Check Presenter unit
C0016	Jamming at Stacker during presenting at PCDU/HPCDU	Clear jammed notes at Presenter
C0017	Jamming at Stacker during presenting at PCDU/HPCDU	Clear jammed notes at Presenter
C0018	Jamming at Exit during presenting at PCDU/HPCDU	Clear jammed notes at Presenter

C0019	Exit sensor failure(PEXT) at PCDU/HPCDU	Check Exit sensor(PEXT)
C0020	Withdrawal time out at PCDU/HPCDU	Check note path or Presenter unit
C0024	Presenter is not normal position at PCDU/HPCDU	Check Presenter unit
C0025	No notes at Exit before retracting at PCDU/HPCDU	Check note path or Presenter unit
C0026	Jamming at Exit during retracting at PCDU/HPCDU	Clear notes at Exit
C0027	Jamming at Exit during retracting at PCDU/HPCDU	Clear notes at Exit
C0029	Jamming at Stacker during retracting at PCDU/HPCDU	Clear notes at Stacker
C0030	Main motor failure	Check CDU main motor and encoder sensor
C0031	Sub Main motor failure at MCDU/HCDU/PCDU/RCDU	Check Sub Main motor
C0032	Inlet(SKLB/SKRB) sensor failure at the second cassette	Check Inlet(SKLB/SKRB) sensor at the second cassette
C0034	Jamming at Stacker during retracting at PCDU/HPCDU	Clear notes at Stacker
C0035	Jamming at Reject during retracting at PCDU	Clear notes at Reject path
C0036	Outlet Sensor blocked while initializing	Clear notes at Outlet sensor
C0037	Double-Detect Sensor Error	Check Double-Detect sensor
C0039	Reject Diverter failure or Solenoid failure	Check Reject Diverter or Solenoid
C003A	More than 4 notes requested in test mode	Reload application software
C0041	More than 5 re-dispense after last note dispense	Check cassette installation, note setting
C0042	Jamming at Stacker when initializing at PCDU/HPCDU	Clear notes at Stacker
C0043	Number of rejected notes exceeded 20 notes	Do reject analysis for cause of reject
C0044	10 notes rejected consecutively	Do reject analysis for cause of reject
C0045	Note miscount detected	Check CDU Data for this transaction on journal entry

C0046	Jamming at Exit when initializing at PCDU/HPCDU	Clear notes at Exit
C0047	1'st cassette misfeed error	Clean CST rollers, verify there is cash in the CST
C0048	Jamming at Reject when initializing at PCDU	Clear notes at Reject path
C0049	zero notes requested	Check data connection from mainboard to dispenser
C004A	Dispense sensor timeout	Remove any notes from the dispenser
C004B	Shutter failure to open during presenting	Check Shutter open/close
C004D	1'st cassette not detected	Check position of 1'st cassette
C004E	2nd cassette not detected	Check position of 2'nd cassette
C004F	More than 65 seconds passed at dispensing	Check cassette installation, Note setting
C0050	Power failure during dispense	Check CDU Data for this transaction on journal entry
C0051	Dispensing of more than 150 notes requested	Check CDU Data for this transaction on journal entry
C0052	1'st cassette exit sensor blocked after dispensing	Check 1'st cassette exit sensor
C0054	Count sensor blocked during dispensing	Check Count sensor
C0058	Note count mismatch (# at reject gate(?) < # at count(?))	Check Note path
C0059	Note jam occurred while initializing	Clear jammed notes
C005B	2'nd cassette misfeed error	Check 2'nd cassette installation and Note Settings
C0060	3'rd cassette exit sensor blocked after dispensing	Check 3'rd cassette exit sensor
C0062	3'rd cassette exit sensor blocked	Check 3'rd cassette exit sensor
C006A	Note from 2'nd CST not arriving at double timing sensor	Check Note path
C0070	4'th cassette exit sensor blocked after dispensing	Check 4'th cassette exit sensor
C0072	4'th cassette exit sensor blocked	Check 4'th cassette exit sensor

C007A	Note from 4'th CST not arriving at double timing sensor	Check Note path
C007B	Sensor block during initialize	Check Note path and sensor
C007C	4'th cassette misfeed error	Check 4'th cassette installation and Note Settings
C007D	4'th cassette not detected	Check 4'th cassette installation
C0080	2'nd cassette exit sensor blocked after dispensing	Check 2'nd cassette exit sensor
C0081	Double detect timing sensor blocked during dispensing	Check Double detection timing sensor
C0082	Note from cassette not arriving at double timing sensor	Check Note path and sensor
C0083	Reject gate timing sensor (L) blocked during dispensing	Check Reject gate timing sensor(L)
C0084	Reject gate timing sensor (R) blocked during dispensing	Check Reject gate timing sensor(R)
C0085	Note Feed timeout (Double timing sensor)	Check Note path and sensor(Double timing ~ GTRL)
C0086	Note not arriving at count sensor during dispensing	Check Note path and sensor
C009A	Note from 3'rd CST not arriving at double timing sensor	Check Note path and sensor
C009D	3'rd cassette not detected	Check 3'rd cassette installation and Note Settings
C009F	3'rd cassette misfeed error	Check 3'rd cassette installation
C00A0	Communication failure with shutter(Sending)	Check connection between CDU and shutter
C00A1	Communication failure with shutter(Sending)	Check connection between CDU and shutter
C00A2	Communication failure with shutter(Receiving)	Check connection between CDU and shutter
C00A3	Communication failure with shutter(Receiving)	Check connection between CDU and shutter
C00B3	Shutter close failure	Check Shutter open/close
C00B4	Shutter open failure	Check Shutter open/close
CDN00	CDU No Response during idle time	Check connection between Main board and CDU

CDN01	CDU did not respond to command	Check connection between Main board and CDU
CDN0F	CDU did not respond to command	Check connection between Main board and CDU
CDN11	No response from CDU following 3 retries	Check connection between Main board and CDU
CDN12	No Response (ENQ-ACK) after 5 retry of ENQ	Check connection between Main board and CDU
CDN13	No Response after 5 attempts (STX-BCC timeout)	Check connection between Main board and CDU
D0001	Modem initialization error	Check modem using test in diagnostics
D0002	Reversal transaction failure	Check CDU Data for this transaction on journal entry
D0012	Invalid transaction	Error reported from Host processor
D0013	Invalid amount	Error reported from Host processor
D0014	Invalid card number	Error reported from Host processor
D0020	Surcharge screen was not displayed	Error reported from Host processor
D0024	Exceeds withdrawal limit	Error reported from Host processor
D0039	No credit account	Error reported from Host processor
D0051	Insufficient funds	Error reported from Host processor
D0052	No checking account	Error reported from Host processor
D0053	No saving account	Error reported from Host processor
D0054	Expire card	Error reported from Host processor
D0055	Incorrect PIN	Error reported from Host processor
D0057	Transaction not permitted (Card)	Error reported from Host processor
D0058	Transaction not permitted (Terminal)	Error reported from Host processor
D0061	Exceeds withdrawal limit	Error reported from Host processor

D0075	PIN attempts exceeded	Error reported from Host processor
D0078	No account	Error reported from Host processor
D0080	Invalid date	Error reported from Host processor
D0083	Can not verify PIN	Error reported from Host processor
D0086	Can not verify PIN	Error reported from Host processor
D0091	Bank unavailable	Error reported from Host processor
D0092	System unavailable	Error reported from Host processor
D0093	Transaction serial number mismatch	Error reported from Host processor
D0094	Record format mismatch	Error reported from Host processor
D0095	Routing ID mismatch	Verify Routing ID number
D0096	Terminal ID mismatch	Verify Terminal ID number
D0097	Response type mismatch (Reversal)	Error reported from Host processor
D0098	Response type mismatch (Day close)	Error reported from Host processor
D0099	Response type mismatch (Config)	Error reported from Host processor
D009A	Response type mismatch (Transaction)	Error reported from Host processor
D009B	STX error	Error reported from Host processor
D009C	ETX error	Error reported from Host processor
D009D	FS out (after Response code)	Error reported from Host processor
D009E	FS out (after Retrieval reference number)	Error reported from Host processor
D009F	FS out (after System trace audit number)	Error reported from Host processor
D00A0	FS out (after Account balance)	Error reported from Host processor

D00A1	FS out (after Available balance)	Error reported from Host processor
D00A2	FS out (after Surcharge amount)	Error reported from Host processor
D00A3	FS out (after Authorization response text)	Error reported from Host processor
D00A4	ETX wrong position	Error reported from Host processor
D00A5	FS out (after Total cash dispense amount)	Error reported from Host processor
D00A6	FS out (after Total noncash dispense amount)	Error reported from Host processor
D00A7	FS out (after Total surcharge amount)	Error reported from Host processor
D00A8	FS out (after Config surcharge amount)	Error reported from Host processor
D00A9	ETX out (Config)	Error reported from Host processor
D00AC	Invalid data received from host (MAC data mismatch)	Error reported from Host processor
D0101	Expired card	Error reported from Host processor
D0102	Unauthorized usage	Error reported from Host processor
D0103	PIN error	Error reported from Host processor
D0104	Invalid PIN	Error reported from Host processor
D0105	Bank unavailable	Error reported from Host processor
D0106	Card not supported	Error reported from Host processor
D0107	Insufficient funds	Error reported from Host processor
D0108	Ineligible transaction	Error reported from Host processor
D0109	Ineligible account	Error reported from Host processor
D0110	Number of daily withdrawals exceeded	Error reported from Host processor
D0111	Cannot process transaction	Error reported from Host processor

D0112	Amount too large	Error reported from Host processor
D0113	Account closed	Error reported from Host processor
D0114	PIN attempts exceeded	Error reported from Host processor
D0115	Database problem	Error reported from Host processor
D0116	Withdrawal limit already reached	Error reported from Host processor
D0117	Invalid amount	Error reported from Host processor
D0118	External decline	Error reported from Host processor
D0119	System error	Error reported from Host processor
D0120	Contact card issuer	Error reported from Host processor
D0121	Routing lookup problem	Error reported from Host processor
D0122	Message edit error	Error reported from Host processor
D0123	Transaction not supported	Error reported from Host processor
D0124	Insufficient funds	Error reported from Host processor
D0125	Western Union sender data error	Error reported from Host processor
D0126	Western Union receiver data error	Error reported from Host processor
D0127	CRC error	Error reported from Host processor
D0300	Modem is not responding	Verify modem function using diagnostics
D1100	Cannot receive ENQ from HOST	Check programming, check modem in diagnostics
D1200	Transmission Error	Check Modem Controller
D1300	Receiving NAK more than 3 times	Check HOST
D1401	Disconnected - unknown reason	Disconnected

D1402	Disconnected - Remote Party rejected call	Disconnected
D1403	Disconnected - Local phone picked up	Disconnected
D1404	Disconnected - Forwarded	Disconnected
D1405	Disconnected - Unreachable	Disconnected
D1406	Disconnected - Congestion	Disconnected
D1407	Disconnected - Incompatible	Disconnected
D1408	Disconnected - Unknown Reason	Disconnected
D1500	Modem connection timeout - host not responding	Check telephone line
D1601	Disconnected - Invalid Address	Disconnected, Bad Address
D1602	Disconnected - Unavailable	Disconnected, Unavailable
D1700	Com Error (call dropped after connection)	Verify programming, check telephone line quality
D1701	Com Error (while receiving ENQ data from host)	Verify programming, check telephone line quality
D1702	Com Error (before sending data to host)	Verify programming, check telephone line quality
D1703	Com Error (while sending data to host)	Verify programming, check telephone line quality
D1704	Com Error (while sending ACK/NAK data)	Verify programming, check telephone line quality
D1705	Com Error (while receiving ACK/NAK data)	Verify programming, check telephone line quality
D1706	Com Error (while receiving data from host)	Verify programming, check telephone line quality
D1800	No Dial Tone	Verify phone line using PHONE test port on mainboard
D1900	No Answer	Verify programming, check phone line quality
D2000	Phone Line Busy	Verify programming, check phone line quality
D2100	Modem timeout (30sec.) while initializing	Verify modem function using diagnostics

D2200	Not receiving EOT from HOST	Verify programming, check modem using diagnostics
D2300	No response (Dialing time out to host)	Verify programming, check modem using diagnostics
D2500	Cannot connect to the host	Verify programming, check TCP/IP settings
D2510	Timeout while sending data	Verify programming, check TCP/IP settings
D2511	Communication error while sending data	Verify programming, check TCP/IP settings
D2512	Socket error while sending data	Verify programming, check TCP/IP settings
D2513	Timeout while receiving data	Verify programming, check TCP/IP settings
D2514	Communication error while receiving data	Verify programming, check TCP/IP settings
D2515	Socket error while receiving data	Verify programming, check TCP/IP settings
D2516	Wireless Configuration error	Verify programming, check Wireless setting
D2600	SSL Certification Read Error	Cannot read the Certificate file being loaded
D2601	SSL Certification Verify Error	Certificate file is not matching host
D3200	No response (Time out to Host)	Verify programming, check modem using diagnostics
D3201	Outbound call aborted	Verify programming, check modem using diagnostics
D3202	Failure to connect (modem)	Verify programming, check modem using diagnostics
E0001	RMS port failure	Check programming for RMS
E0002	RMS response time out	Verify programming, check modem using diagnostics
E0003	RMS modem failure	Verify programming, check modem using diagnostics
E0004	RMS no dial tone	Verify programming, check modem using diagnostics
E0005	RMS modem disconnect	Verify programming, check modem using diagnostics
F0001	Number of bills has not been entered	Settlement Menu, Input number of Bills

F0002	Parameter has not been set (Surcharge Owner)	Customer Setup Menu, set Surcharge Owner
F0003	Parameter has not been set (Surcharge Amount)	Customer Setup Menu, set Surcharge Amount
F0004	Parameter has not been set (Adver. Text refresh timer)	Customer Setup Menu, set Advertisement Refresh timer
F0005	Parameter has not been set (Advertisement text)	Customer Setup Menu, set Advertisement text
F0006	Parameter has not been set (Dispense limit)	Transaction Setup Menu, set Dispense Limit
F0007	Parameter has not been set (Denomination)	Transaction Setup Menu, set Denomination
F0008	Parameter has not been set (Fast Cash)	Transaction Setup Menu, set Fast Cash Value
F0009	Master Key index invalid	Host Setup Menu, set Master Key index
F000A	Master Key is empty	Host Setup Menu, input Master Key
F000B	Host Phone number has not been entered	Host Setup Menu, set Host Phone Number
F000C	Error Retry timer has not been entered	Host Setup Menu, set Error Retry Timer
F000D	RMS Password has not been set	Host Setup Menu, set RMS Password
F000E	RMS Phone Number has not been entered	Host Setup Menu, set RMS Phone Number
F000F	Terminal ID has not been entered	Host Setup Menu, set Terminal Number
F0010	Routing ID has not been entered	Host Setup Menu, set Routing ID
F0011	Master Key Serial Number has not been entered	Host Setup Menu, input Master Key Serial Number
F0012	Non-Cash item text has not been entered	Transaction Setup Menu, set Non-Cash Type
F0013	NVRAM Failure	Transaction Setup Menu, set Non-Cash Value
F0014	NVRAM Failure	Check Battery on mainboard, Critical Failure
F0015	ATM Serial No. Empty	Set Serial Number
F0016	Default Master Password is not changed	Change the default master password

F0017	Abnormal system clock	Check system clock
F0020	Host IP Address has not been entered	Set HOST IP address
F0021	RMS IP or Port has not been entered	Set RMS IP address
F0022	SSL Activation Code is not valid	Check and enter SSL Activation Code again
TOUCH	Touch screen failure	Check Touch Screen or cable
SDN01	SPL Communication Error	Check the TSPL Status
PDN01	PINPAD Communication Error	Check EPP status or cable
MDN01	CARD READER Communication Error	Check CARD READER status or cable

Appendix B – Master Key Entry

Master Key Installation

Master keys are entered only through an approved EPP (Encrypting Pin Pad) device and are stored in the keypad. These keys, along with another key downloaded from your processor are used to encrypt the 'PIN' numbers for customer transactions.

Two Passwords (Secure Mode Passwords) are required in order to enter 'Key Mode' and change any options.

NOTE: You will NOT be able to enter keys or change key mode until the Secure Mode Passwords have been changed from default. After changing both passwords, you must back out of the operator menu and reinitialize the ATM.

Please follow the procedures below to begin this process.

Installation Procedure:

To access the Key Management menu from Host Setup, you'll need to enter the Secure Mode Password (parts 1 and 2). See page 3.6 for Secure Mode instructions.

Default Secure Mode password is:

Part #1 = 000000 / Part #2 = 000000
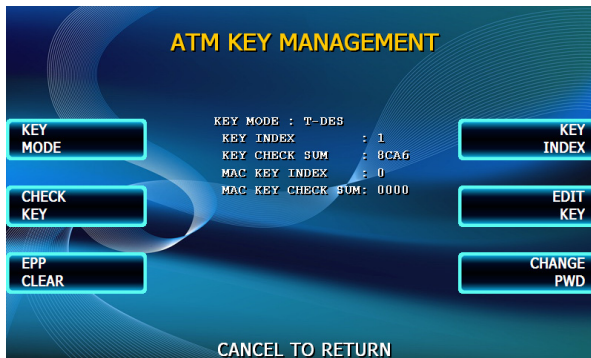
Access the Key Mode selections by entering the operator function menu

 [ENTER]+[CLEAR]+[CANCEL] + 1 + 2 + 3

Enter Master Password and choose Host   Setup

Note: *Master Password is required to access Key Management Menu.*

NOTE: You must change the Secure Mode Password from default before any changes can be made to Key Management, or enter any keys. Change the default passwords for Part #1 and Part #2 and then completely exit the Operator Menu (cancel out and let machine initialize) Once you go back in and use the new Secure Mode Passwords, you'll be able to make changes or enter keys.

1) **Select Key Mode**

The table below describes the format for each key mode.

DES	2 - 16 digit master keys entered as Part A and Part B.
Dual Master Key	2 - 16 digit master keys entered as Part A and Part B (a common key is entered, and then a working key is downloaded from the host).
Unique Key, DES	2 - 16 digit master keys entered as Part A and Part B - with 10 digit unique serial number entered prior to each part.
TDES	2 – 32 digit master keys entered in 16 digit pieces, Part A (left and right) and Part B (left and right)
Unique Key, TDES	2 – 32 digit master keys entered in 16 digit pieces, Part A (left and right) and Part B (left and right) - 10 digit unique serial number entered prior to each part.
MAC	2 -16 digit master keys entered as Part A and Part B, with 2 additional 16 digit numbers entered as MAC Part A and Part B
Unique Key, MAC	2 -16 digit master keys entered as Part A and Part B, with 2 additional 16 digit numbers entered as MAC Part A and Part B - 10 digit unique serial number entered prior to each part of the master key only.
TDES, MAC	2 – 32 digit master keys entered in 16 digit pieces, Part A (left and right) and Part B (left and right), with 2 additional 16 digit numbers entered as MAC Part A and Part B

Under most circumstances, you'll be using TDES as Key Mode.

Unique Key modes use a unique 10 digit serial number that is entered before each half of the master key to allow the processor to bind the key to the terminal ID automatically. In cases where the processor provides a serial number that is less than 10 digits, zeros must be added at the beginning of the number to equal 10 digits.

2) **Entering A Master Key**

Master Key security requires that no one person has access to all parts of the key. To ensure this, the processor will provide keys in separate sealed envelopes (sometimes referred to as "key components"). Each envelope contains either one or two 16 digit keys and in the case of unique key, a serial number.   The diagram below shows a sample Unique Key, TDES master key.

Date: 5/15/2011
Serial #: 123456
Chk Digits: L:0427   R:0521   3D:A123FF

Left Part = 2314 AB04 88ED C107   Right Part = 49FA 001C 3826 07B5

Left Check Digit = AF16   Right Check Digit = 811C
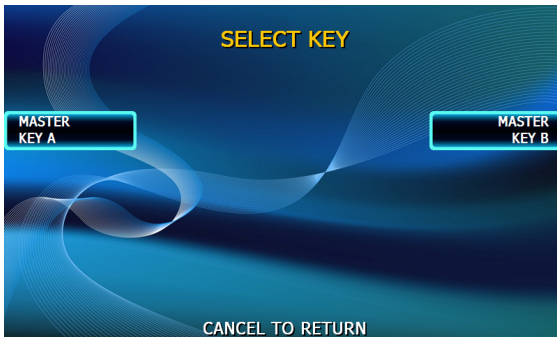
Begin by choosing Edit Master Key from the menu

Depending on Key Mode, the menu prompts for Part A and Part B.

The Edit Master Key interface is designed so that Parts A and B can be entered at completely different times and in either order (Part A first, or Part B first). If a technician is dispatched to enter a key part, choose Check Key from the Key Management menu to determine which part of the key has already been entered.
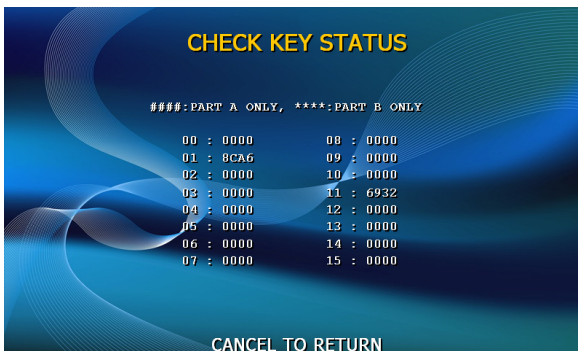
Partially entered keys will appear in the index as #### or **** which denotes that either part A or part B has been successfully entered. (A = #, B = *)

This would tell the second technician that they need to enter their key as Part B on index 12.

Part1 = Part A / Part2 = Part B

SELECT KEY

MASTER
KEY A

MASTER
KEY B

CANCEL TO RETURN
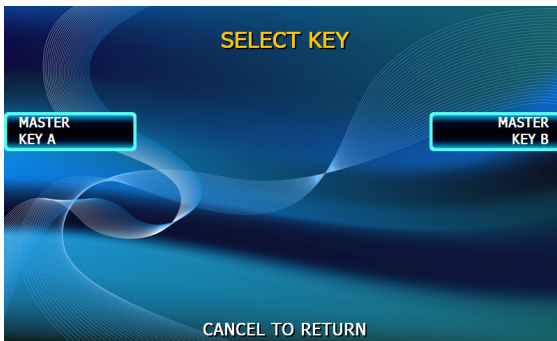
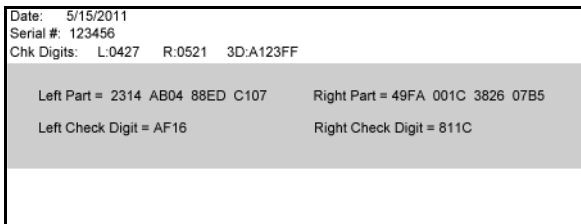Once you have selected Part A or B, you'll be prompted to enter a Key Index.

This index points to the location where the key will be stored.   There are 16 possible memory locations (0-15) available.   Unique master keys must be stored at location #12, and MAC keys at location #15.

The interface will default the values for Unique and MAC keys regardless of what you enter. It is very important to remember that both parts of a key must be entered on the same index. If you enter Part A on index #2 and Part B on index #3 the key will not be complete. Use the Check Key function (shown above) to determine where your keys parts have been entered.

RE-ENTER MASTER KEY B RIGHT

INDEX :   11

****
-----------------
5   10   15
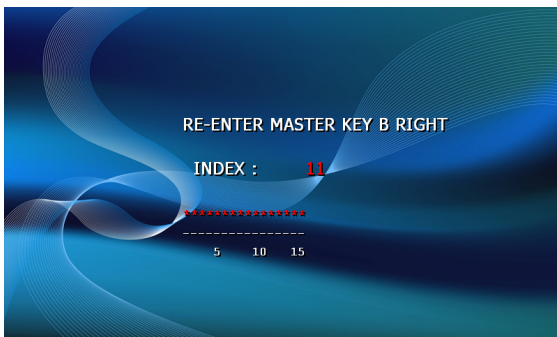
If entering a Unique key, next you'll be prompted to enter the key serial number.

This 10 digit number is found on the paperwork containing your master key(s). If the number the processor has provided is less than 10 digits, you'll need to add zeros to the **beginning** of the number to equal 10 digits.

Date: 5/15/2011
Serial #: 123456
Chk Digits: L:0427   R:0521   3D:A123FF

Left Part = 2314 AB04 88ED C107   Right Part = 49FA 001C 3826 07B5

Left Check Digit = AF16   Right Check Digit = 811C

In the example shown at left, the serial number is 123456.   This 6 digit number would be changed to 0000123456 to create 10 digits.

RE-ENTER MASTER KEY B RIGHT

INDEX :   11

****
----
5   10   15
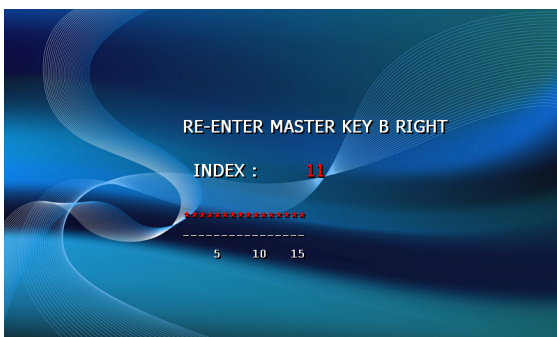
The next step is to enter the master key itself. If you are using TDES, you'll need to enter the left portion first.

After entering the key, you'll be prompted to enter it a second time for verification.

```
Date:    5/15/2011
Serial #:  123456
Chk Digits:    L:0427    R:0521    3D:A123FF

    Left Part =  2314  AB04  88ED  C107        Right Part = 49FA  001C  3826  07B5

    Left Check Digit = AF16                     Right Check Digit = 811C
```

The 16 digit alpha-numeric key is entered using the pin-pad only.

Letters are entered by using the arrow and function keys. Use the pin-pad layout below.

1	2	3	D Cancel
4	5	6	E Clear
7	8	9	F Enter
A	0	B	C

Older EPP-B2 (Encrypted Pin Pad) Master Key Alpha-Numeric Key Layout

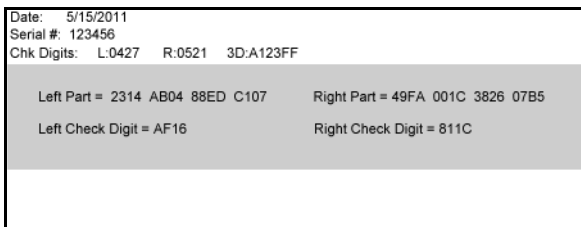| 1	2	3	F Enter
4	5	6	E Clear
7	8	9	D Cancel
A	0	B	C

Newer EPP-B1 (Encrypted Pin Pad) Master Key Alpha-Numeric Key Layout

At this point the left (or first 16 digit) portion of the master key has been entered successfully.

RE-ENTER MASTER KEY B RIGHT

INDEX :   11

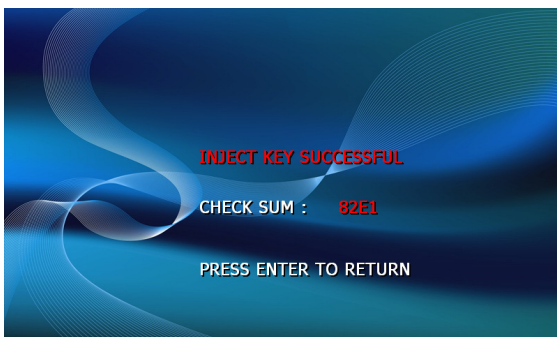*****************
----
      5   10   15
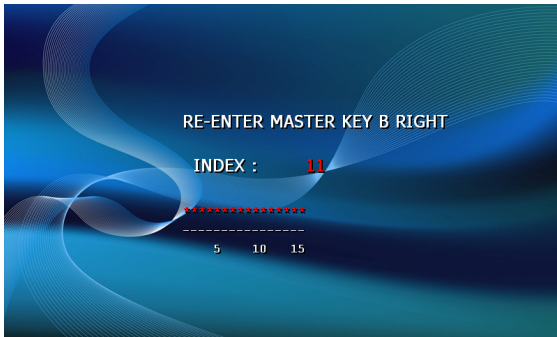
If you are entering a 32 bit key (TDES), the second or "Right" half of the key is entered next.

This option will only appear when in TDES mode.

Date: 5/15/2011
Serial #: 123456
Chk Digits: L:0427   R:0521   3D:A123FF

   Left Part = 2314 AB04 88ED C107   Right Part = 49FA 001C 3826 07B5

   Left Check Digit = AF16   Right Check Digit = 811C

After entering the right portion of the key successfully you'll be prompted with a check digit as shown below. Verify the check digit with the information provided by the processor.

INJECT KEY SUCCESSFUL

CHECK SUM :   82E1

PRESS ENTER TO RETURN

Check digits appear after entering both the right and left portion of each part of the key.

Date: 5/15/2011
Serial #: 123456
Chk Digits: L:0427   R:0521   3D:A123FF

   Left Part = 2314 AB04 88ED C107   Right Part = 49FA 001C 3826 07B5

   Left Check Digit = AF16   Right Check Digit = 811C
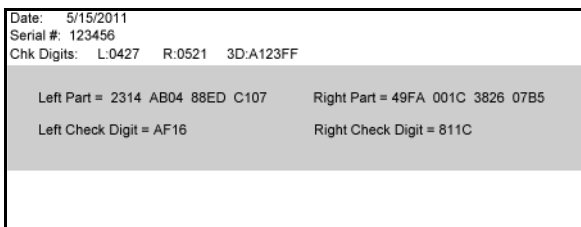
Compare the check digit against the number located at the top of the key component. This represents a check digit for the combined keys. There is not a check digit shown for left and right portions individually.

SELECT KEY

MASTER
KEY A
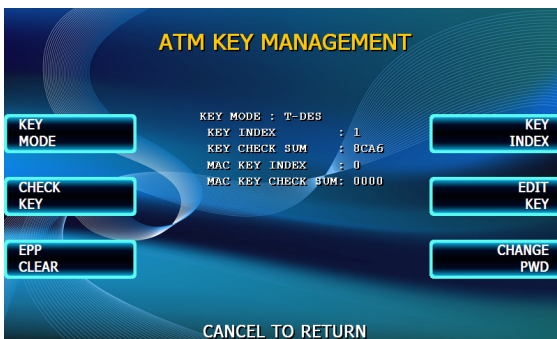
MASTER
KEY B

CANCEL TO RETURN
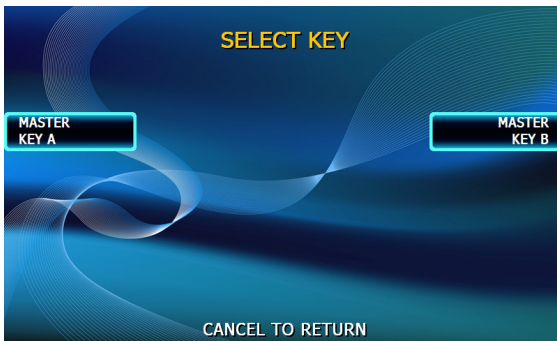
After successfully entering both the left and right portions of Part A, you'll be returned to the Edit Master Key menu.

At this point you can proceed with Part B, or if Part B is to be entered at a later time you can exit the menu and power off the machine until both halves of the key are entered.

Part B is entered with the same procedure given for Part A. Enter the left and right (for TDES) portions of the keys and verify the check digits against what has been provided by the processor.

3) **Verifying Master Key**

ATM KEY MANAGEMENT

KEY
MODE

CHECK
KEY

EPP
CLEAR

KEY MODE : T-DES
KEY INDEX   : 1
KEY CHECK SUM   : 8CA6
MAC KEY INDEX   : 0
MAC KEY CHECK SUM: 0000

KEY
INDEX

EDIT
KEY

CHANGE
PWD

CANCEL TO RETURN

Once both Part A and Part B have been entered successfully, the key management menu will display a check digit for the key index where the master key was entered. If no check digit is entered, use the check key screen to determine where the key parts were entered, then re-enter the keys as necessary.

At this point, the master key is successfully entered. If all other parameters have been entered properly, power off the ATM and power on to connect to host and initialize the keys.

Appendix C – Extra BIN List

This feature allows you to load and manage a large number of BIN numbers into your ATM that will be excluded from Surcharging. BIN numbers are 1- 8 digit numbers which represent the account / card numbers of customers.

To take advantage of this, you must create a list of these numbers according to the special format below.

You can use Excel or Word to gather and sort your list, however we recommend exporting to a text (TXT) file when complete. See the picture following these instructions.
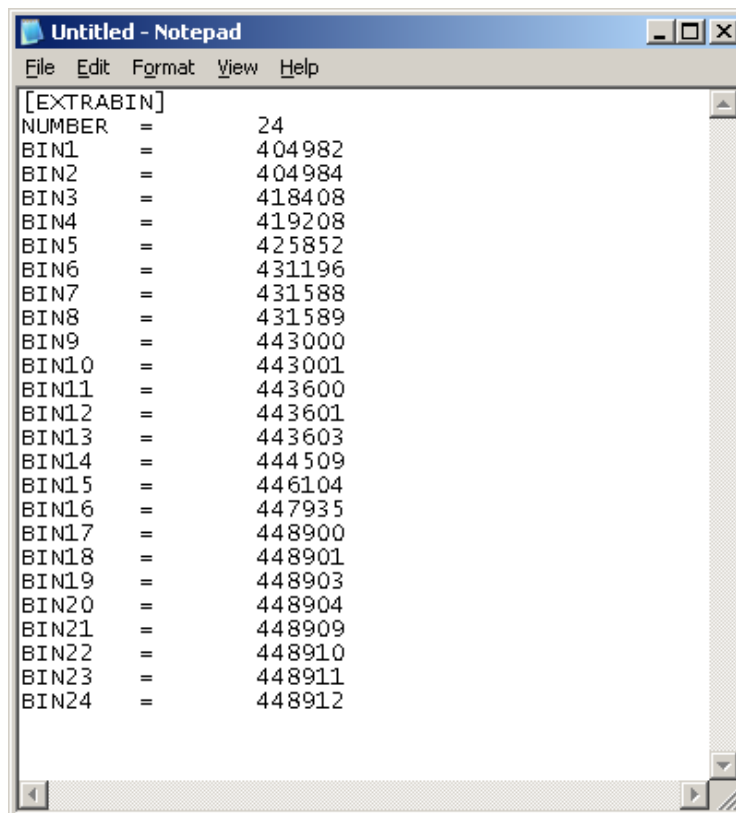
First, the first line of this file must be [EXTRABIN]

Next, you'll have a line which is NUMBER (tab) = (tab) XXXX

Where XXXX will be the total number of numbers you're adding

For each line to be added you must begin BIN1 and then consecutively BIN2, BIN3 up to BIN999. If there will be more than 999 numbers used in your list, then when you get to BIN999, you would follow that with BIN1 again and begin counting up again from 1.

In this example we only have a total of 24 bins. BIN1 through BIN24. Notice the line "Number = 24". 24 is the # of bins and the value must be entered here. If you have 300 bins then you must put 300 here.

```
[EXTRABIN]
NUMBER    =       24
BIN1      =       404982
BIN2      =       404984
BIN3      =       418408
BIN4      =       419208
BIN5      =       425852
BIN6      =       431196
BIN7      =       431588
BIN8      =       431589
BIN9      =       443000
BIN10     =       443001
BIN11     =       443600
BIN12     =       443601
BIN13     =       443603
BIN14     =       444509
BIN15     =       446104
BIN16     =       447935
BIN17     =       448900
BIN18     =       448901
BIN19     =       448903
BIN20     =       448904
BIN21     =       448909
BIN22     =       448910
BIN23     =       448911
BIN24     =       448912
```

GENMEGA

When your list is complete, save the file as EXTRABIN.txt

Next, you'll need to rename this file so the ATM can use it. Locate the EXTRABIN.txt file you just saved and right click on it, then select PROPERTIES. You should get a window like this:
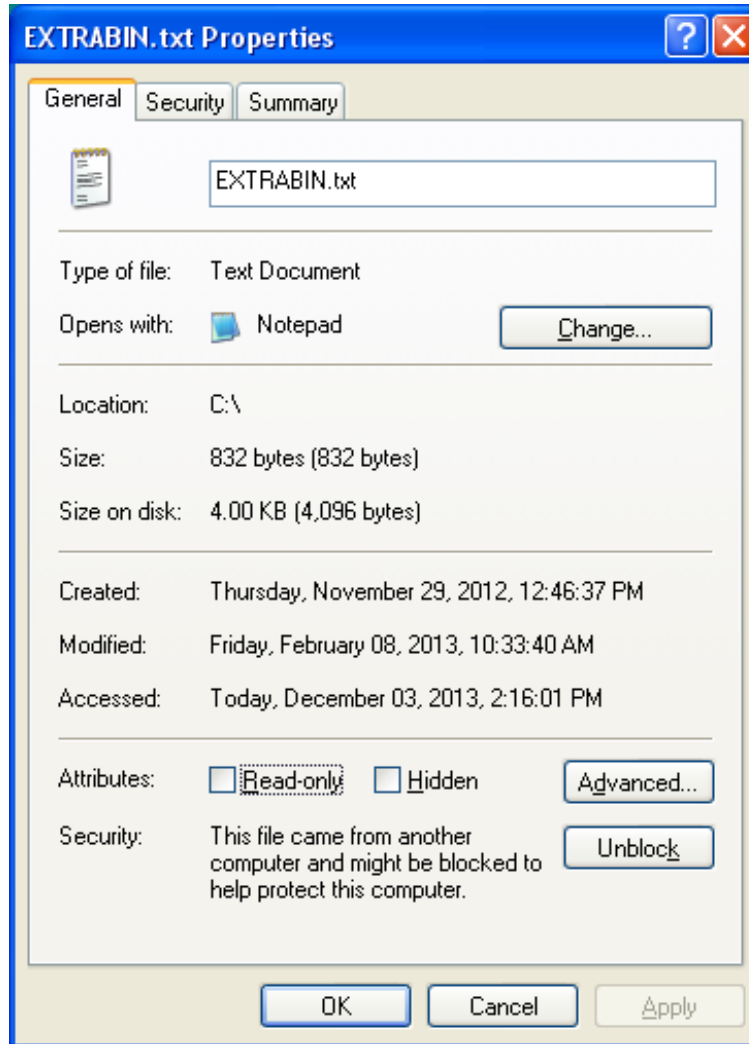
You want to rename the file to EXTRABIN.DAT
DAT extension is what the ATM is looking for to load this as a list of BIN numbers.

In the box at the top of this properties window, rename the file to EXTRABIN.DAT and press OK.

Note that you will get a warning from Windows that renaming the file may cause it to be unusable.
That is normal … just click OK.

To upload this new file you've created to the ATM using an SD card, you'll need to do prepare the SD card for use.

Make sure the SD card you're going to use us 2GB or less. The ATM cannot read cards larger than 2GB capacity.
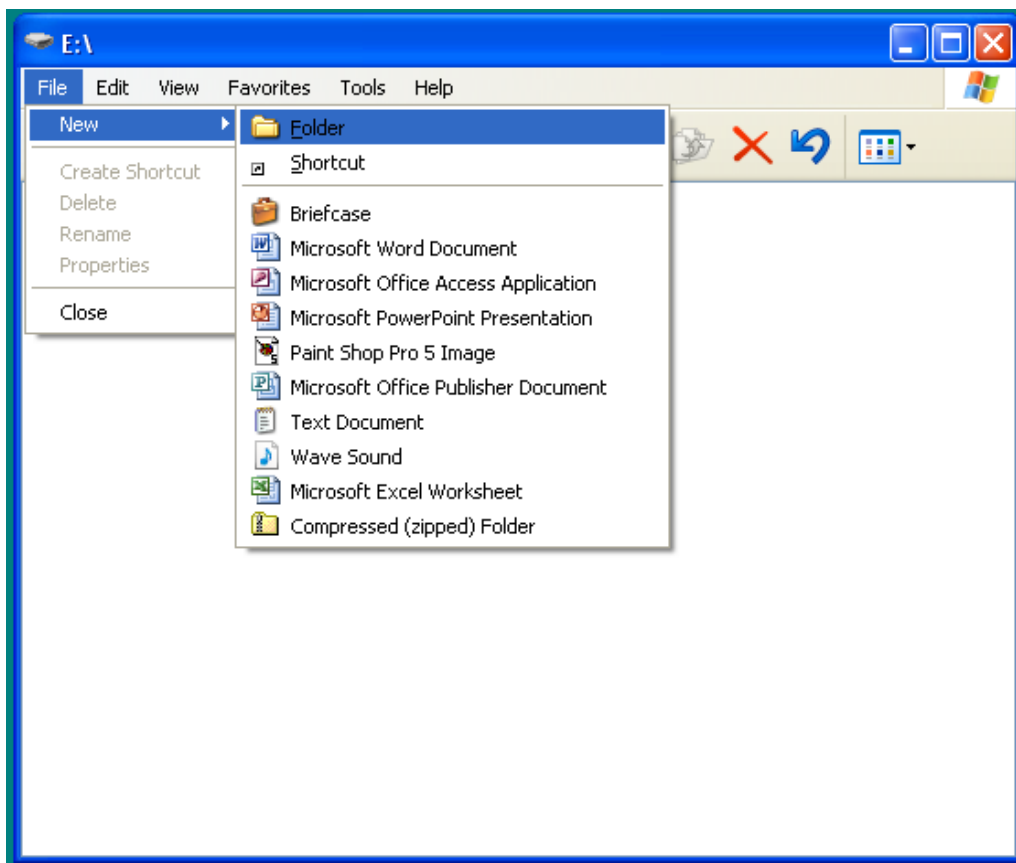
Insert your SD card and open it with My Computer.

Make sure the SD card is empty before you copy any files.
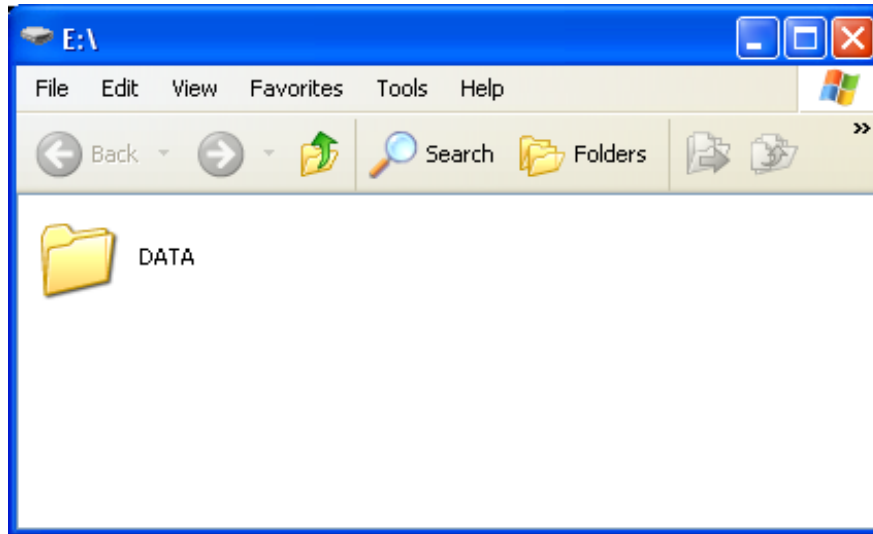
Begin by creating a folder on the SD card called 'Data'

Choose File, then New then Folder.
Or you can right click in the middle of the window and click New and Folder.

When the folder appears, rename it DATA

Now you should have a DATA folder on your SD card.

Copy the EXTRABIN.DAT file into the DATA folder.

Finally you'll need to create another special file. Please note that if you have any copy of Genmega ATM software, you can find this file in the Update folder.

If you don't have the ATM software, you can make this file using the steps below:

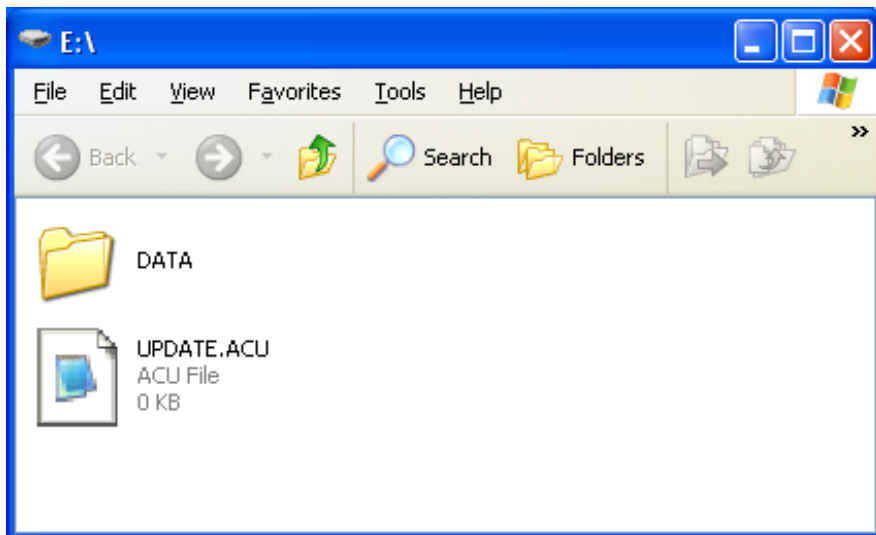In the window shown above, clock on "File" and select "New" and then "Text Document"
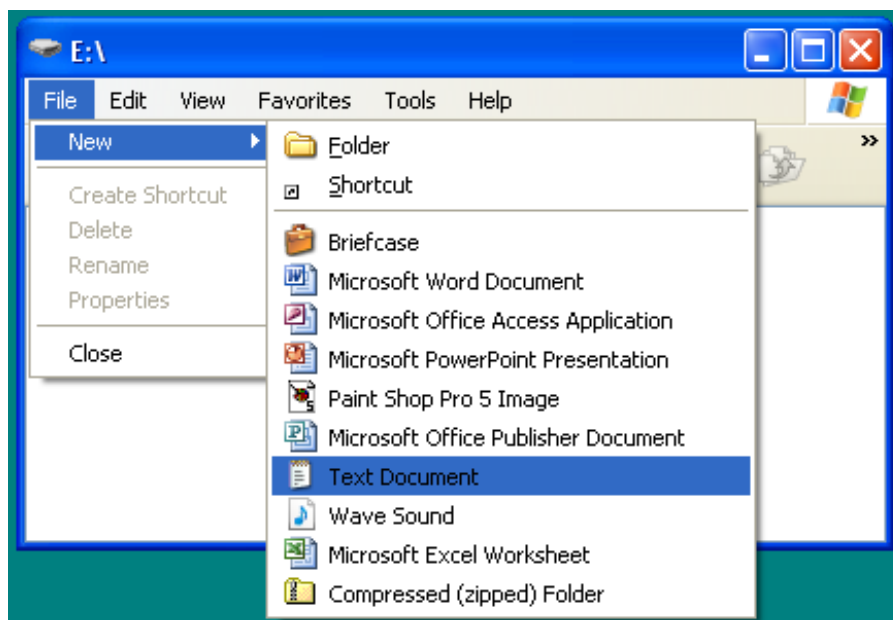
If you've done this correctly, you'll have new file in the box as shown below:
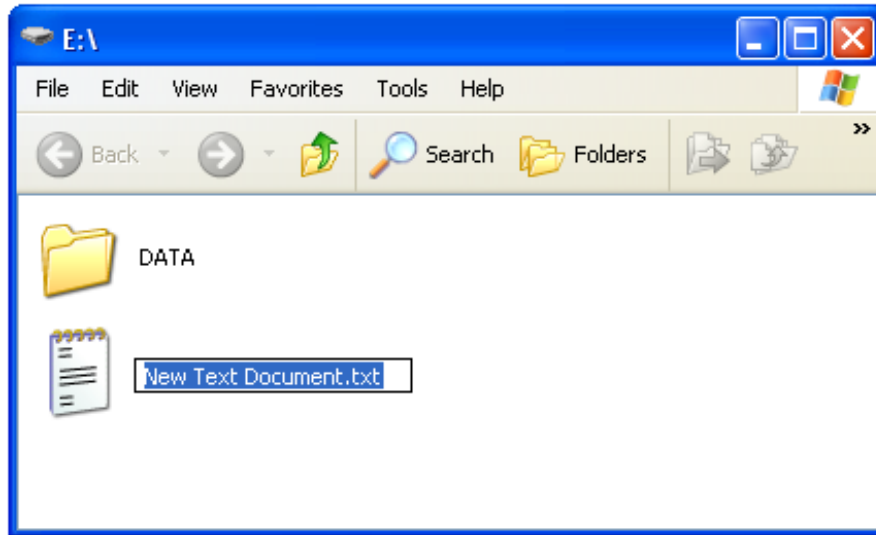
The final step to this is to change the name of this text file to UPDATE.ACU
Type into the box above and press enter when done.

You will get a warning box again when you change the name, just ignore and click OK.

When complete, your SD card should look like the picture above. Inside that DATA folder should be the EXTRABIN.DAT file containing all your BIN numbers.

Insert the SD card into the slot on the back of the screen of your ATM. Power off the ATM and the power back on. If the SD card has been setup properly, then the file will be copied automatically.

The best way to determine if the file copied correctly is to check the message on the screen in the Operator Menu under Customer Setup → BIN list
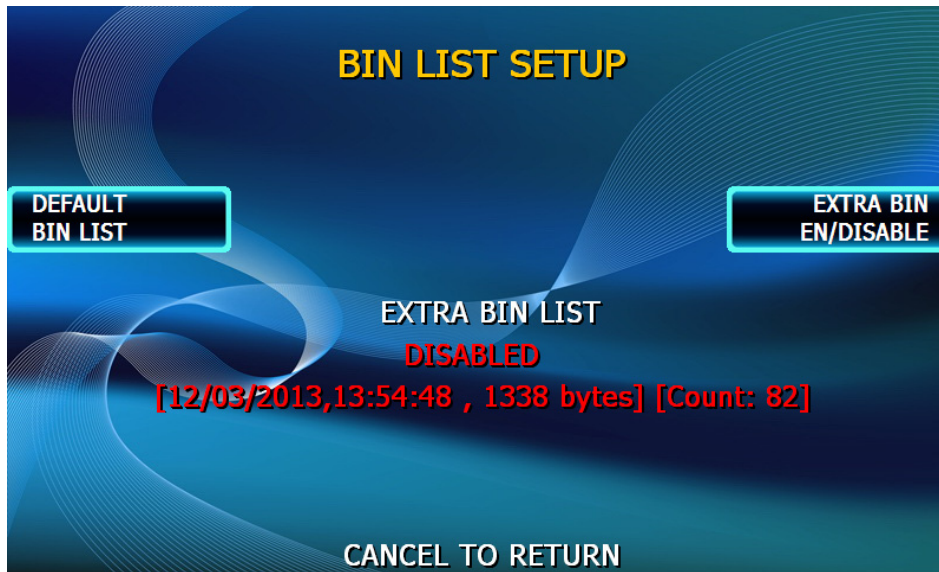
The message above in red shows that an EXTRABIN.DAT file was successfully loaded. The date and time reflect the data and time that the file was saved. Bytes refers to the file size and the Count number refers to the number of BIN numbers loaded.

Another tip to verify that your BIN file is loaded correctly is to add your ATM card number to the list and then attempt a withdrawal transaction. If you do not receive a Surcharge authorization screen, then the BIN list is working correctly.

Appendix D – Advertisement Graphics

Custom graphics screen can be created on your computer and loaded to the ATM via SD card or GenRMS.

The files are all saved as JPG (jpeg) images and are sized depending on the screen size in your ATM.

For G1900, G2500, G2900, G3500, GT3000 which all use a 'wide-screen' LCD of 7", 8" or 10" the image size is 800x480 pixels.

For GT5000 the size is 1024x768

It is recommended that you stick with a 256 color palette for all your images. Be very careful not to copy high resolution photographs (16 million color palette) as the resulting file sizes can be too large and cause memory problems in your ATM.

Files are names CENTER1.JPG through CENTER8.JPG

Below is an example of an 800 x 480 image:

When planning your custom graphics, note that if you use 'WELCOME' text, it will appear overlaid onto the custom image (see page 16') so either plan on that when creating your custom image, or you can delete the text from the Welcome Message.

For advanced users, you can still modify the 'Welcome Screen' as center0.jpg

Please note that if you ever need to return any of the screens back to the default, you'll need to do a Full Install of ATM software.

Once you've made your custom ads, and would like to upload them to your ATM via SD card, you'll need to copy the files on to a blank SD Card (2GB or less capacity) using the following file structure.

From the root of the SD Card (as seen in My Computer) create a folder called 'Common'
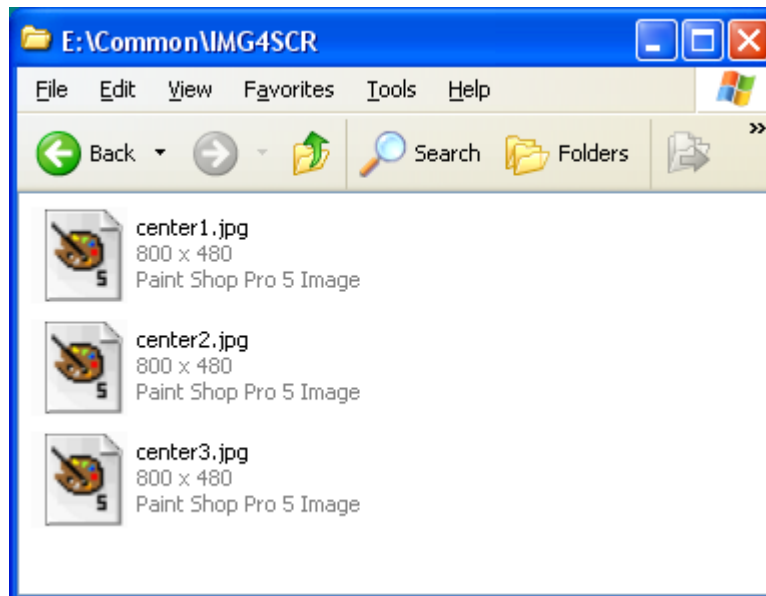
Click 'File' then 'New' then 'Folder' to create.
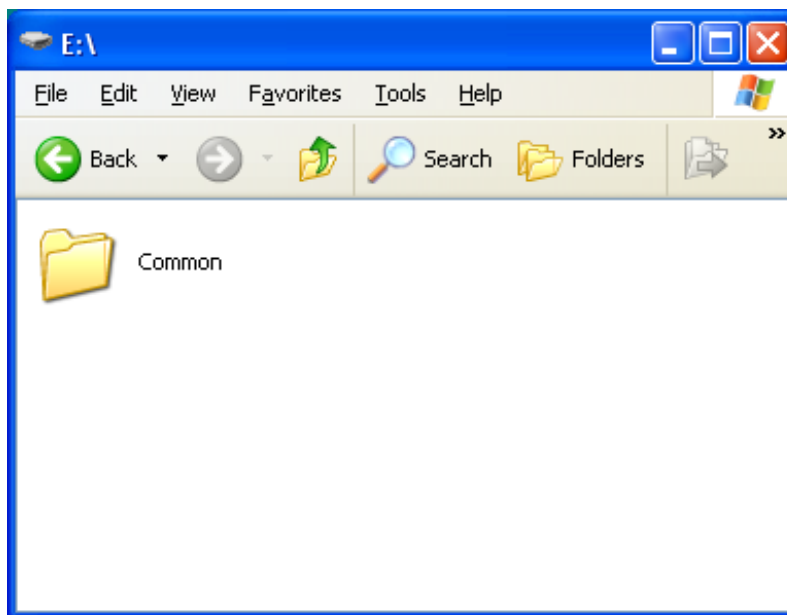
Next you'll need to double-click that Common Folder and within it, create another new folder called IMG4SCR
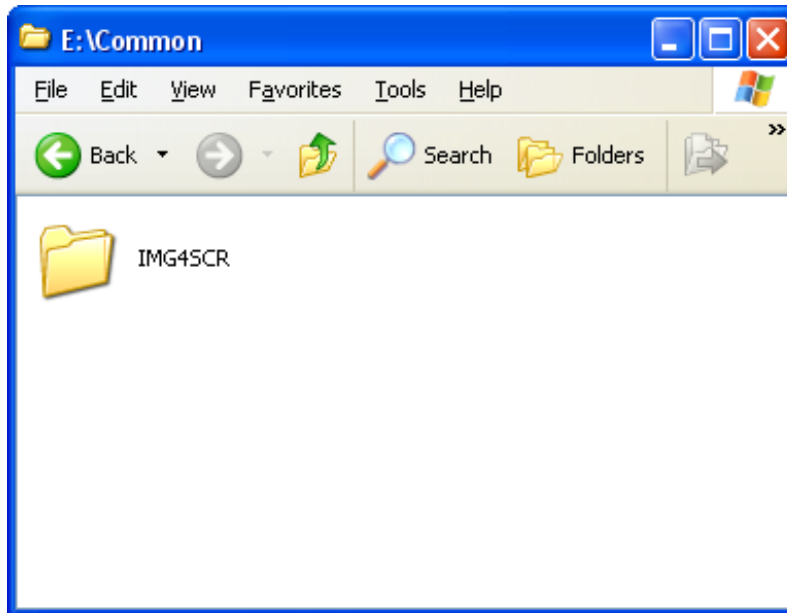
Now, you can double-click the IMG4SCR folder and this is where you will copy any new graphic files to be uploaded to the ATM

Note that the file above were created using a graphics program called Paint Ship Pro. So the icon and text you see may be different (if you're using Windows Paint for example)

The important part here is seeing the file structure.

SD Card → Common Folder → IMG4SCR folder → Graphic files (centerX.jpg)

Finally you'll need to create another special file. Please note that if you have any copy of Genmega ATM software, you can find this file in the Update folder.

If you don't have the ATM software, you can make this file using the steps below:

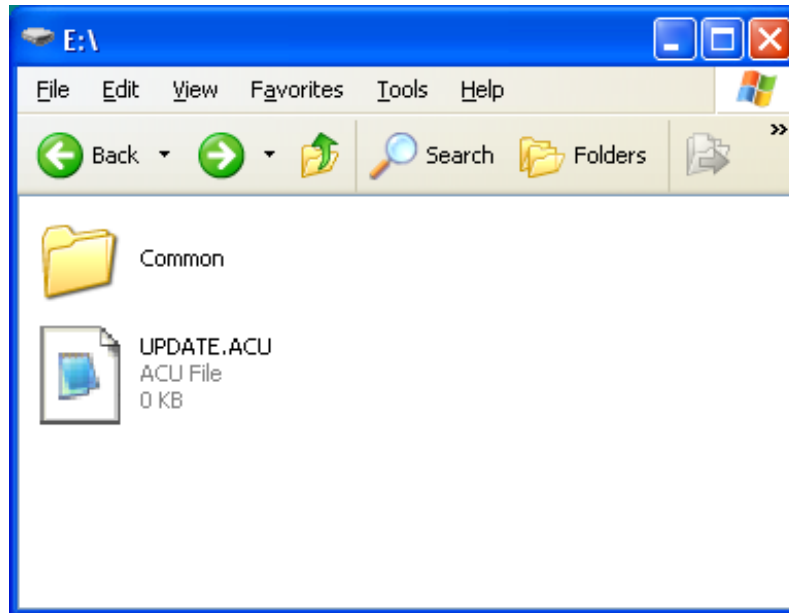In the window shown above, clock on "File" and select "New" and then "Text Document"
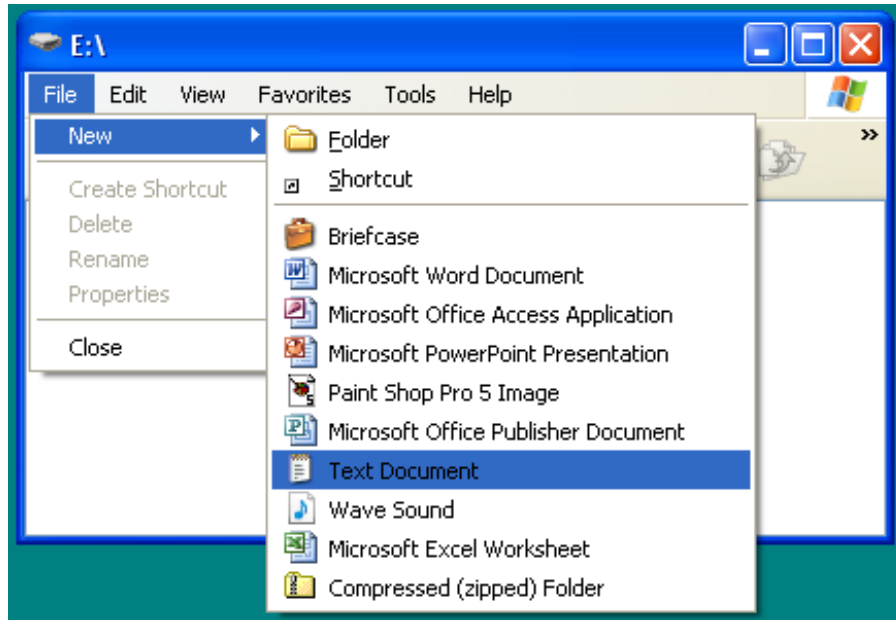
If you've done this correctly, you'll have new file in the box as shown below:
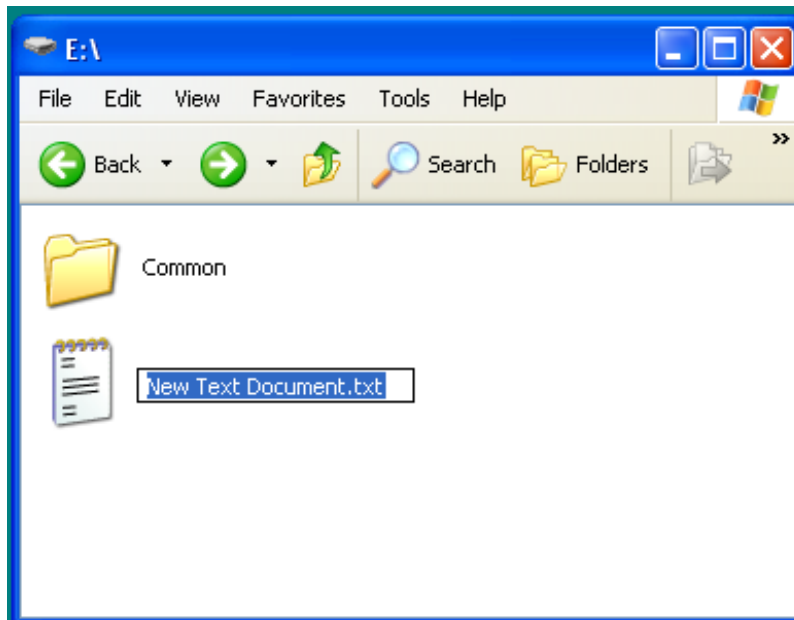
The final step to this is to change the name of this text file to UPDATE.ACU
Type into the box above and press enter when done.

You will get a warning box again when you change the name, just ignore and click OK.

Please note that if you are familiar with loading ATM software on our machines and have an Update version of software, you can always copy that UPDATE.ACU file from the software install over to your SD card rather than creating a new one. It doesn't matter either way.

Once you have created the file structure and then copied your new graphics file, you're ready to load into the ATM.

Insert the SD card into the slot on the back of the screen of your ATM. Power off the ATM and the power back on. If the SD card has been setup properly, then the file will be copied automatically.

To verify that the files were copied successfully, enter the Operator Function Menu and go to Customer Setup → Screen Graphics → Advertisement Enable / Disable.

You should now see your new screens appear in the positions determined by their file name (center0 through center8)

These file, when enabled, will cycle though as the ATM is standing idle (at the Welcome screen).

If you disable an Ad graphic, it will not appear.

RECEIPT GRAPHICS

If your ATM was sold with the optional 3" receipt printer (G2500/G2900/G3500/GT5000) then you can also load an image to display on the receipts.

The dimensions of the image are 530 pixels wide, by 110 pixels tall.
Note that this image must be 2 color (black and white)

Save this file as LOGOIMG.BMP (bitmap file)

It should be copied to the ATM using the same file structure and procedure are listed above in the screen advertisements.

Copy the file to the IMG4SCR folder and upload via the SD memory card as explained previously.

Below is an example of where the image will print on the receipt.

After loading the image on the ATM, each time you restart the ATM you will see a message during boot up that says 'Downloading Logo'.

During that message the image is loaded directly to the printer control board.

```
            GENMEGA

DATE:11/11/2014          TIME:12:06:05
TERMINAL                     70330999

WITHDRAWAL FROM CHECKING

CARD NUMBER            ************8949
BUSINESS DATE               11/11/2014
SEQUENCE #                        0003
AUTH #                      123456 AA

AMOUNT REQUESTED               $20.00
AMOUNT DISPENSED               $20.00
TERMINAL FEE                    $1.50
TOTAL AMOUNT                   $21.50
BALANCE                      $1234.78
SURCHARGE PAID TO             GENMEGA


------------ CUT HERE -------------

 11/11/2014,12:06:18
 TERMINAL # = 70330999
 SEQUENCE # = 0003
 REF. #     = 123456789012


 ******************************
 *  THIS IS A SAMPLE OF A     *
 *  RECEIPT COUPON !!!!       *
 ******************************
```