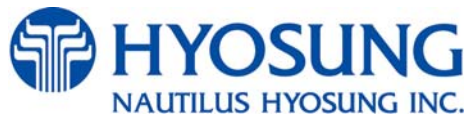


MCWHORTER
ATM
SERVICES



MX-4000W

Operator Manual



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Revision Record

Date	Version	Page	Description of Change
November 2011	1.0	All	New Publication
December 2011	1.1	6-5	Added "Packing Dimensions" in Chapter 6.
		6-6~14	Modified "6.2 System Installation" of chapter 6.

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Chapter 1. Introduction

1. Introduction

1.1 About MX-4000W

The MX-4000W is a wall-mounted ATM and designed to meet the everyday demands of immediate cash needs for individuals with a compact size to fit in virtually any place. This Automated Teller Machine (ATM) is connected to a network processor to verify accounts and any other inquires through the insertion of a customer's card. The MX-4000W is easy to use, easy to service and is able to support customer's needs.

1.2 Basic Features

Important features of the model MX-4000W machine is highlighted in the following list:

Main Controller		
CPU		S5PC100 834MHz (ARM Cortex-A8)
Memory	SDRAM	256MB
	Flash Memory	256MB
	NV-RAM	N/A
Operating System		WinCE 6.0
Serial Ports		8 Ports
Communication		MODEM & TCP/IP Selectable
Customer Display		
Display Type		8" TFT Color LCD
Flicker		2 EA (High Bright LED)
Customer Input Method		
Pin-Pad		Plastic Key Cap EPP
Function Key		4X2
Cash Dispenser		
Number of cassettes		1 cassette
Denomination		US \$20
Maximum Dispense		20 Notes/1transaction
Cassette Capacity		60mm
Reject Type		About 500 new notes (US Dollar Brand New)
		About 20 notes

Card Reader		
Type	DIP Type	
Receipt Printer		
Printing Type	Direct Line Thermal	
Printing Width	54mm	
Paper Width	Max. 60mm	
Resolution	203dpi	
Paper Setting Method	Auto-Loading or Clamshell Type	
Journal		
Electronic Journal	Supported	
Safety		
Locking Device	Key Lock	
Additional Function		
Audio guidance	Support	
ADA Audio guidance	Support	
Access Type	Front Access	
Installation	Wall Mount Type	Table Top Option

1.3 What is in this manual

This MX-4000W Automated Teller Machine Manual contains all information needed for normal operational use.

This manual contains Unit Specifications, ATM Opening & Closing Procedures, Operator Functions, Customer Transactions, Error Recovery and etc.

Some of the information in this manual may differ according to the network processor to be connected.

1.4 Terminologies

In this document the terminology listed below is used as follows:

- Customer and consumer refer to any person who transacts business through the ATM.
- Device and unit refer to the standard and optional ATM equipment, such as monitors, card readers, printers, and dispensers.
- Fascia refers to the entire front portion of the unit, including the portion where the customer transacts business.
- Module refers to a plug-in device that can be serviced or replaced.

- Note(s) and bill(s) refer to the individual documents loaded into and dispensed from the dispenser.
- Operator refers to a person who performs daily servicing and maintenance tasks, such as replenishing supplies and diagnosing certain problems.
- Screen refers to the text appearing on the customer display.
- Servicing and maintenance refer to the operator tasks performed to keep the terminal operational.

1.5 Abbreviations of ATM

NO.	Abbreviations	Description
1	AD board	Analog to Digital conversion board
2	ADA	The American Disabilities Act
3	AP	Application Program
4	Assy	Assembly
5	BATT S/W	Battery Switch
6	CAM	Camera Unit
7	CDU	Cash Dispenser Unit
8	CE	Control Electronics
9	Earphone Jack	Voice Converter for Visually Disabled Persons (ADA)
10	EMV	Europay, Mastercard, Visa
11	EP	Elementary Program
12	EPP	Encryption PIN Pad
13	H/W	Hardware
14	I/F	Interface
15	ISO	International Standard Organization
16	ISO 1	IATA (International Air Transaction Association)
17	ISO 2	ABA (American Banks Association)
18	ISO 3	MINTS(Mutual Institutions National Transfer Systems)
19	JPR	Journal Printer
20	LCD	Liquid Crystal Display
21	MCU	Magnetic Card Unit
22	OPL	Operation Panel for Customers to Operate
23	OSD board	On Screen Display Board
24	P/S	Power Supply
25	PIN	Personal Identification Number

NO.	Abbreviations	Description
26	PNC	Panel Control Board
27	PTR	Printer (mainly Receipt Printer)
28	S/W	Switch
29	SIU	Sensor and Indications Unit
30	SP	Service Provider
31	SPR	Slip Printer (Receipt Printer)
32	TTU	Text Terminal Unit (OPL or SPL)
33	VFD	Vacuum Fluorescent Display

Chapter 2. Precautions for Safety (English)

2. Precautions for Safety

2.1 Overview

Common Precaution for Safety



Precautions outlined in this manual provide information on safe and proper handling of the product. Non-compliance of the precautions may result in injury or damage to the product.

This precaution symbol with sample term tells you safety warnings during equipment handlings.







Please read the following instructions before operating equipment.

1. Operate equipment in the order outlined in this manual.
2. Follow precautions indicated in this manual, as well as the equipment itself.
Failure to properly address these precautions may lead to injury or damage to the product.
3. Avoid operations not addressed in this manual.
4. If you cannot remedy system problems using the methods outlined in this manual, please refer to contact information listed in the manual.
5. Any change or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

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

2.2 Description of Precaution Symbols

Symbol	Description
	<p>Electrical Shock</p> <ul style="list-style-type: none"> • Do not remove cover. Only a maintenance engineer is allowed to open the cover. • Do not touch. You may receive electric shock. • Make sure to turn off the power when servicing the equipment.
	<p>High Temperature</p> <ul style="list-style-type: none"> • Do not touch the equipment when it is running. • The equipment can get extremely hot and may cause a burn. • Make sure to close the cover before running the equipment.
	<p>Be Careful when Moving</p> <ul style="list-style-type: none"> • The equipment is heavy. Make sure at least 2 people to lift or move the equipment. • Do not attempt to move the equipment alone. You may be injured by dropping the heavy equipment.
	<p>Fire Hazard</p> <ul style="list-style-type: none"> • Place the equipment in an area away from any combustible materials. • The equipment may catch on fire from overheating or short circuit of the power supply unit.
	<p>Disassembly</p> <ul style="list-style-type: none"> • Do not disassemble or modify the equipment unless you are a certified engineer. • Contact the service center for maintenance, adjustments and repairs. • Improper disassembly may cause fire or electrical shock.
	<p>Fall down</p> <ul style="list-style-type: none"> • Do not place the equipment where the floor cannot sustain the weight of the equipment, or on slanted or unstable surface. • Equipment may fall down and cause injury or damage.
	<p>Unplug the Equipment</p> <ul style="list-style-type: none"> • Stop using the equipment immediately if it smokes, emits an unusual smell, makes abnormal sounds, or if liquids or other foreign materials enter the equipment. • If the above-mentioned abnormalities occur, immediately turn off the power, unplug the equipment and contact the service center. • If you ignore these symptoms, the equipment may catch on fire or cause electric shock.

CAUTION:

1. TO REDUCE THE RISK OF FIRE, USE ONLY No. 26 AWG OR LARGER TELECOMMUNICATION LINE CORD
2. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSED OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
3. FOR PLUGGABLE EQUIPMENT, THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE
4. THE EQUIPMENT IS TO BE SECURED TO THE BUILDING STRUCTURE BEFORE OPERATION

Chapitre 2. Précautions pour la sécurité (French)

2. Précautions pour la sécurité

2.1 Sommaire

Précaution générale pour la sécurité



Précautions décrits de ce manuel fournissent des informations sur une manipulation sûre et appropriée du produit. Le non-respect des précautions peut causer des blessures ou endommager le produit. Ce symbole de précaution avec le terme d'exemple vous indique des consignes de sécurité lors de la manipulation de l'équipement.

Veillez lire des instructions suivantes avant d'utiliser l'équipement

- Fonctionner l'équipement dans l'ordre indiqué dans ce manuel.
- Suivre les précautions indiquées dans ce manuel, ainsi que l'équipement lui-même.
Le défaut de traiter correctement de ces précautions peut entraîner des blessures ou endommager le produit.
- Évitez des opérations non traitées dans ce manuel.
- Si vous ne pouvez pas résoudre des problèmes du système en utilisant des méthodes décrites dans ce manuel, veuillez se référer aux informations de contact figurant dans le manuel, s'il vous plaît.
- Certain changement ou des modifications dans la construction de ce dispositif qui ne sont pas expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur de faire fonctionner l'équipement.

REMAQUE:

Cet équipement a été testé et fondé pour se conformer aux limites pour un équipement numérique de classe A, conformément à la partie 15 des règles FCC. Ces limites sont conçues pour fournir une protection raisonnable contre des interférences nuisibles lorsque l'équipement est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre des fréquences radios et, s'il n'est pas installé et utilisé conformément aux instructions de ce manuel, peut causer des interférences nuisibles aux communications radios.

Le fonctionnement de cet équipement dans une zone résidentielle est susceptible de provoquer des interférences nuisibles dans le cas, l'utilisateur devra corriger ces interférences à ses propres frais.

2.2 Description des symboles de précaution

Symbole	Description
	<p>Choc électrique</p> <ul style="list-style-type: none"> • Ne pas retirer le couvercle. Seul le technicien d'entretien est autorisé à ouvrir le couvercle. • Ne pas toucher. Vous pouvez avoir un choc électrique. • Assurez-vous d'éteindre l'appareil lors de l'entretien de l'équipement.
	<p>À haute température</p> <ul style="list-style-type: none"> • Ne pas toucher l'équipement quand il est en marche. • L'équipement peut devenir extrêmement chaud et peut provoquer une brûlure. • Assurez-vous de fermer le couvercle avant de lancer l'équipement.
	<p>Soyez prudent lors du déplacement</p> <ul style="list-style-type: none"> • L'équipement est lourd. Assurez-vous d'au moins 2 personnes pour soulever ou déplacer l'équipement • N'essayez pas de déplacer l'équipement seul. Vous pouvez être blessés par la chute de l'équipement lourd.
	<p>Risque d'incendie</p> <ul style="list-style-type: none"> • Placer l'équipement dans une zone éloignée de tous les matériaux combustibles. • L'équipement peut s'enflammer de surchauffe ou de court-circuit de l'unité d'alimentation.
	<p>Démontage</p> <ul style="list-style-type: none"> • Ne pas démonter ou de modifier l'équipement, sauf si vous êtes ingénieur certifié. • Contacter le centre de service pour l'entretien, le réglage et la réparation. • Le mauvais démontage peut provoquer un incendie ou un choc électrique.
	<p>Tomber</p> <ul style="list-style-type: none"> • Ne pas placer l'équipement dont le sol ne peut pas supporter le poids de l'équipement, ou sur une surface inclinée ou instable. • L'équipement peut tomber et provoquer des blessures ou des dommages.
	<p>Débrancher l'équipement</p> <ul style="list-style-type: none"> • Cessez d'utiliser l'équipement immédiatement si il fume, émet une odeur inhabituelle, fait des bruits anormaux ou si des liquides ou d'autres matériaux étrangers dans l'équipement.

Symbole	Description
	<ul style="list-style-type: none">• Si les anomalies mentionnées ci-dessus se produisent, éteignez immédiatement la puissance, débranchez l'appareil et contactez le centre de service.• Si vous ignorez ces symptômes, l'équipement peut prendre feu ou provoquer un choc électrique.

AVERTISSEMENT :

1. POUR RÉDUIRE LES RISQUES D'INCENDIE, UTILISEZ UNIQUEMENT AWG n ° 26 OU LA LIGNES DE TELECOMMUNICATION PLUS GROSSE
2. RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UN TYPE INCORRECT. DISPOSER POUR UTILISATION DES BATTERIES SELON LES INSTRUCTIONS
3. POUR LES APPAREILS RACCORDES, LA PRISE DOIT ÊTRE INSTALLÉE PRES D'EQUIPEMENT POUR ÊTRE FACILEMENT ACCESSIBLE
4. L'EQUIPEMENT DOIT ÊTRE SECURISÉ A LA STRUCTURE DU BATIMENT AVANT D'UTILISER

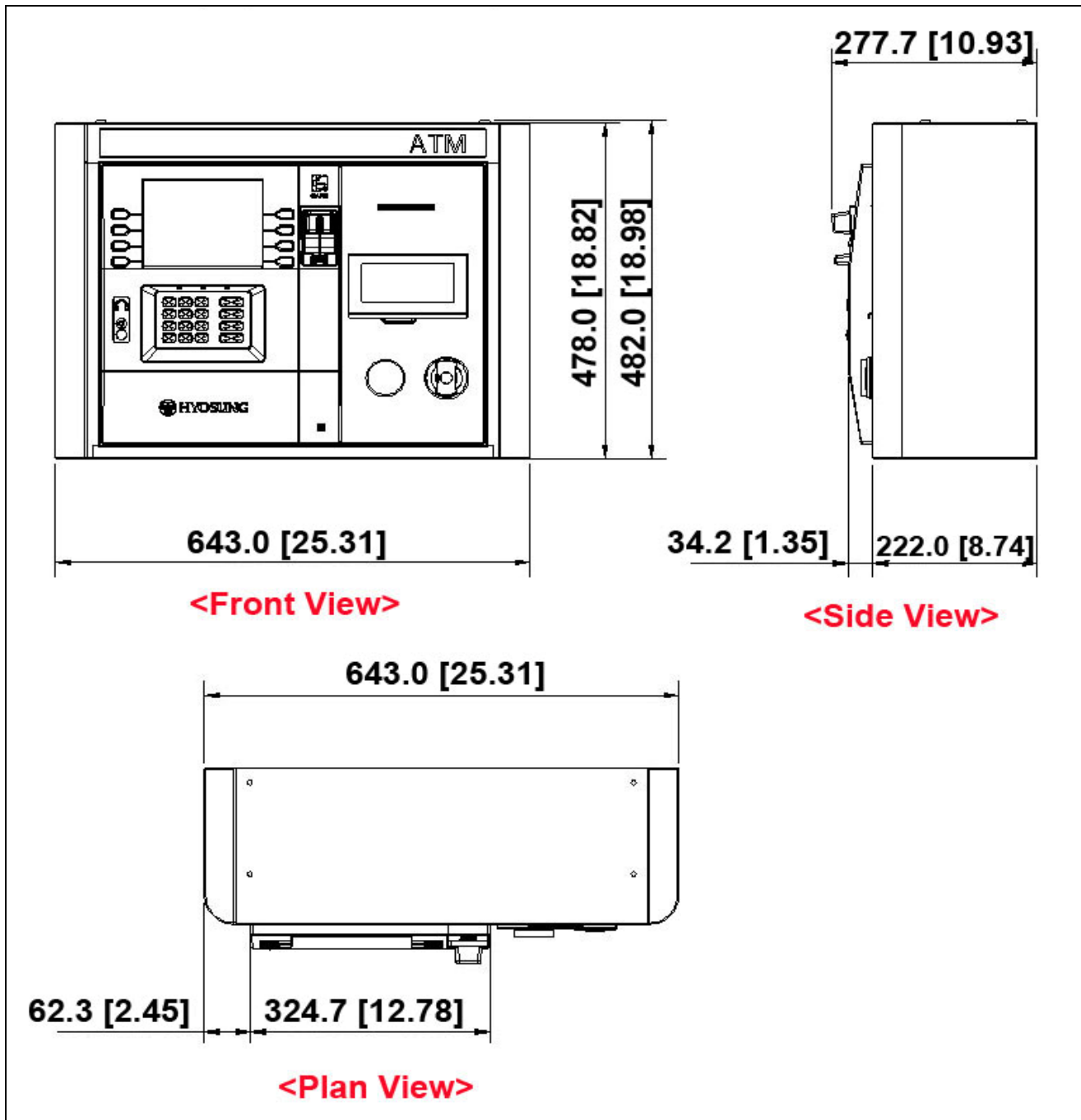
Chapter 3. Hardware Specifications

3. Hardware Specifications

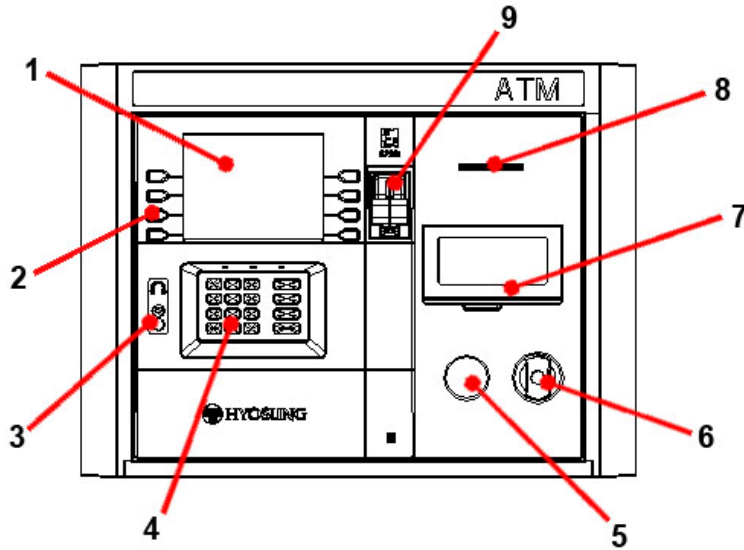
3.1 Dimensions

Below figures show the overall physical dimensions of the MX-4000W.

NOTE: All the units in the dimension is mm and () is inch scale.



3.2 Component Locations



1	Liquid Crystal Display (Customer Display)
2	Function Keys
3	Phone Jack (board)
4	Encryption Pin Pad
5	Key Lock
6	Push End Button
7	Cash Dispenser Slot
8	Receipt Printer Slot
9	Card Reader Slot (Dip Type)

Customer Display

The customer display welcomes the consumer and provides instructions for performing transactions at the terminal.

Function keypads

The function keypads are made up of four keys mounted on each side of the consumer display. The customer selects from the choices shown on the consumer display and presses the corresponding function key.

Encryption PIN Pad

During the transaction sequence, the ATM prompts the customer to use the customer keypad to enter transaction information. The 16-key keypad uses a security module and encrypting PIN pad technology to secure the information entered by the customer at the keypad.

Cash Dispenser Slot

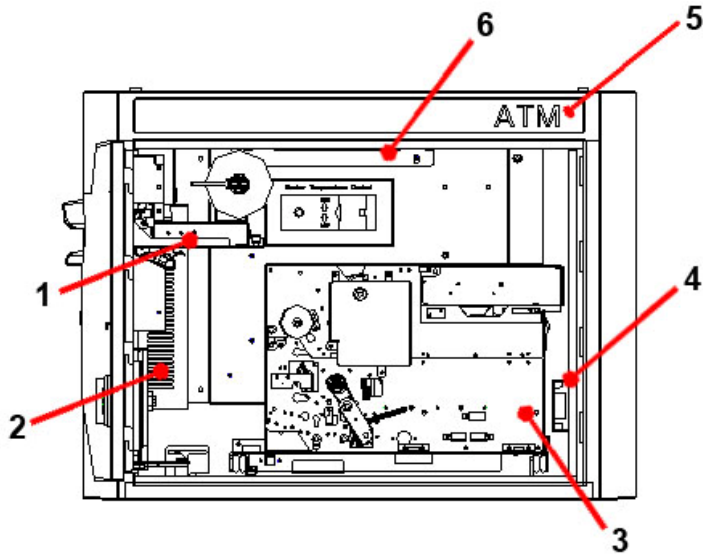
When the customer requests cash, it is presented through the cash dispenser slot in the fascia.

Receipt Printer Slot

After the customer uses the ATM, the receipt printer prints the transaction information on a form. The ATM presents the form through the receipt printer slot on the upper fascia.

Card Reader Slot

The consumer inserts (to begin transactions) and removes a card from the card reader slot.



1	Receipt Printer
2	Power Supply
3	Cash Dispenser
4	Door Sensor
5	Lamp (placed at the back)
6	Heater

Receipt Printer

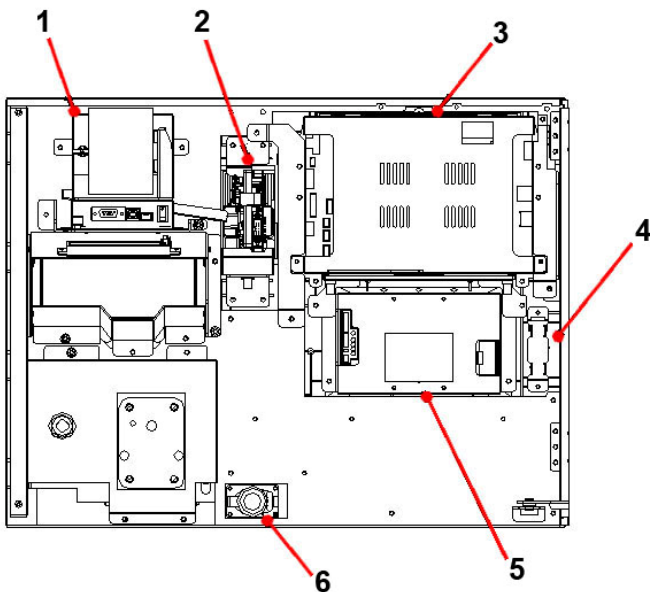
The receipt printer provides a printed receipt of the customer's transaction

Power Supply

The power supply (100W) unit provides power to modules and the control board of the system

Cash Dispenser

The main function of the cash dispenser is to dispense the exact number of banknotes in the cassette by a customer's request and to transfer to the customer automatically.



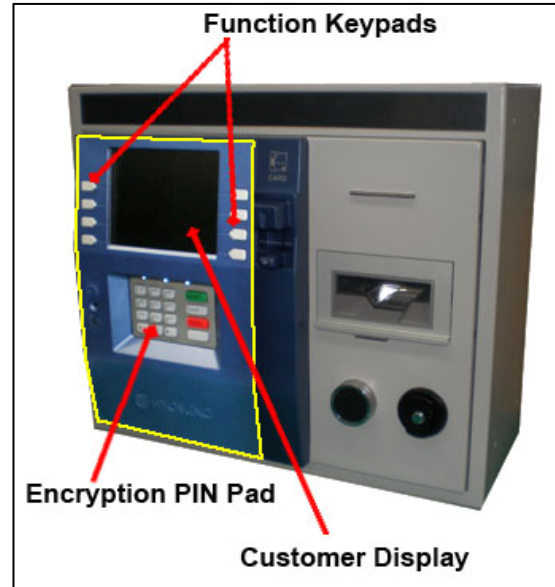
1	Receipt Printer
2	Dip Card Reader
3	Main Controller & Customer Display (OPL/CE)
4	Phone Jack Board
5	Encryption PIN Pad
6	Speaker

3.3 LCD & Customer Keypad

The customer display welcomes the customer and provides instructions for performing transactions at the ATM.

During the transaction sequence, the ATM prompts the customer to use the customer keypad to enter transaction information. The 16-key keypad uses a security module and encryption PIN pad technology to secure the information entered by the customer at the keypad.

The function keypads are made up of four keys mounted on each side of the customer display. The customer selects from the choices shown on the consumer display and presses the corresponding function key.



Basic Specification of LCD

- Screen Size: 8 " (TFT Color LCD)
- Resolution : 800 × 600 pixels
- 4 x 2 Function Keys

Basic Specification of Keypad

- 10 Alphanumeric , ◀ , ▶ , ENTER, CLEAR, CANCEL, BLANK Keypads

3.4 Cash Dispenser Unit

The main function of Cash Dispenser Unit is to dispense the exact number of banknotes in the cassette by a customer's request and to transfer to the customer automatically.

Basic Specification of Cash Dispenser Unit

- 1 Cassette supported
- US \$20 supported
- Max 20 notes dispensed
- Capacity of cassette: About 500 notes
(60mm, US Dollar Brand New)
- Reject capacity: About 20 notes



3.5 Receipt Printer

The receipt printer provides a printed receipt of the customer's transaction. The transaction information can include the amount of withdrawals, transfers, the ATM number and location, and other desired information. After the customer uses the ATM, a printed record of the transaction information is presented through the appropriate printer slot.



Basic Specification of Receipt Printer

- Direct Line Thermal
- 203dpi resolution
- 60mm paper in width used

3.6 Magnetic Card Reader

The dip card reader is a manually operated device mounted directly to the ATM fascia. The customer inserts an ATM card in the card entry slot and then removes the card to begin the transaction.



Basic Specification of Magnetic Card Reader

- Dip type Card Reader

3.7 Main Control Board

This motherboard is applied to MX-4000W ATM based on Window CE.

Basic Specification of Control Electronics

- S5PC100 834 MHz (ARM Cortex-A8) CPU
- SDRAM (256MB), Flash Memory (256 MB)
- Operating system: Windows CE 6.0
- 8 Serial ports supported
- Communication: Modem & TCP/IP Selectable



3.8 Operating Environment

Environmental Specification (temperature & humidity)

Temperature	Operating	5°C ~ 35°C / 41°F ~ 95°F	
	In Storage	0°C ~ 40°C / 32°F ~ 104°F	
Humidity	Operating	25% ~ 85%	
	In Storage	10% ~ 90%	

Power Requirements

Main Power Supply	100W Free Voltage (90~264VAC)	
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Chapter 4. Operating Instructions

4. Operating Instructions

4.1 Opening and Closing the Front Door

Opening the Front Door

1. Insert a key into the lock case and turn it clockwise until it is stopped.



2. Press the handle (Push_End button) and turn it clockwise to open the front door.



Closing the Front Door

1. Turn the handle (Push_End button) counterclockwise and press it.



2. Turn the key counterclockwise and take it out to unlock the door.



4.2 Cash Dispenser

The main function of Cash Dispenser Unit is to dispense the exact number of banknotes in the cassette by a customer's request and to transfer to the customer automatically.

Features

1. To separate notes by friction roller & plate.
2. To prevent from double dispensing case by ultrasonic double detect mechanism
3. To implement mold guides and paths to minimize jam occurrence
4. To maximize convenience in maintenance or clearing by opening guide structure
5. To realize compact and slim size so as to be applied to even small space
6. To have tray for customer easily to take the sprayed notes
7. After power failure, bills on the path are rejected to reject tray when power turns on again
(Auto Reject Function)

4.2.1 How to load the notes into the cassette

Preparing Notes

The number of rejects depends directly on the loading procedure and the quality of the notes. Store the notes at room temperature for at least eight hours before feeding from cash cassette. The following procedures are recommended to aid easier note feeding from trays. Without preparation, feeding problems may occur, such as a higher reject rate or jams in the cash transport path.

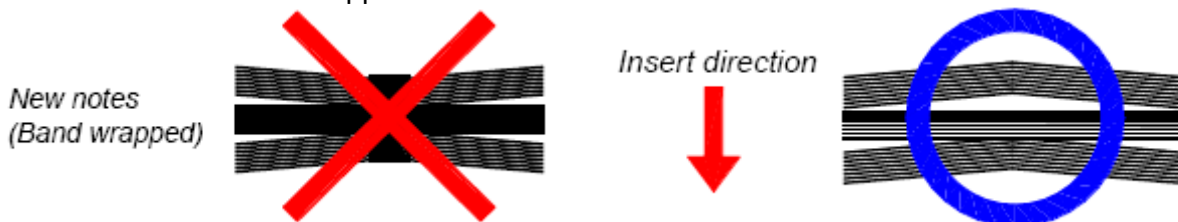
1. New, unused notes

Remove the band around each bundle of notes.

Separate the notes from each other by:

- Striking the bundle hard against the edge of a table or similar object.
- Flipping the rough each bundle of notes in both directions at both ends.
- Using a note counter.

Select notes from the centre of the bundle. The notes in the centre are normally flat, notes in the ends of the bundle are often cupped.



2. Unacceptable notes

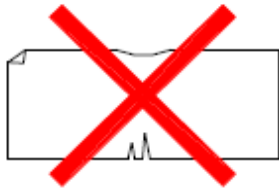
Notes with the following irregularities are liable to cause feeding problems

- Joined by any means
- Having staples or pins
- Sticky surfaces
- Repaired with tape
- Torn, with tears exceeding 5mm or with centre edged tears
- Having holes or missing sections
- Crumpled or crisp and crinkled
- Dog-eared, with a folded edge exceeding 5mm
- Limp or moist
- Concave or deformed by prolonged storage
- Having strapping damage
- Combination of new and used notes in the same cassette may cause higher reject rates.

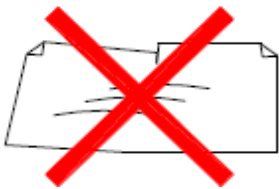
3. Used notes

Used Notes must not be limp and should be reasonably clean.

- Remove the band around each bundle of notes.
- Remove foreign objects, e.g. pins, paper clips etc.
- Remove torn or very worn notes.
- Straighten any folded notes.



Dog-eared, strapping damage, center edge tears



Crumpled



Concaved (Height: 5 mm or more)

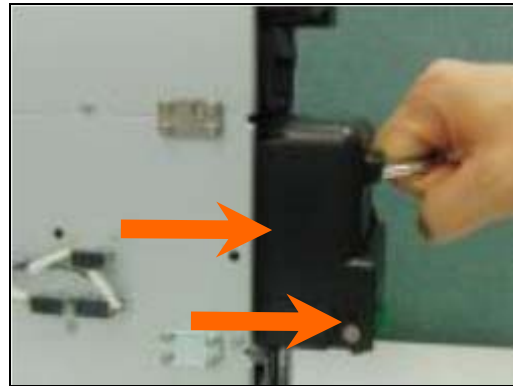
Removing the cash cassette

The cash cassette can be removed at any time when the machine is not in use.

Before removing the cash cassette, use the appropriate command from the host, driver or application.

If the cash cassette should be removed while the CDU is in use the CDU will malfunction.

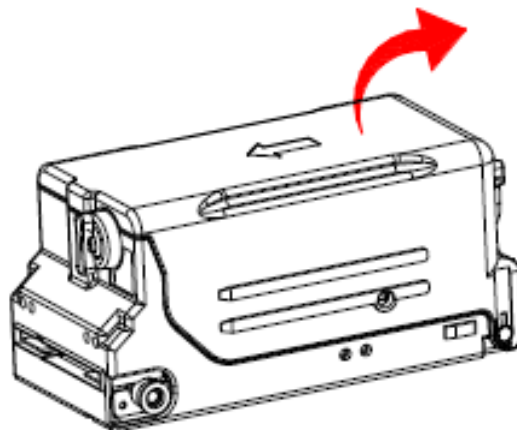
Pull out cash cassette gripping the handle and pushing lock button.



Loading the notes into the cassette

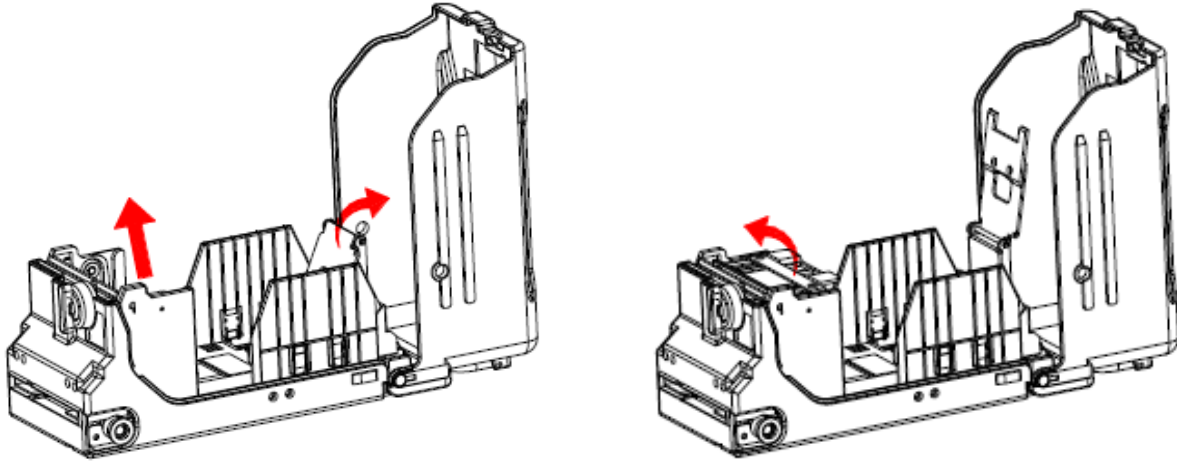
Load only notes of the correct denomination into the VCDM cash cassette.

Open the cover top.



Move the pusher plate & the rear pusher

The pusher plate has to be moved to give space for the notes between the pusher plate and the feed opening.



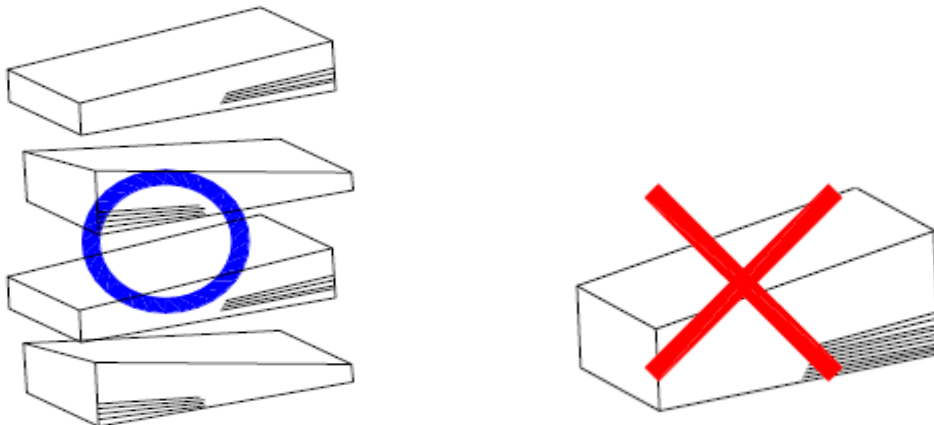
Prepare and Load the Notes

WARNING:

- a. Notes are sometimes thicker in certain parts. They can also be cupped in the bundle.
- b. If the notes are turned the same way, the pile will be unequal and the notes will be difficult to dispense.

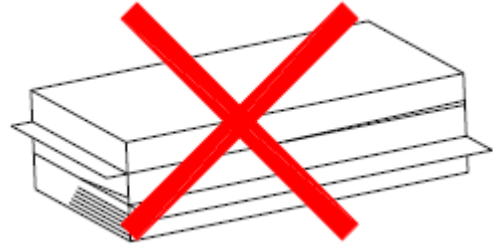
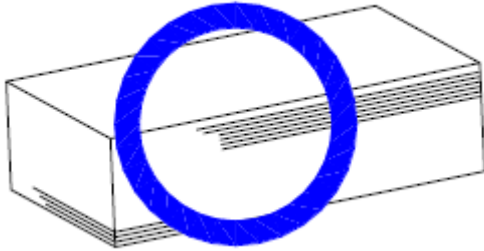
1. Slanting pile

- To avoid dispensing problems caused by a slanting pile, put the notes in neat bundles of 100-200 notes.
- Turn every other bundle to face the other way to make the pile the same height at both sides.



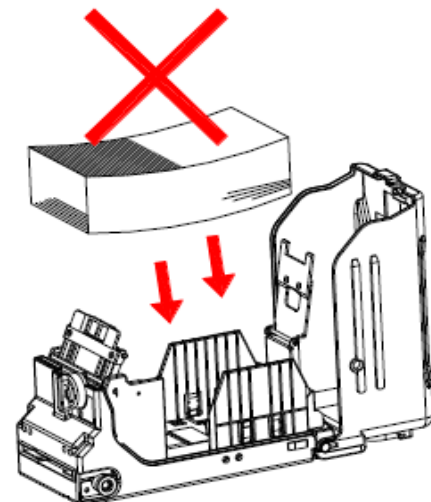
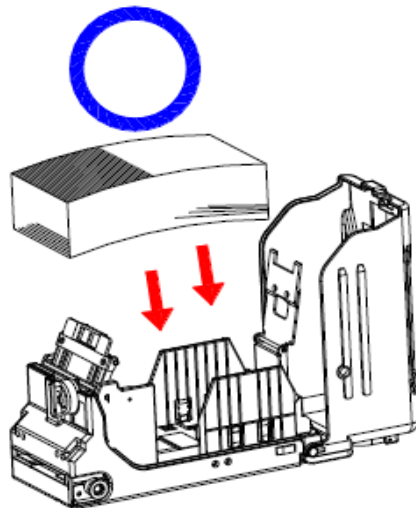
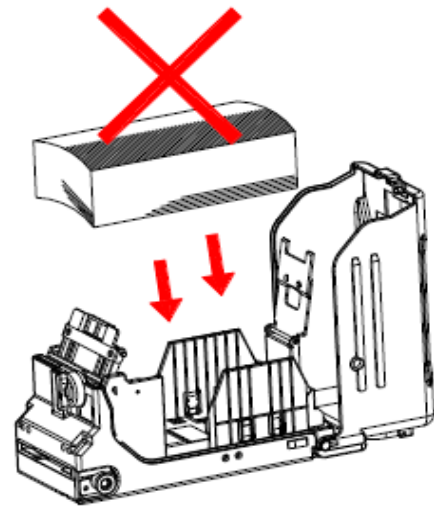
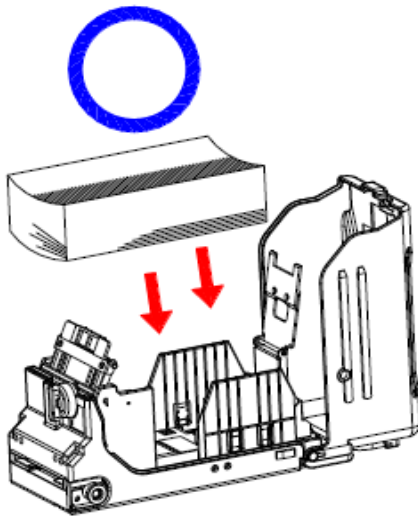
2. Bad aligned bundle

To avoid dispensing problems caused by bad aligning of note bundles, must be aligned the front side of bundles.



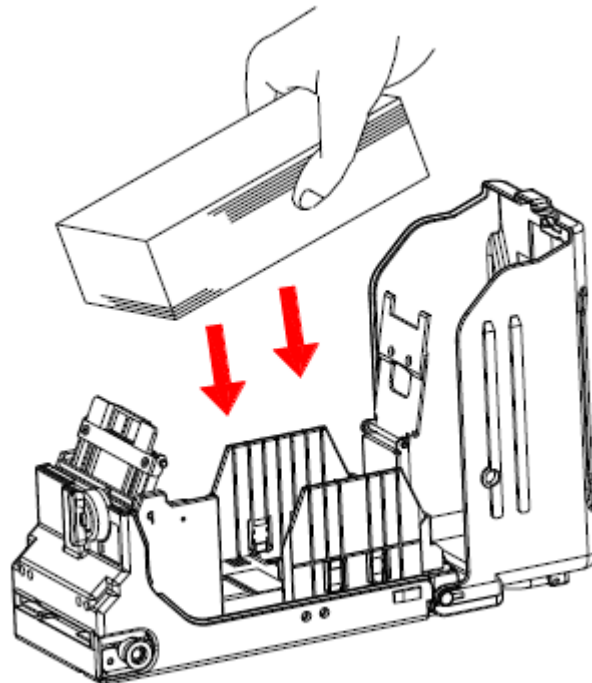
3. Concave bundle

To avoid dispensing problems caused by cupped bundles, turn all the bundles with the cupped side towards the dispense opening.



4. Mixed slanting and concave bundles

- To avoid dispensing problems caused by a slanting and cupped bundles, put the notes in neat bundles of 100-200 notes.
- Place the prepared bundles with the cupped side nearest and towards the dispense opening.
- Turn every other bundle to face the other way to make the pile the same height at both sides, as shown. It will make dispensing of notes from the VCDM easier.
- Always place the bundles containing old notes into the cassette first and bundles containing new notes last.



5. Release the pusher plate

- Release the pusher plate towards the note pile.

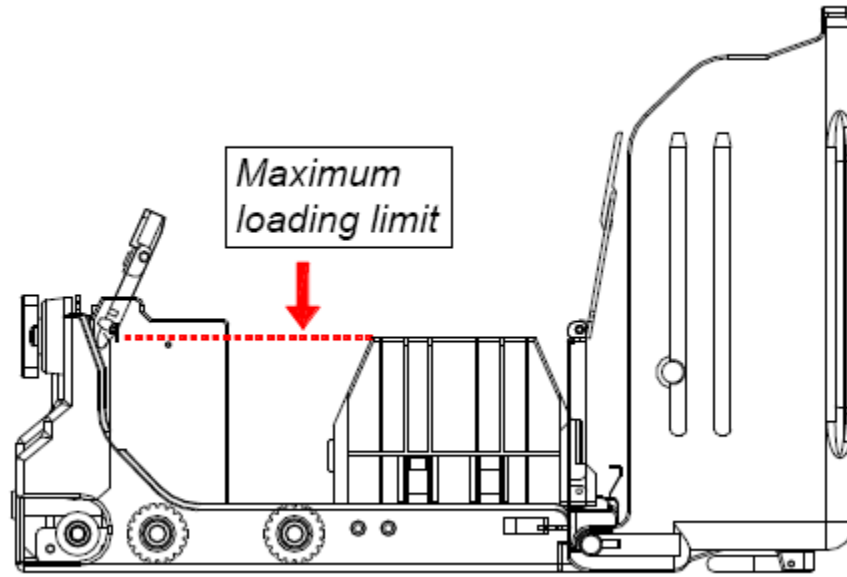
6. Side aligning the pile

- Aligning the note pile by hand. Single note must not protrude from the bundle.

NOTE:

When loading the cash cassette full, make sure that the pusher plate don't exceed rear side guide. (Maximum loading limit)

If the pusher plate exceed rear side guide, the notes will be difficult to dispense.



Inserting the cash cassette

- Using the handle, slide the cash cassette into the machine.
- Make sure the cash cassette is fully inserted.
- The Cash Dispenser is now ready to execute commands from host or application.

4.2.2 Collecting the rejected notes

Collect rejected notes from the reject compartment part of the reject tray as shown.



4.2.3 Clearing Note Jam

Removing cash cassette

IMPORTANT:

- Always switch the power OFF before clearing jams.
- All notes removed from the mechanism must be handled according to local procedures.

Removing notes in the note inlet area

Inspect the note inlet area and remove any jammed notes.



Opening the path guide and removing all jammed notes

Open the path guide (release the green handle) and remove any jammed notes.

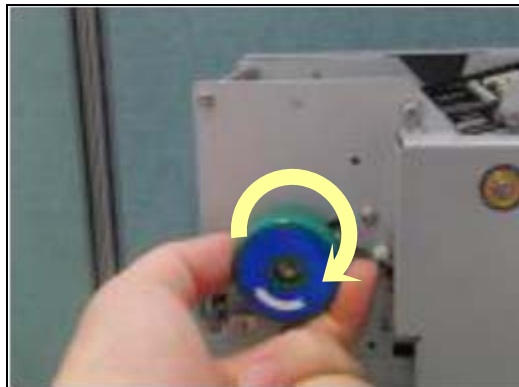




NOTE: After removing jam, be sure to close the path guide properly!

Removing jammed notes (using the knob)

Remove all visible jammed notes in the note transport by turning the knob wheel clockwise as shown.



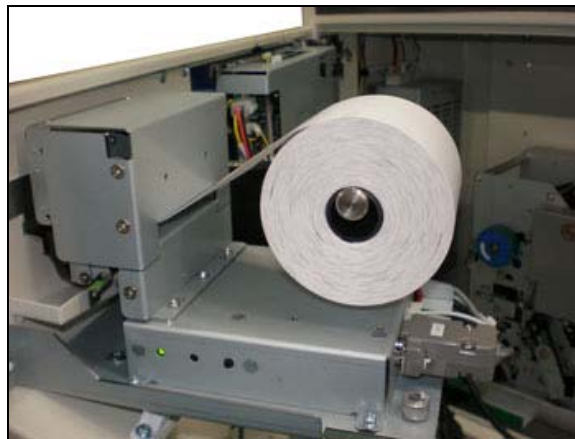
4.3 Receipt Printer

4.3.1 How to load the Receipt Printer with the paper

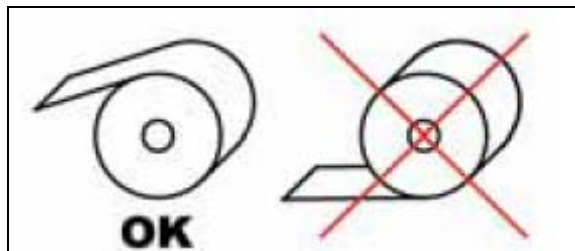
1. If there is remained paper, press the feed switch to dispense it.



2. Load the paper on the paper rack and deeply insert the end of the paper into the entrance. Then the auto-loading is started. Cut the paper after the feeding in a certain extent.



CAUTION: Be sure to correctly place the direction of the paper when loading the paper.

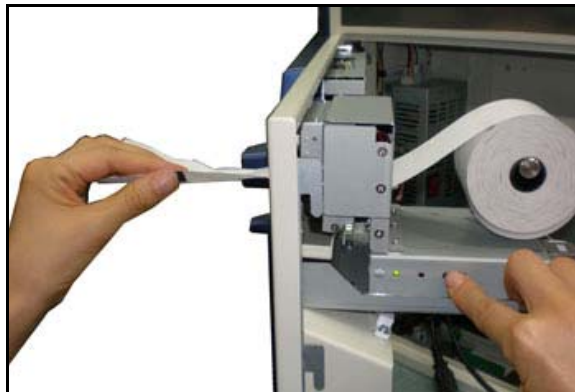


3. Check that the paper is normally dispensed by pressing the feed switch.



4.3.2 How to remove jam

1. Press the feed button to feed the jammed paper and take it out through the receipt printer slot.



Chapter 5. Operator Function

5. Operator Function

*****INTRODUCTION*****

5.0 HOW TO INSTALL THE NEW SOFTWARE MADE BY HYOSUNG.

5.0.1 ENTERING SUPERVISOR MODE.

The first thing you have to do to install newly released S/W is to log on into supervisor mode. The screen for entering supervisor mode is depicted in the chapter 5.1.1

5.0.2 IN MAIN SCREEN, SELECT SYSTEM SETUP AND AFTER SELECTING THAT MENU, SELECT SYSTEM CONTROL.

The second thing you have to do is to select **SYSTEM SETUP** button, and then the screen would be changed into SYSTEM SETUP screen, which contains the menu named as SYSTEM CONTROL. If you that the menu, SYSTEM CONTROL, please select that one.

5.0.3 IN SYSTEM CONTROL SCREEN, SELECT S/W UPDATE.

The last thing you have to do is to select S/W update. Before selecting it, USB drive should be inserted in USB slot or SD card in SD card slot. And there is the folder named as 'update' in root path. More precisely, the structure of folder and file should be as like as below.

F:\update\nh2700ce\Master.zip (In case of Master file update)

F:\update\nh2700ce\Patch.zip (In case of Patch file update)

So if you receive zip file which is different from 'update' folder as explained above, more precisely as like as VUSXX.XX.XX_XXXXXXXXXX or VCAXX.XX.XX_XXXXXXXXXX, the thing you should do next is to unzip downloaded file and find the update folder. If you find 'update' folder in unzipped file, just copy that folder and paste it to USB root path.

5.0.4 SET THE TYPE OF MACHINE AFTER UPDATING S/W (NH1800SE, MX4000W)

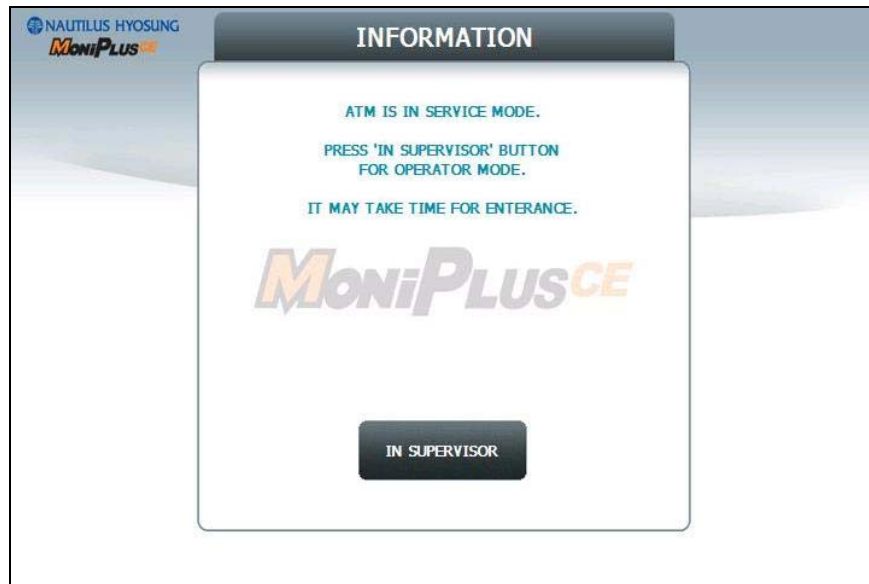
If you install the newly released S/W to NH1800SE, MX4000W, the thing you should take into consideration is whether the type of machine is right or not. If different machine name appears compared with your machine kind, please perform CLEAR NVRAM or CLEAR SETTING explained in the chapter **5.8.8.4 SET THE TYPE OF MACHINE**. If your machine is a NH2700 series, there is no need to check the type of machine. In that case, S/W detects the type of machine automatically.

5.1 BASIC SYSTEM OPERATION

5.1.1 PASSWORD FOR ENTERING SUPERVISOR MODE



- Location of Function Key on ATM -



- Main Screen on SPL of Rear Type Machine -

To enter Supervisor mode press the **ENTER, CLEAR, CANCEL, 1, 2 and 3** keys in order.
(In case of **Rear Type Machine**, press the **IN SUPERVISOR** button)

The default password is "555555"(6 digits). The default password is changeable in Supervisor mode.

If the correct password is entered, the OPERATOR FUCNTION menu will be displayed.

Pressing **CLEAR** key erases the entered number and pressing **CANCEL** key goes to in-service-mode. Depending on authority, there are three kinds of default password like below table.

Authority	Default Password
OPERATOR	111111 (6 digits)
SERVICE	222222 (6 digits)
MASTER	555555 (6 digits)

Please make sure that default password should be changed to different password for your security as soon as this machine is installed at field site.

•Authorities for each Mode

No	Working Management Function						CE Authority			
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O	
1	SETTLEMENT	ADD CASH	1ST CST	-	-		0	0	0	
			2ND CST	-	-		0	0	0	
			3RD CST	-	-		0	0	0	
			4TH CST	-	-		0	0	0	
			APPLY	-	-	-	0	0	0	
		DAY TOTAL	-	-	-	0	0	0		
		TRIAL DAY TOTAL	-	-	-	0	0	0		
		CASSETTE TOTAL	-	-	-	0	0	0		
		TRIAL CASSETTE TOTAL	-	-	-	0	0	0		
2	JOURNAL	CLEAR JOURNAL	-	-	-		0	0	0	
		CLEAR TRANS. SEQUENCE NO.	-	-	-		0	0	0	
		VIEW JOURNAL	PREV	-	-	-		0	0	0
			NEXT	-	-	-		0	0	0
			PREV 50	-	-	-		0	0	0
			NEXT 50	-	-	-		0	0	0
			MOVE START	-	-	-		0	0	0
			MOVE LAST	-	-	-		0	0	0
			PRINT THIS	-	-	-		0	0	0
			SEARCH JOURNAL	-	-	-		0	0	0
		PRINT JOURNAL	-	-	-		0	0	0	
		LAST X PRINT	-	-	-		0	0	0	
UPLOAD JOURNAL TO HOST	EN/DISABLE					0	0	0		
3	REPORT	ERROR CODE	PREV	-	-		0	0	0	
			NEXT	-	-		0	0	0	

No	Working Management Function						CE Authority				
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O		
			PREV 10	-	-		0	0	0		
			NEXT 10	-	-		0	0	0		
			MOVE FIRST	-	-		0	0	0		
			MOVE LAST	-	-	-	0	0	0		
			PRINT THIS	-	-	-	0	0	0		
			SEARCH ERROR CODE	-	-	-	0	0	0		
		SW VERSION	-	-	-	-	0	0	0		
		PRINT ALL SETUP	-	-	-	-	0	0	0		
		ERROR SUMMARY	PRINT	-	-	-	0	0	0		
			CLEAR	-	-	-	0	0	0		
			PREV	-	-	-	0	0	0		
			NEXT	-	-	-	0	0	0		
		REJECT ANALYSIS	PRINT	-	-	-	0	0	0		
			CLEAR	-	-	-	0	0	0		
		4	DIAGNOSTICS	INITIALIZE	-	-	-	-	0	0	X
				RECEIPT PRINTER	-	-	-	-	0	0	X
				CASH DISPENSER	-	-	-	-	0	0	X
MODEM (DIAL UP)	-			-	-	-	0	0	X		
TCP/IP (TCP/IP)	-			-	-	-	0	0	X		
MCU TEST (IC ONLY)	IC TEST						0	0	X		
	CARD SCAN						0	0	X		
ANTI SKIMMING	INITIATE						0	0	X		
	TIME THRESHOLD						0	0	X		
AUXILIARY UNIT	SENSOR			CDU SENSOR	-	-	-	0	0	X	
				SPR SENSOR	-	-	-	0	0	X	
	FLICKER			ALL FLICKER	-	-	-	0	0	X	
				EPP FLICKER	-	-	-	0	0	X	

No	Working Management Function						CE Authority		
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O
					CDU FLICKER	-	-	O	O
				SPR FLICKER	-	-	O	O	X
				MCU FLICKER	-	-	O	O	X
		AGING	-	-	-	-	O	O	X
5	CUSTOMER SETUP		WELCOM MESSAGE	-	-	-	O	O	O
			RECEIPT HEADER	-	-	-	O	O	O
	CHANGE MESSAGE	RECEIPT TAIL	-	-	-	O	O	O	
		RECEIPT ADDRESS & PHONE NUMBER	-	-	-	O	O	O	
	BIN LIST	EXTENDED BIN LIST	PREV	-	-	O	O	X	
			NEXT	-	-	O	O	X	
		ADD	-	-	O	O	X		
		EDIT	-	-	O	O	X		
		DELETE	-	-	O	O	X		
		DELETE ALL	-	-	O	O	X		
	OPTIONAL FUNCTION1	MOD 10 CHECK	EN/DISABLE	-	-	O	O	X	
		BALANCE AT START	EN/DISABLE	-	-	O	O	X	
			CONTINUE EN/DISABLE	-	-	O	O	X	
		ACCOUNTS	CREDIT CARD EN/DISABLE	-	-	O	O	X	
		SELECT RECEIPT	EN/DIABLE	-	-	O	O	X	
		PRE-DIALING (DIAL UP)	EN/DISABLE	-	-	O	O	X	
			AFTER CARD	-	-	O	O	X	
			AFTER PIN	-	-	O	O	X	
			AFTER ACCOUNT	-	-	O	O	X	
		CHECK CASHING	CERTIFICATION	-	-	O	O	X	
	EN/DISABLE		-	-	O	O	X		

No	Working Management Function						CE Authority			
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O	
					MESSAGE TYPE	-	-	O	O	X
				PIN OPTION EN/DISABLE	-	-	O	O	X	
		OPTIONAL FUNCTION1	EMV	EN/DISABLE			O	O	X	
				AID LIST			O	O	X	
			DEVICE OPTION	RECEIPT PAPER LOW SENEOR	-	-	O	O	X	
				CST SOUND	-	-	O	O	X	
				EPP FLICKER ON	-	-	O	O	X	
		OPTIONAL FUNCTION2			EN/DISABLE		O	O	X	
						SCREEN 1	O	O	X	
						SCREEN 2	O	O	X	
					DEFAULT SCREEN	SCREEN 3	O	O	X	
						SCREEN 4	O	O	X	
						SCREEN 5	O	O	X	
						SCREEN 6	O	O	X	
			SCREEN SERVICES	CHANGE BACKGROUND		SCREEN 1	EN/DISABLE	O	O	X
						SCREEN 2	EN/DISABLE	O	O	X
						SCREEN 3	EN/DISABLE	O	O	X
						SCREEN 4	EN/DISABLE	O	O	X
						SCREEN 5	EN/DISABLE	O	O	X
						SCREEN 6	EN/DISABLE	O	O	X
							EN/DISABLE	O	O	X
				NOTICE		TITLE		O	O	X
						MESSAGE		O	O	X
		SURCHARGE MODE	EN/DISABLE	-	-	-	O	O	X	
			OWNER	-	-	-	O	O	X	
			AMOUNT	-	-	-	O	O	X	
			PERCENT	EN/DISABLE	-	-	O	O	X	
				PERCENTAGE	-	-	O	O	X	

No	Working Management Function						CE Authority			
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O	
					WARNING MANNER	-	-	O	O	X
				LOCATION	-	-	O	O	X	
		ADVERTISEMENT		COUPON TYPE	-	-	O	O	X	
			COUPON	COUPON SETTING	BASIC COUPON	COUPON1	O	O	X	
						COUPON2	O	O	X	
						COUPON3	O	O	X	
						COUPON4	O	O	X	
						COUPON5	O	O	X	
						COUPON6	O	O	X	
					ENHANCED COUPON	CUT OPTION	COUPON1	O	O	X
							COUPON2	O	O	X
							COUPON3	O	O	X
							COUPON4	O	O	X
							COUPON5	O	O	X
							COUPON6	O	O	X
				WELCOME ADVERTISEMENT	TIMER			O	O	X
					SCREEN 1	EN/DISABLE		O	O	X
			SCREEN 2		EN/DISABLE		O	O	X	
			SCREEN 3		EN/DISABLE		O	O	X	
			SCREEN 4		EN/DISABLE		O	O	X	
			SCREEN 5		EN/DISABLE		O	O	X	
			TRANSACTION ADVERTISEMENT	SCREEN 6	EN/DISABLE		O	O	X	
				TIMER			O	O	X	
				SCREEN 1	EN/DISABLE		O	O	X	
				SCREEN 2	EN/DISABLE		O	O	X	
				SCREEN 3	EN/DISABLE		O	O	X	
				SCREEN 4	EN/DISABLE		O	O	X	
				SCREEN 5	EN/DISABLE		O	O	X	

No	Working Management Function						CE Authority		
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O
					SCREEN 6	EN/DISABLE		O	O
		STANDARD3 OPTION	STATUS MONITORING EN/DISABLE	-	-	-	O	X	X
			COMMUNICATION HEADER	-	-	-	O	X	X
			COMMUNICATION ID	-	-	-	O	X	X
			CRC EN/DISABLE	-	-	-	O	X	X
		STANDARD1 OPTION	TERMINAL STATUS EN/DISABLE				O	X	X
			HOST ERROR EN/DISABLE				O	X	X
			REVERSAL REASON EN/DISABLE				O	X	X
		SELECT PROCESSOR	COMMUNICATION	DIALUP	-	-	O	X	X
				TCP/IP	-	-	O	X	X
			EOT/ENQ OPTION	GENERAL	-	-	O	X	X
				EOT OPTIONAL	-	-	O	X	X
				NO EOT REQUIRED	-	-	O	X	X
				NO ENQ REQUIRED	-	-	O	X	X
			MESSAGE FORMAT	STANDARD 1	-	-	O	X	X
				STANDARD 2	-	-	O	X	X
				STANDARD 3	-	-	O	X	X
				EPS	-	-	O	X	X
		TCP/IP TYPE	VISA FRAMED	-	-	O	X	X	
			STANDARD	-	-	O	X	X	

No	Working Management Function						CE Authority		
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O
				ACK CONTROLLED	-	-	O	X	X
				SSL EN/DISABLE	-	-	O	X	X
				SSL CERT. EN/DISABLE (Only Available when SSL is set as 'ENABLE')			O	X	X
				SSL CERT. DOWNLOAD FROM USB (Only Available when SSL CERT. is set as 'ENABLE')			O	X	X
				REVERSAL RETRY COUNT	-	-	-	O	X
6	SYSTEM SETUP	DATE & TIME	YEAR	-	-	-	O	O	O
			MONTH	-	-	-	O	O	O
			DAY	-	-	-	O	O	O
			HOUR	-	-	-	O	O	O
			MINUTE	-	-	-	O	O	O
			APPLY	-	-	-	O	O	O
		SPEAKER VOLUME	UP	-	-	-	O	O	O
			DOWN	-	-	-	O	O	O
		TERMINAL IP (TCP/IP)	IP ADDRESS				O	O	X
			SUBNET MASK	-	-	-	O	O	X
			GATEWAY	-	-	-	O	O	X
			DNS	-	-	-	O	O	X
			DHCP EN/DISABLE	-	-	-	O	O	X

No	Working Management Function						CE Authority			
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O	
				DEFAULT LANGUAGE	-	-	-	O	O	O
		LANGUAGE EN/DISABLE	ENGLISH EN/DISABLE	-	-	-	O	O	O	
			SPANISH EN/DISABLE	-	-	-	O	O	O	
			FRENCH EN/DISABLE	-	-	-	O	O	O	
			CHANGE PASSWORD	OPERATOR PASSWORD	-	-	-	O	O	O
		SERVICE PASSWORD		-	-	-	O	O	X	
		MASTER PASSWORD		-	-	-	O	X	X	
		MODEM PARAMETERS (DIAL UP)	HOST INITIAL STRING	-	-	-	O	O	X	
			RMS INITIAL STRING	-	-	-	O	O	X	
			MODEM TEST	-	-	-	O	O	X	
		DEVICE SETUP	CDU SETUP (N/A to MX4000W)	COUNTRY	-	-	O	O	X	
				CDU TYPE	-	-	-	O	O	X
				CASSETTE VOLUME	-	-	-	O	O	X
				EXECUTE	-	-	-	O	O	X
			CALRIBRATION (Rear Type Only)				O	O	X	
			TOUCH VIBRATION (Touch Type Only)	EN/DISABLE			O	O	X	
			CARD READER SETUP	NH DIP			O	O	X	
				MAGTEK DIP				O	O	X

No	Working Management Function						CE Authority		
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O
				SANKYO DIP			O	O	X
				ANTI SKIMMING (SANKYO ONLY)	EN/DISABLE		O	O	X
					SHUTTER EN/DISABLE		O	O	X
					TIME THRESHOLD		O	O	X
					AUTO RECOVERY TIME		O	O	X
					APPLY		O	O	X
		SYSTEM CONTROL	SOFTWARE UPDATE		-	-	-	O	O
			REBOOT	-	-	-	O	O	O
			BACKUP ALL JOURNAL TO USB	-	-	-	O	O	O
			BACKUP JOURNAL BY DATE TO USB	FROM	-	-	O	O	O
				TO	-	-	O	O	O
				SEARCH	-	-	O	O	O
			BACKUP LOG TO USB	-	-	-	O	O	O
			CLEAR NVRAM	CLEAR ALL	SET THE TYPE OF MACHINE (MX4000W)	-	O	X	X
				CLEAR SETTING	SET THE TYPE OF MACHINE (MX4000W)-	-	O	X	X
				CLEAR JOURNAL	-	-	O	X	X
				CLEAR TRANS SEQUENCE NUMBER	-	-	O	X	X
				CLEAR LOG	-	-	O	X	X

No	Working Management Function						CE Authority			
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O	
			BACK NVRAM				O	X	X	
			RESTORE NVRAM				O	X	X	
7	HOST SETUP	KEY MANAGEMENT	KEY& CONFIG DOWNLOAD	EN"/DISABLE			O	X	X	
				KEY&CONFIG DOWNLOAD-	-	-	O	X	X	
			ENTER MASTER KEY	REMOTE KEY INFO	-	O	X	X		
					-	O	X	X		
				KEY MODE	-	O	X	X		
				CHECK KEY	-	O	X	X		
				EDIT KEY (KEY MODE DEPENDENT)	MASTER KEY (TRIPLE)		O	X	X	
					MAC MASTER KEY(SINGLE)		O	X	X	
					MAC MASTER KEY (TRIPLE)		O	X	X	
				CHANGE PASSWORD	PASSWORD1		O	X	X	
			PASSWORD2			O	X	X		
			RKT SETUP (STANDARD1 ONLY)	RKT EN/DISABLE-	-	-	O	X	X	
				RANDOM NUMBER EN/DISABLE			O	X	X	
				DOWNLOAD MASTERKEY			O	X	X	
			TELEPHONE NUMBER (DIAL UP)	HOST PHONE 1	-	-	-	O	X	X
				HOST PHONE 2	-	-	-	O	X	X
			HOST ADDRESS	URL EN/DISABLE	-	-	-	O	X	X

No	Working Management Function						CE Authority		
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O
				HOST ADDRESS 1	-	-	-	O	X
			PORT NUMBER 1	-	-	-	O	X	X
			HOST ADDRESS 2	-	-	-	O	X	X
			PORT NUMBER 2	-	-	-	O	X	X
		TERMINAL ID	-	-	-	-	O	O	X
		HEALTH CHECK	EN/DISABLE	-	-	-	O	O	X
		MESSAGE	SEND INTERVAL	-	-	-	O	O	X
		REMOTE MONITOR	RMS EN/DISABLE	EN/DISABLE	-	-	O	O	X
				RMS RING COUNT (DIAL UP)	-	-	O	O	X
				ATM LISTENING PORT (TCP/IP)	-	-	O	O	X
			RMS Status Send En/Disable	EN/DISABLE-	-	-	O	O	X
				URL En/Disable (TCP/IP)	-	-	O	O	X
				PHONE NUMBER1 (DIAL UP)	-	-	O	O	X
				PHONE NUMBER2 (DIAL UP)	-	-	O	O	X
				INTERVAL	-	-	O	O	X
				RMS ADDRESS (TCP/IP)	-	-	O	O	X
				RMS LISTENING PORT (TCP/IP)	-	-	O	O	X
		RMS PASSWORD	-	-	-	O	X	X	
		ROUTING ID	-	-	-	-	O	O	O
		AUTO DAY TOTAL	EN/DISABLE	-	-	-	O	O	O
			TOTAL TYPE	-	-	-	O	O	O
			HOUR	-	-	-	O	O	O

No	Working Management Function						CE Authority			
	Main	Sub1	Sub2	Sub3	Sub4	Sub5	M	S	O	
			MINUTE	-	-	-	O	O	X	
8	TRANSACTION SETUP	DISPENSE LIMIT	-	-	-	-	O	O	X	
		FAST CASH	LB 0	-	-	-	-	O	O	X
			LB 1	-	-	-	-	O	O	X
			LB 2	-	-	-	-	O	O	X
			RB 0	-	-	-	-	O	O	X
			RB 1	-	-	-	-	O	O	X
			RB 2	-	-	-	-	O	O	X
			LOW CURRENCY CHECK EN/DISABLE	-	-	-	-	-	O	X
		DENOMINATION	1ST CASSETTE	-	-	-	-	O	X	X
			2ND CASSETTE	-	-	-	-	O	X	X
			3RD CASSETTE	-	-	-	-	O	X	X
			4TH CASSETTE	-	-	-	-	O	O	O
9	IN SERVICE	-	-	-	-	-	O	O	O	
10	SITE MAP	-	-	-	-	-	O	O	O	
11	QUICK REPLENISH	-	-	-	-	-	O	X	X	
12	QUICK CONFIGURATION	-	-	-	-	-				

5.1.2 When an Error Occurs

When you try to enter Supervisor Mode or go into **IN SERVICE MODE** from supervisor menu, the screen below will be displayed if there is any ERROR.

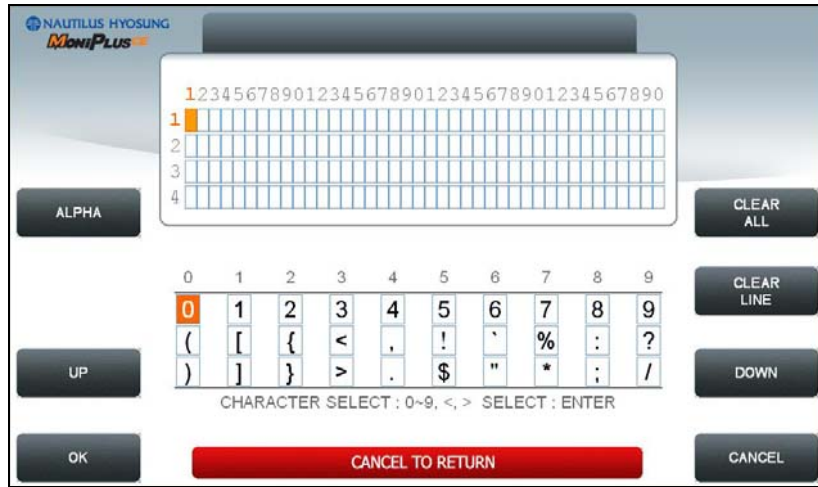
Press **DEVICE INITIALIZE** button, if the error is caused by a device so it can be cleared by initializing. Press **OPERATOR FUNCTION** button, if you have to set up any information to clear the error. And set up the information which is missed.



NOTE: If the machine goes out of service, the error code will not always appear on the screen. If you do not see an error code, enter operator function and go to reports. Look in the error summary for error codes.

5.1.3 How to Use Keypad (Function Key Type)

This section explains the basic operation of the Keypad.



[Default Keypad Character Table Screen]

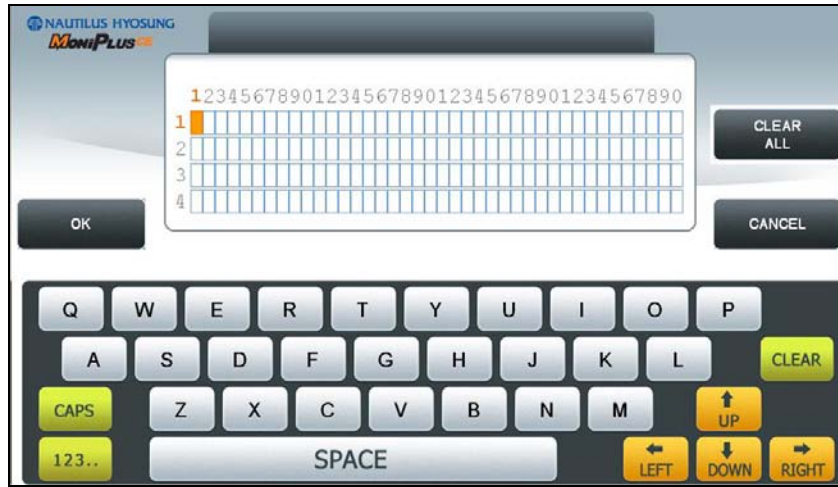
Shift Status				0	1	2	3	4	5	6	7	8	9
F1	NUMBER	F3	-	0	1	2	3	4	5	6	7	8	9
			([{	<	,	!	'	%	:	?	
)]	}	>	.	\$	"	*	;	/		
	+ Space		A	D	G	J	M	P	T	W			
ALPHA	UPPER	-	Q	B	E	H	K	N	R	U	X		
	=	Z	C	F	I	L	O	S	V	Y			
LOWER	+ Space	a	d	g	j	m	p	t	w				
	-	q	b	e	h	k	n	r	u	x			
=	z	c	f	i	l	o	s	v	y				
TABLE	-	The character on the current cursor position on the screen will be selected											

How to Enter the Character

- A. The Keypad Character Table will appear on the bottom of the screen in all keypad input screens.
- B. F1 key gives the option for ALPHA or NUMBER, Table mode. Default is NUMBER.
- C. F3 key gives the option for Upper or Lowercase characters. It is valid only in the ALPHA mode. Default is Uppercase.
- D. The input of characters is limited to the space provided.
- E. Key can be changed whenever you press it to choose proper character. For example, when key “1” is pressed once it is “SPACE”, pressed twice it is “Q”, pressed third time it is “Z” in case of the Alpha mode. When the desired character is selected, press ENTER.
- F. ◀, ▶ keys move the cursor position in the ALPHA or NUMBER mode. In the TABLE mode ◀, ▶ keys are used to select the character.
- G. **F2** key is used to clear the whole screen and returns the cursor to its initial position.
- H. **F4** key and **CLEAR** key in pinpad are used to clear the current line.
- I. **F5** key is used to save the current changes.
- J. **F6** key and **CANCEL** key in pinpad are used to exit. (If you didn't press F5 key after changing, the changes will be ignored.)
- K. **F7** key is used to move the cursor position **UP**.
- L. **F8** key is used to move the cursor position **DOWN**.

5.1.4 How to Use Keypad (Touch Screen Type)

You can use this Keypad in same way as a computer keyboard.



[Default Keypad Character Table Screen]

Key	Character Table
ABC..	Q W E R T Y U I O P A S D F G H J K L Z X C V B N M
CAPS	q w e r t y u i o p a s d f g h j k l z x c v b n m
123	1 2 3 4 5 6 7 8 9 0 ~ ! @ # \$ % ^ & * + - : ; < > ?
+ /	1 2 3 4 5 6 7 8 9 0 () { } [] _ = " ' , . / \ £

5.2 SUPERVISOR MENU

The following screen below is the main screen of Supervisor mode.

Supervisor mode in this machine is largely composed of ATM Status and Function.

A. ATM Status

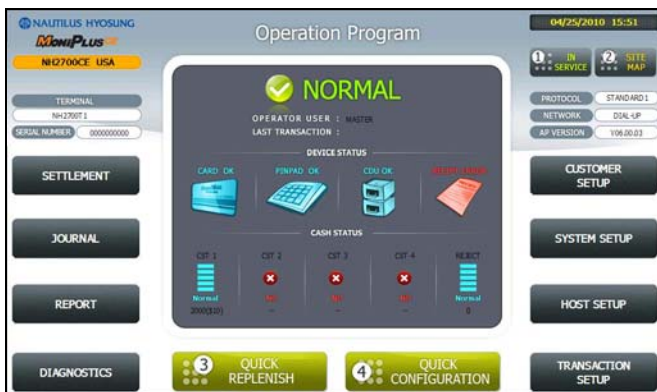
- 1) Machine Kind and Country Code
- 2) Program version
- 3) Serial Number
- 4) Line Type (Dial-up, TCP/IP)
- 5) Message Format
- 6) Terminal ID
- 7) The Media Status of 1st Cassette
- 8) The Media Status of 2nd Cassette (N/A to MX4000W)
- 9) The Media Status of 3rd Cassette (N/A to MX4000W)
- 10) The Media Status of 4th Cassette (N/A to MX4000W)
- 11) 1st Cassette : Remaining notes(Denomination)
e.g) if 1000 notes of \$20, 1000(\$20)
- 12) 2nd Cassette : Remaining notes(Denomination)
- 13) 3rd Cassette : Remaining notes(Denomination)
- 14) 4th Cassette : Remaining notes(Denomination)
- 15) Reject Box Status(Rejected Count)
- 16) Error Code
- 17) The Status of Card
- 18) The Status of Pinpad
- 19) The Status of Cash Dispenser
- 20) The Status of Receipt Printer
- 21) Current Date and Time
- 22) Last Transaction Time
- 23) Operator User

B. Functions

- 1) IN SERVICE
- 2) SITE MAP
- 3) QUICK REPLENISH
- 4) QUICK CONFIGURATION
- F1) SETTLEMENT
- F2) CUSTOMER SETUP
- F3) JOURNAL
- F4) SYSTEM SETUP
- F5) REPORT
- F6) HOST SETUP
- F7) DIAGNOSTICS
- F8) TRANSACTION SETUP

In order to move to the in-service mode, press the **1** or **CANCEL** key in pinpad.

In order to reset terminal error, press the **CLEAR** key in pinpad.



[Function Key Type]



[Touch Type]

C. Field Values

CLASS	VALUE (eg.)	Remarks
MACHINE KIND	NH-2700/NH-2700 L/NH-2700 T NH-1800SE, MX4000W	
COUNTRY CODE	USA, Canada, Mexico, Australia, New Zealand	
PROGRAM VERSION	V06.0015	
LINE TYPE	TCP/IP DIAL-UP	
MESSAGE FORMAT	STANDARD1 STANDARD2 STANDARD3 EPS	
TERMINAL ID	1234567	
ERROR CODE	[00000(00)]	
STATUS		
CST1(Remaining Notes)	BILLS COUNT - 1047(\$10) N/A	
CST2(Remaining Notes)	BILLS COUNT - 18(\$20) N/A	
CST3(Remaining Notes)	BILLS COUNT - 20(\$50) N/A	
CST4(Remaining Notes)	N/A	Not Available
CST1(Media Status)	MISSING NORMAL LOW EMPTY FULL	
CST2(Media Status)	MISSING NORMAL LOW EMPTY FULL	Not Available to MX4000W

CST3(Media Status)	MISSING NORMAL LOW EMPTY FULL	Not Available to MX4000W
CST4(Media Status)	N/A	Not Available to MX4000W
REJECT	REJECT COUNT(CDU) – (0)	
Card	OK ERROR	
Pinpad	OK ERROR	
Cash Dispenser	OK ERROR	
Receipt Printer	OK ERRPR	

5.3 SETTLEMENT

This menu contains **ADD CASH**, **DAY TOTAL**, **TRIAL DAY TOTAL**, **CASSETTE TOTAL** and **TRIAL CASSETTE TOTAL**. Please press each button on this menu to go to next screen or to operate the related function. To go back to the previous screen, press the **CANCEL** key in pinpad.



- 1) **ADD CASH** : Go to the next screen
- 2) **DAY TOTAL** : Do settlement with host. After settlement, clear transaction information.
- 3) **TRIAL DAY TOTAL** : Just do settlement with host. (Not clear transaction info.)
- 4) **CASSETTE TOTAL** : Show note count and then clear note count.
- 5) **TRIAL CASSETTE TOTAL** : Just show note count. (Not clear note count.)

5.3.1 ADD CASH

By pressing button on this menu, you can select cassette to add note count. (Cassette numbers are designated from top to bottom). Input the note count you want to add and press the **ENTER** key in the pinpad. If you completed the all cassettes, you have to press **APPLY** button to make the value changed.

NOTE: The total note count you enter must not exceed the maximum note count. And this count represents the logical one. So you can input more count than physical limit.

(Max. note count : 2,000/CST)



5.4 JOURNAL

This **JOURNAL** menu contains **CLEAR JOURNAL**, **CLEAR TRANS. SEQUENCE NO.**, **VIEW JOURNAL**, **PRINT JOURNAL**, and **PRINT LAST X** sub menu.



- 1) **CLEAR JOURNAL** : The **CLEAR JOURNAL** function is used to delete all journal data
- 2) **CLEAR TRANS. SEQUENCE NO** : This function will reset the journal sequence number to <0000>. This may be useful if you switch processing or switch Terminal ID numbers and want to keep new records.
- 3) **PRINT JOURNAL**: The **PRINT JOURNAL** function is used to print out all the journals which have not been printed from the last printed journal. If you want to stop printing, you may stop it by pressing **CANCEL** key.
- 4) **VIEW JOURNAL** : Go to the next screen
- 5) **PRINT LAST X** : Go to the next screen
- 6) **UPLOAD JOURNAL TO HOST**: Go to the next screen for determining whether to use the function of 'Electric Journal Upload (EJ UPLOAD)' or not.

5.4.1 VIEW JOURNAL

You can see the various kinds of journal data by using each field and button. The VIEW function is used to display the Journal data on the customer screen. The Journal record will be displayed on the screen.



Use **PREV** or **NEXT** button to show just one data before or after, and **PREV 50** or **NEXT 50** button are for data before 50 or after 50 EA. If you use **MOVE FIRST** or **MOVE LAST** button, you can see first or last journal. Besides, you can check up journal data you would try to search by using **SEARCH JOURNAL** button and just print out the current journal by pressing **PRINT THIS** button.

5.4.1.1 SEARCH JOURNAL

You can search a specific journal with a journal index and see it if the index is valid.



5.4.2 PRINT LAST X

The **PRINT LAST X** function is used to print out recent journal data. If you want to print recent journal data, enter the count of data you want on JOURNAL main screen and then press **ENTER** key. Then the data you request is printed.

If you want to stop printing, you may stop by pressing **CANCEL** key.



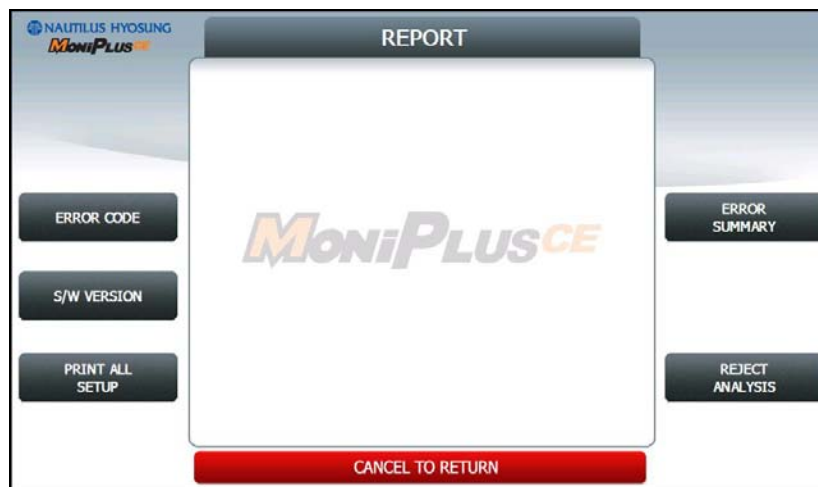
5.4.3 UPLOAD JOURNAL TO HOST

You can select whether to use 'EJ UPLOAD' or not on the screen as depicted as below.



5.5 REPORT

This report menu consists of 5 sub-menus. **ERROR CODE**, **ERROR SUMMARY**, **SW VERSION**, **PRINT ALL SETUP** and **REJECT ANALYSIS**. You can print out all information regarding each device as well as system value set up. If you want to go back the previous screen, press the **CANCEL** key.



5.5.1 ERROR CODE

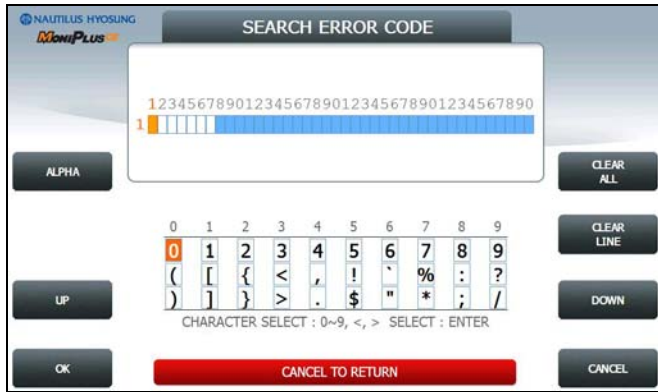
ERROR CODE offers detailed descriptions of error codes and way to deal with the errors on a working ATM machine.



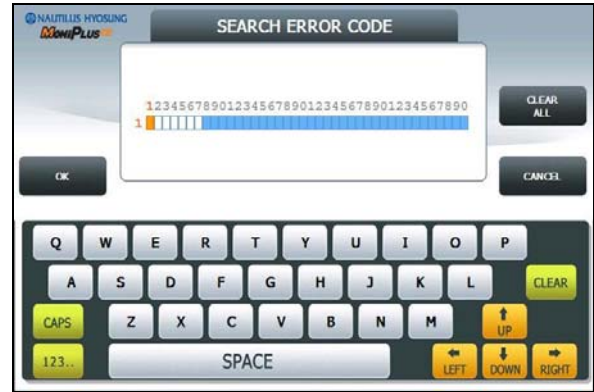
PREV/NEXT buttons are to navigate previous and next error codes one by one and **PREV 10/NEXT 10** are to do by 10 EA.. **MOVE FIRST/MOVE LAST** buttons are to go to the first error code and the last one. **PRINT THIS** button is for printing information about the error code displaying in the screen. **SEARCH ERROR CODE** button is to search for a specific error code immediately.

5.5.1.1 SEARCH ERROR CODE

You can search a specific error code if that exists. In order to use the function, please input the specific error code in the field and select **OK** button. If there is no result in database, “**INVALID ERROR CODE**” displays.



[Function Key Type]



[Touch Type]

5.5.2 SW VERSION

This menu shows each software version. Each versions will be displayed. (APPLICATION, CDU EP, CDU SP, SPR EP, SPR SP, MCU EP, MCU SP and etc.)

The screenshot shows a menu titled "S/W VERSION" with the Nautilus Hyosung logo and "MONIPLUS" branding. The menu displays software versions for various components, organized into four columns: AP, VDM, SP, and EP. Each component has a sub-label and a version number. At the bottom, there are "PRINT" and "CANCEL TO RETURN" buttons.

AP		VDM		SP		EP	
AP	V06.00.03	CDU	V06.04.01.00	CDU	V 06.04.01	CDU	CDUU1PV030103
OS	V06.01.03	SPR	V06.04.00.00	SPR	V 06.04.00	SPR	SPR11
RMS	V01.03.15	MCU	V06.03.00.00	MCU	V 06.03.07	MCU	V01.00.03
B-L	V06.02.03			PIN	V 06.03.01	PIN	V08.00.00
T-P	N/A			SIU	V 06.03.10	SIU	N/A

5.5.3 PRINT ALL SETUP List

[DIAL – UP]

NO	ITEM	DESCRIPTION	REMARKS
1	DATE	CURRENT DATE & TIME	
2	MACHINE KIND	NH-2700/ NH-2700 L/NH-2700 T	
3	COUNTRY	USA	
4	HOST PROCESSOR	HOST PROTOCOL TYPE	
5	NETWORK TYPE	DIAL-UP	
6	VISA FRAMED OPTION	EOT/ENQ OPTION	
7	VERSION INFORMATION	AP / SP / EP VERSION	
8	SYSTEM SETUP	CURRENT CASSETTE REJECT	
		CURRENT BILLS	
		SERIAL NUMBER	
		SPEAKER VOLUME	
		HOST MODEM INITIAL STRING	
		RMS MODEM INITIALI STRING	
		LANGUAGE MODE	
9	CUSTOMER SETUP	WELCOME MESSAGE INFO	
		RECEIPT HEADER & TAIL INFO	
		RECEIPT ADDRESS & PHONE INFO	
		OPTIONAL FUNCTION 1 INFO	
		OPTIONAL FUNCTION 2 INFO	
		BIN LIST	
		ADVERTISEMENT #n INFO	
		COUPON #n INFO	
10	TRANSACTION SETUP	DISPENSE LIMIT	
		CURRENCY ID	
		DENOMINATION	
		FAST CASH	
		LOW CURRENCY CHECK	
11	HOST SETUP	TERMINAL ID	
		STANDARD 3 OPTION	
		ROUTING ID	
		HOST PHONE NUMBER	
		HEALTH CHECK OPTION	
		AUTO DAY TOTAL OPTION	
		RMS OPTION	
		MASTER KEY INFO	

[TCP / IP]

NO	ITEM	DESCRIPTION	REMARKS
1	DATE	CURRENT DATE & TIME	
2	MACHINE KIND	NH-2700/ NH-2700 L/NH-2700T /NH1800SE/ MX4000W	
3	COUNTRY	USA	
4	HOST PROCESSOR	HOST PROTOCOL TYPE	
5	NETWORK TYPE	TCP/IP	
6	TCP/IP TYPE	TCP/IP TYPE	
7	SSL MODE	SSL OPTION	
7-1	SSL CERT.	ENABLE/DISABLE	Only available when SSL MODE is set as 'ENABLE'
8	VERSION INFORMATION	AP / SP / EP VERSION	
9	SYSTEM SETUP	CURRENT CASSETTE REJECT	
		CURRENT BILLS	
		SERIAL NUMBER	
		SPEAKER VOLUME	
		ATM IP OPTION	
		LANGUAGE MODE	
10	CUSTOMER SETUP	WELCOME MESSAGE INFO	
		RECEIPT HEADER & TAIL INFO	
		RECEIPT ADDRESS & PHONE INFO	
		OPTIONAL FUNCTION 1 INFO	
		OPTIONAL FUNCTION 2 INFO	
		BIN LIST	
		ADVERTISEMENT #n INFO	
		COUPON #n INFO	
11	TRANSACTION SETUP	DISPENSE LIMIT	
		CURRENCY ID	
		DENOMINATION	
		FAST CASH	
		LOW CURRENCY CHECK	
12	HOST SETUP	TERMINAL ID	
		STANDARD 3 OPTION	
		ROUTING ID	

		HOST ADDRESS INFO	
		HEALTH CHECK OPTION	
		AUTO DAY TOTAL OPTION	
		RMS OPTION	
		MASTER KEY INFO	

5.5.4 ERROR SUMMARY

ERROR SUMMARY menu offers a statistics of error codes on an ATM machine. It lists the errors by the number of times they occurred. You can print these errors.

The screenshot shows the 'ERROR SUMMARY' menu on an ATM. At the top left, the Nautilus Hyosung logo and 'MiniPlus' are visible. The main title is 'ERROR SUMMARY'. Below the title, there is a 'START DATE' field displaying '04/24/2010 13:43:56'. A table lists 10 error codes with their respective counts. At the bottom of the table, there are three buttons: 'PRINT' on the left, 'CLEAR' on the right, and a red 'CANCEL TO RETURN' button at the very bottom.

NO	ERROR CODE	COUNT
1	971A600	15
2	2000400	9
3	D170400	4
4	FFFFFFF	3
5	971A700	1
6	9799904	1
7	F000B00	1
8	F000F00	1
9	D170600	1
10	D200000	1

PREV/NEXT buttons are to navigate previous and next pages and **PRINT** button prints all of error code history.

CLEAR button erases the history stacked in an ATM machine and set **START DATE** to the present date as well. (START DATE displays "01/01/2000 00:00:00" in ATM machines which have never done the CLEAR function.)

5.5.5 REJECT ANALYSIS

REJECT ANALYSIS menu offers a statistics of note reject on an ATM machine. It lists the rejects by the number of times or note counts they occurred. You can print these rejects.

START DATE	04/24/2010 13:43:56			
	CST1	CST2	CST3	CST4
DISPENSED	0	N/A	N/A	N/A
REJECTED	0	N/A	N/A	N/A
SKEW	0	N/A	N/A	N/A
GAP TOO CLOSE	0	N/A	N/A	N/A
LONG NOTE	0	N/A	N/A	N/A
SHORT NOTE	0	N/A	N/A	N/A
DOUBLE DETECT	0	N/A	N/A	N/A
TEST DISPENSED	0	N/A	N/A	N/A

Buttons: PRINT, CANCEL TO RETURN, CLEAR

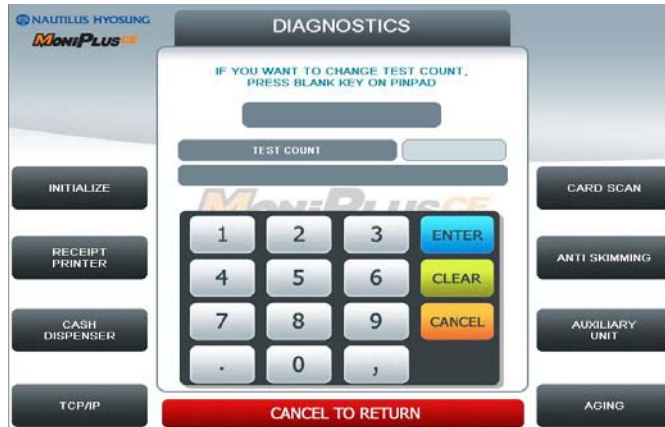
PRINT button prints the reject analysis information.

CLEAR button erases the reject analysis information and set **START DATE** to the present date as well. (START DATE displays "01/01/2000 00:00:00" in ATM machines which have never done the CLEAR function.)

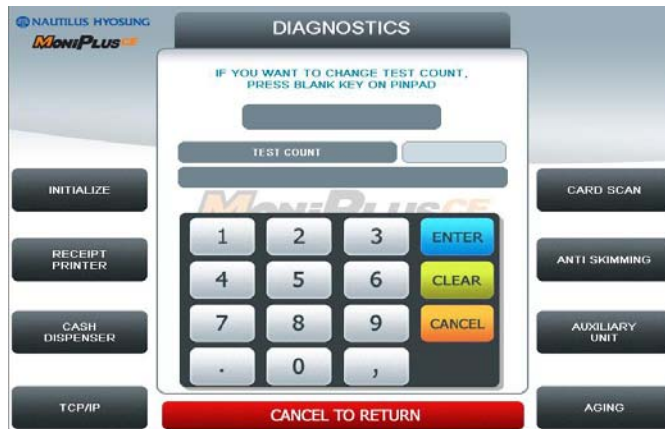
Caution: After selecting **CLEAR** button as depicted as above, If there is the error code about **"Reject Box is full"** in transferring Operator state to Service state, you must select **"CASSETTE TOTAL"** button, explained in the previous chapter 5.3, to get free from error state even though the count of rejected notes would be canceled out to '0' on the screen. You might be curious about the necessity of **"CLEAR"** button. The reason why this button is necessary is to cancel out the information of notes for statistical purpose.

5.6 DIAGNOSTICS

This report menu consists of 7 sub-menus. **INITIALIZE**, **RECEIPT PRINTER**, **CASH DISPENSER**, **MODEM (or TCP/IP)**, **CARD SCAN**, **AUXILIARY UNIT** and **AGING**. Please press each button on this menu to go to next screen or to operate the related function. To go back to the previous screen, press the **CANCEL** key in pinpad.



[Function Key Type]

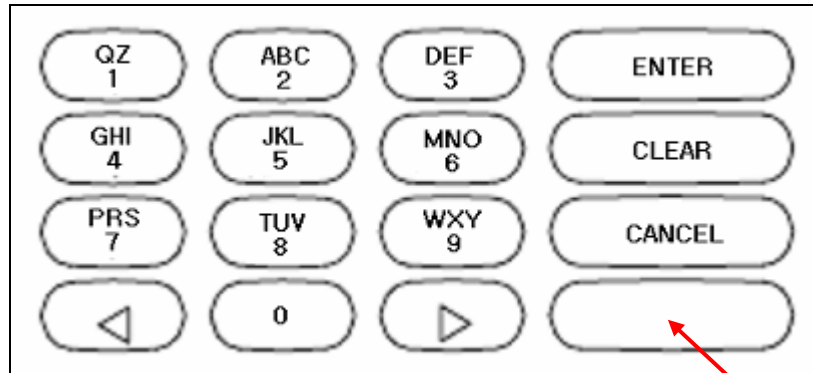


[Touch Type]

Changing the TEST COUNT

The **TEST COUNT** means the number of test.

If you want to change the test count, press **BLANK** key or **SET** button then input the test count and press **ENTER** key. To delete the test count while inputting, press **CLEAR** key. To cancel the test while testing, press **CANCEL** key.



BLANK Key

NOTE: TEST COUNT affects when testing RECEIPT PRINTER, CASH DISPENSER, and MODEM.

CASE:

- 1) If you input test count '0', the test count will be "UNLIMIT"
- 2) If you input test count 10, the test will perform 10 times.
- 3) If you cancel a test and then perform same test, the test count will be continue.
e.g. If you cancel a test when the tested count is 3, and then perform same test, the tested count starts at 3.
- 4) If you cancel a test and then perform another test, the test count will be initialized.
e.g. If you cancel a test when the tested count is 3, and then perform another test, the tested count starts at 0.

5.6.1 INITIALIZE

The **INITIALIZE** has the function of resetting each unit of the ATM. If an error occurs while executing, the system will stop and display an error code. Confirm the detailed error description in the ERROR CODE of REPORT MENU.

Accessing the INITIALIZE

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION
- 2) Select the **INITIALIZE** in the DIAGNOSTICS menu. All units will be initialized.
- 3) When the ATM is in the normal state, the SUCCESS message will be displayed.

5.6.2 RECEIPT PRINTER

The **RECEIPT PRINTER** has the function of printing a sample receipt and cutting out one receipt. If an error occurs while executing, the system will stop and display an error code. Confirm the detailed error description in the ERROR CODE of REPORT MENU.

Accessing the RECEIPT PRINTER

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select the **RECEIPT PRINTER** in the DIAGNOSTICS menu. Test String will be printed from the receipt printer.
- 3) When the ATM is in the normal state, the SUCCESS message will be displayed.

5.6.3 CASH DISPENSER

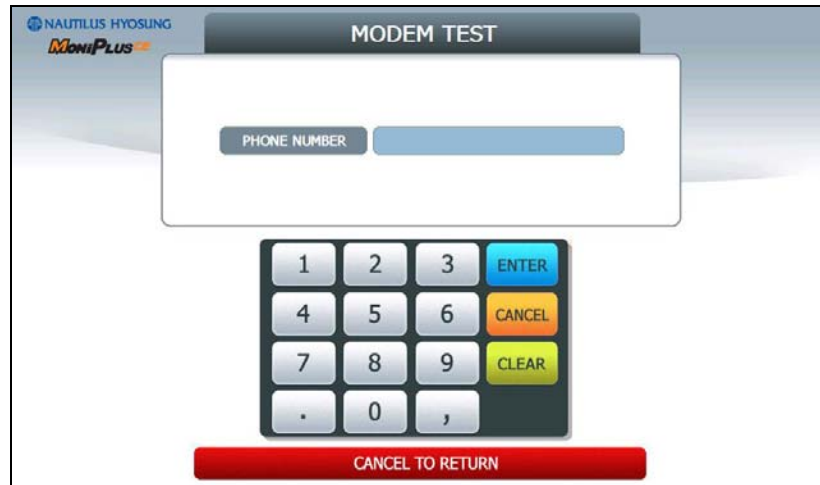
The **CASH DISPENSER** has the function of testing the dispense mechanisms. This function will dispense one note from the cassette and dump into the reject bin. If an error occurs, the system will stop and display an error code. Confirm the detailed error description in the ERROR CODE of REPORT MENU

Accessing the CASH DISPENSER

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select the **CASH DISPENSER** in the DIAGNOSTICS menu. The **CASH DISPENSER** test will be performed.
- 3) When the ATM is normal state, the SUCCESS message will be displayed.

5.6.4 MODEM

The **MODEM** has the function of testing the modem for any errors. Input the desired PHONE NUMBER, then press **ENTER** Key for TEST DIAL. This function is used to check the function of the modem dial.



Accessing the MODEM

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select the **MODEM** in the DIAGNOSTICS menu.
- 3) The MODEM TEST will be displayed.

5.6.4.1 TCP/IP

The **TCP/IP** has the function of testing the TCP/IP for any errors. Input the desired HOST ADDRESS, HOST PORT, SSL OPTION and SSL VERSION, then select **CONNECT** for line test. This function is used to check the function of the TCP/IP.

The screenshot displays the 'TCP/IP' configuration interface. At the top left, the 'NAUTILUS HYOSUNG' logo and 'MONIPLUS' branding are visible. The main title is 'TCP/IP'. Below the title, there are four input fields: 'HOST ADDRESS' (150.11.5.195), 'HOST PORT' (31702), 'SSL OPTION' (DISABLE), and 'SSL VERSION' (VERSION 23). To the right of these fields is a 'CONNECT' button. At the bottom center, there is a red 'CANCEL TO RETURN' button. On the left side, there are four buttons: 'HOST ADDRESS', 'HOST PORT', 'SSL EN/DISABLE', and 'SSL VERSION'.

Accessing the TCP/IP

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select the **TCP/IP** in the DIAGNOSTICS menu.
- 3) The TCP/IP menu will be displayed.

5.6.5 CARD SCAN (NH DIP)

The **CARD SCAN** has the function of testing the magnetic stripe reader and the card itself.

The screenshot displays the 'CARD SCAN' interface. At the top left, the Nautilus Hyosung logo and 'MiniPLUS' branding are visible. The title 'CARD SCAN' is centered at the top. The main area contains three rows for card type selection:

- ISO1: A button labeled 'ISO1' and a text field containing '0'.
- ISO2: A button labeled 'ISO2' and a text field containing '0'.
- ISO3: A button labeled 'ISO3' and a text field containing '0'.

At the bottom center, there is a prominent red button labeled 'CANCEL TO RETURN'.

Accessing the CARD SCAN

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **CARD SCAN** in the DIAGNOSTICS menu. And if the display is ready, please insert and remove the card quickly.
- 3) The card data will be displayed.

5.6.5.1 CARD SCAN (SANKYO DIP , MAGTEK DIP)

The **CARD SCAN** has the functions for testing both the magnetic stripe reader and IC reader.

The screenshot displays the 'MCU TEST' screen. At the top left, it shows the 'NAUTILUS HYOSUNG' logo and 'MiniPLUS' branding. The main title is 'MCU TEST'. Below the title, a blue instruction reads 'INSERT CARD BEFORE PRESS TEST BUTTON'. The interface contains several input fields: 'ISO1' with a 'LEN' field set to '0', 'ISO2' with a 'LEN' field set to '0', 'ISO3' with a 'LEN' field set to '0', and 'ATR DATA'. At the bottom, there are three buttons: 'IC TEST' on the left, 'CANCEL TO RETURN' in the center (highlighted in red), and 'CARD SCAN' on the right.

Accessing the CARD SCAN AND IC TEST

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **CARD SCAN OR IC TEST** in the DIAGNOSTICS menu. And if the display is ready, please insert and remove the card quickly only in case of magnetic card. However, in case of testing IC card, insert and do not remove the card..
- 3) The card data will be displayed.

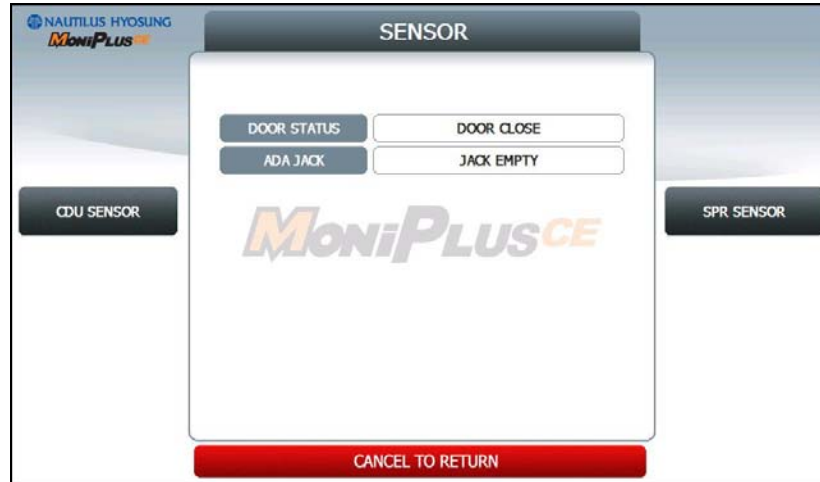
5.6.6 AUXILIARY UNIT

This **AUXILIARY UNIT** contains **SENSOR** and **FLICKER**. Please press each button on this menu to go to the next screen. To go back to the previous screen, press the **CANCEL** key in pinpad.



5.6.6.1 SENSOR

This **SENSOR** contains **CDU SENSOR** and **SPR SENSOR**. Please press each button on this menu to go to the next screen. To go back to the previous screen, press the **CANCEL** key in pinpad.



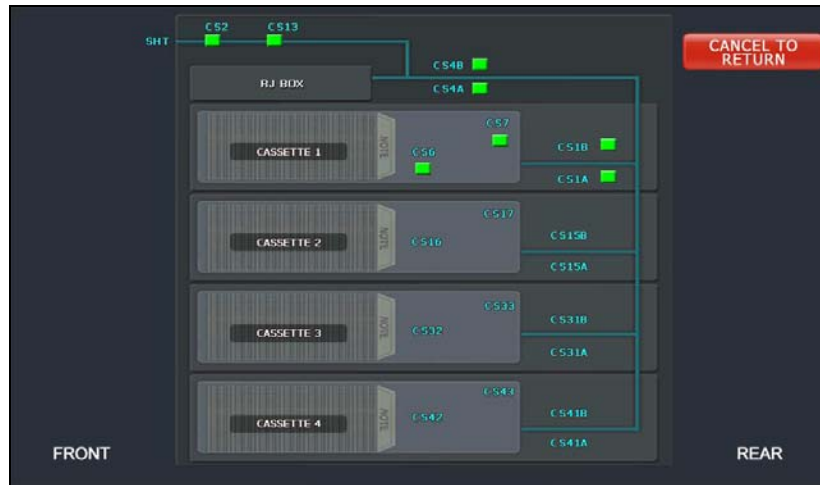
The **SENSOR** has the function of testing if all the sensors are in proper working condition. The sensors are tested by turning the sensors on and off.

Accessing the SENSOR

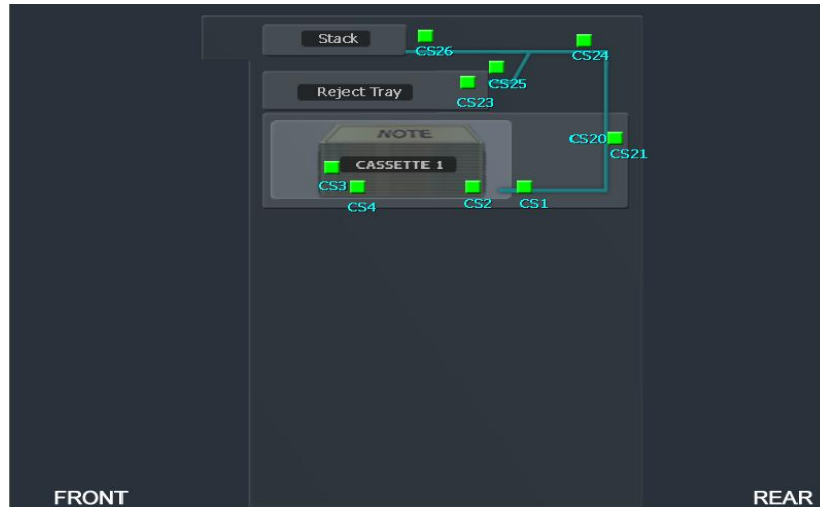
- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **AUXILIARY UNIT** in the DIAGNOSTICS menu and then select **SENSOR** in the AUXILIARY menu.
- 3) DOOR STATUS and ADA JACK data will be displayed on the center. If you want to see the **CDU SENSOR** or **SPR SENSOR**, then press the button in each.

5.6.6.1.1 CDU SENSOR

The **CDU SENSOR** has the function of testing if all the sensors are in proper working condition. The sensors are tested by turning the sensors on and off. If any sensor is normal, the sensor will be displayed as **GREEN COLOR**. And if any sensor detects an object or is abnormal, the sensor will be displayed as **RED COLOR**. Moreover, if any sensor doesn't exist, the sensor will not be displayed.



[The screen except for MX4000W]



[The screen for MX4000W]

Accessing the SENSOR

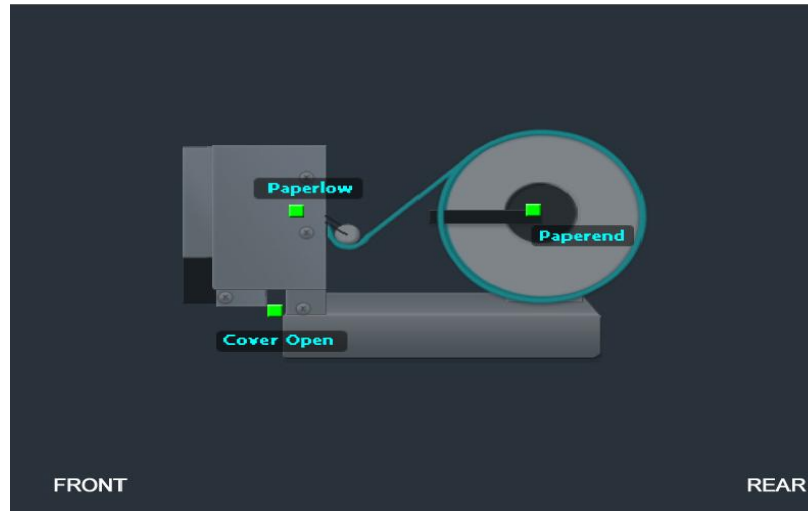
- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **AUXILIARY UNIT** in the DIAGNOSTICS menu
- 3) Select **SENSOR** in the **AUXILIARY** menu and then select **CDU SENSOR** in the **SENSOR** menu.

5.6.6.1.2 SPR SENSOR (Except for MX4000W)

The **SPR SENSOR** has the function of testing if all the sensors are in proper working condition. The sensors are tested by turning the sensors on and off. If any sensor is normal the sensor will be displayed as **GREEN COLOR**. And if any sensor detects an object or is abnormal, the sensor will be displayed as **RED COLOR**. Moreover, if any sensor doesn't exist, the sensor will not be displayed.



[The screen except for MX4000W]



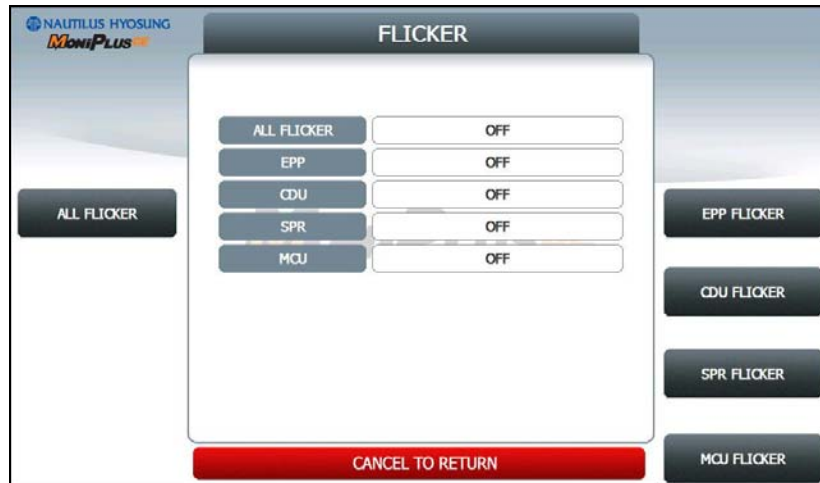
[The screen for MX4000W]

Accessing the SENSOR

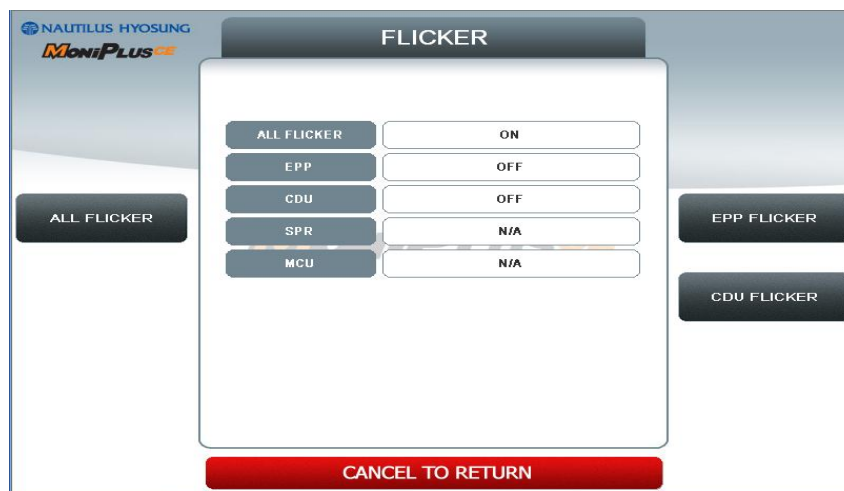
- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **AUXILIARY UNIT** in the DIAGNOSTICS menu
- 3) Select **SENSOR** in the **AUXILIARY** menu and then select **SPR SENSOR** in the **SENSOR** menu.

5.6.6.2 FLICKER

This **FLICKER** contains **ALL FLICKER SENSOR**, **EPP FLICKER**, **CDU FLICKER**, **SPR FLICKER** and **MCU FLIKCER**. Please press each button on this menu to change test mode ON, OFF or FLICKING. To go back to the previous screen, press the **CANCEL** key in pinpad. In MX4000W, there are no flickers attached to **SPR**, **MCU**, So 'N/A' would be displayed on the screen corresponding to the blank of **SPR**, **MCU**.



[The screen except for MX4000W]



[The screen for MX4000W]

Accessing the SENSOR

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **AUXILIARY UNIT** in the DIAGNOSTICS menu and then select **FLICKER** in the **AUXILIARY** menu.

3) Select any button to test EPP, CDU, SPR, MCU in each or ALL FLICKER..

5.6.7 AGING

The AGING function is only used at the factory.

Accessing the AGING

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **AGING** in the **DIAGNOSTICS** menu.
- 3) All units will be tested unlimitedly. When you press **CANCEL** key, the testing will be stopped.

5.6.8 ANTI SKIMMING (SANKYO DIP ONLY WITH ANTI SKIMMING BOARD)

The **ANTI SKIMMING** has the functions for testing anti skimming board added to card reader.



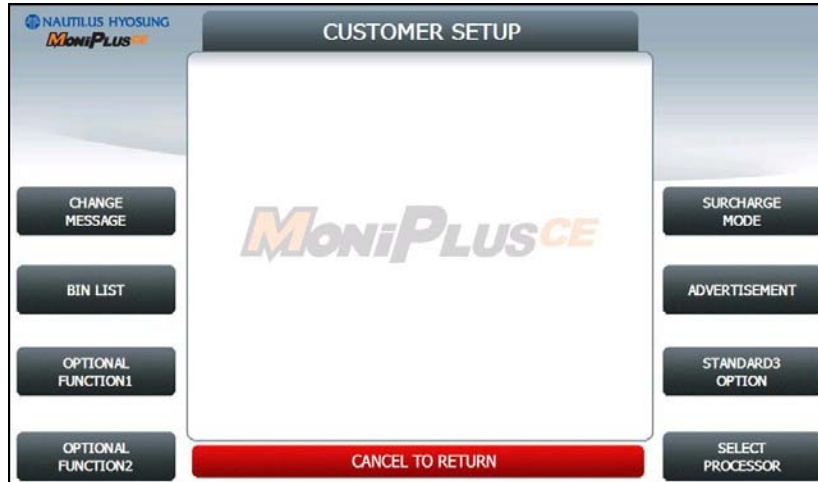
Accessing the CARD SCAN AND IC TEST

- 1) Select **DIAGNOSTICS** in the OPERATOR FUNCTION.
- 2) Select **ANTI SKIMMING** in the DIAGNOSTICS menu. And if the display is ready, the screen would show you what is going on inside anti skimming board
- 3) **INITIALIZE** button will make the anti skimming board initialized.
- 4) **TIME THRESHOLD** button would be used to test the time interval of detecting metal stuff attached to card reader. If you set threshold time as 10 sec, the anti skimming board will send the detection signal to S/W to notify it after 10 sec. passes by.

5.7 CUSTOMER SETUP

This customer setup menu contains **CHANGE MESSAGE**, **BIN LIST**, **OPTIONAL FUNCTION1**, **OPTIONAL FUNCTION2**, **SURCHARGE MODE**, **ADVERTISEMENT**, **STANDARD3 OPTION** and **SELECT PROCESSOR**. Please press each button on this menu to go to the next screen. To go back to the previous screen, press the **CANCEL** key in pinpad.

[STANDARD 3]



NOTE: STANDARD3 OPTION is displayed only if the message format is STANDARD3

[STANDARD 1, 2, EPS]



NOTE: STANDARD1 OPTION is displayed only if the message format is STANDARD1

5.7.1. CHANGE MESSAGE

CHANGE MESSAGE menu has each of 8 sub menus. The displayed menu depends on which country uses. If you press the **WELCOME MESSAGE** button, the current display will be changed into the **WELCOME MESSAGE**. If you press the **EXIT MESSAGE** button, you can change the message on Exit Screen. And you can change the message in the **RECEIPT**. If you press the **RECEIPT HEADER** button, the current display will be changed into the **RECEIPT HEADER**. And you can set the receipt header message in the **RECEIPT**, If you press the **RECEIPT TAIL** button, the current display will be changed into the **RECEIPT TAIL**. And you can set the receipt tail message in the **RECEIPT**. If you press the **RECEIPT ADDRESS & PHONE NUMBER** button, it will be changed the **RECEIPT ADDRESS & PHONE NUMBER** display. You can set the information about **ADDRESS** and **PHONE NUMBER** in the **RECEIPT**. At last, the display can go back to the previous menu by pushing the **CANCEL** key in pinpad



Refer to figure of the Sample Receipt below for the location of the messages. The default receipt format will not include any messages.

Spanish transactions will be printed in English.

TRANSACTION RECORD	
— Customer Copy —	
Thank You for Using Us !!	
<u>RECEIPT ADDRESS 1</u>	
<u>RECEIPT ADDRESS 2</u>	
<u>RECEIPT ADDRESS 3</u>	
<u>RECEIPT PHONE NUMBER</u>	
<u>RECEIPT HEADER 1</u>	
<u>RECEIPT HEADER 2</u>	
TERMINAL #	= NH2700
SEQUENCE #	= 0001
AUTH #	= 120524 90
DATE & TIME	= 05/10/2010 13:27:05
BUSINESS DATE	= 05/10/2010
CARD NUMBER	= *****8444
TRANSACTION	= WITHDRAWAL
ACCOUNT	= FROM CHECKING

DISPENSED AMOUNT	= \$20.00
REQUESTED AMOUNT	= \$20.00
SURCHARGE AMOUNT	= \$1.50
TOTAL AMOUNT	= \$21.50
LEDGER BALANCE	= \$3,567.80
AVAILABLE BALANCE	= \$3,567.80
SURCHARGE PAID TO:	
OWNER	

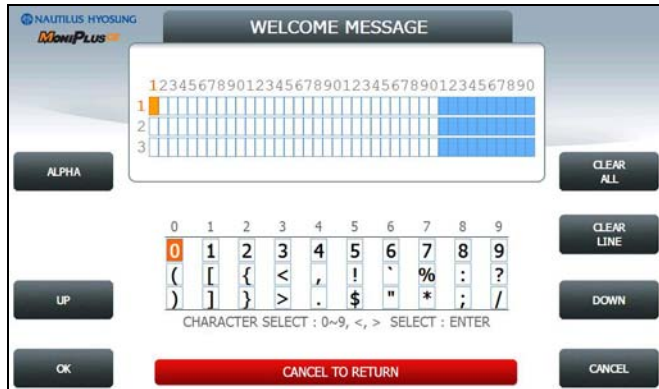
APPROVED	
<u>RECEIPT TAIL</u>	
SEQ.#: 0354	JNL.#: 0008

-Location of Messages on Receipt-

5.7.1.1 WELCOME MESSAGE

The **WELCOME MESSAGE** function is used to edit the welcome text.

Please input the welcome message in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays



[Function Key Type]

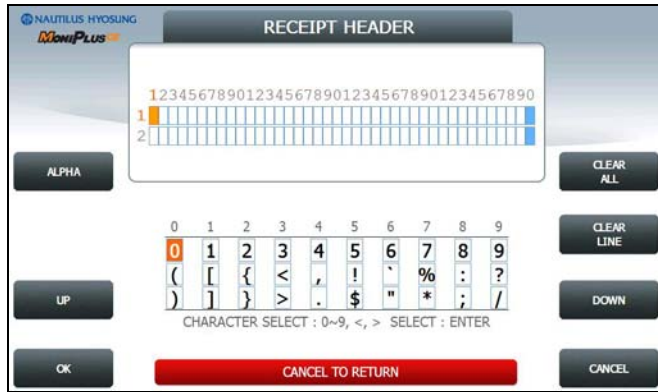


[Touch Type]

5.7.1.2 RECEIPT HEADER

The **RECEIPT HEADER** function is used to edit the message at the header of receipt.

Please input the receipt header in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]

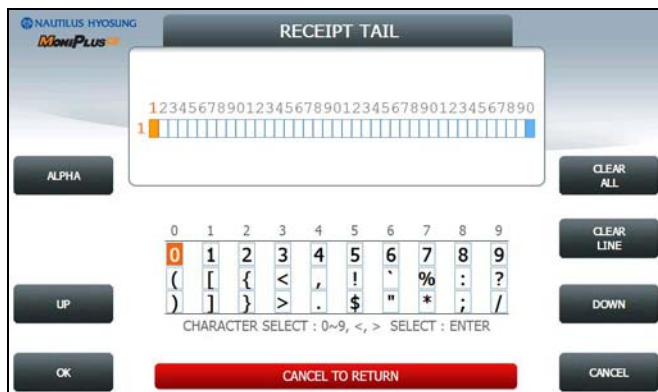


[Touch Type]

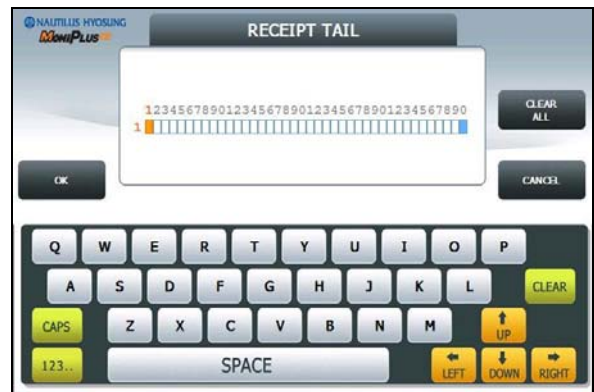
5.7.1.3 RECEIPT TAIL

The **RECEIPT TAIL** function is used to edit the message at the tail of receipt.

Please input the receipt tail in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]

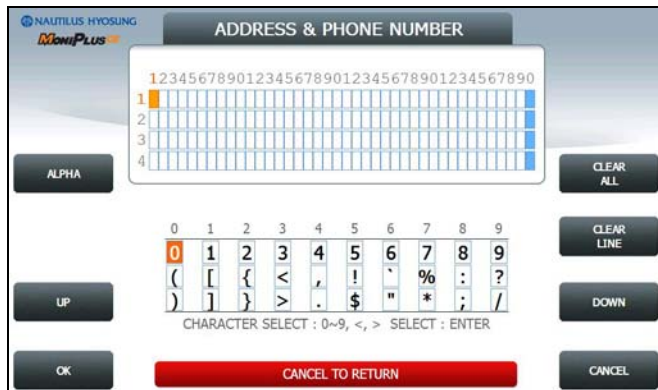


[Touch Type]

5.7.1.4 RECEIPT ADDRESS & PHONE NUMBER

The **RECEIPT ADDRESS & PHONE NUMBER** function is used to edit the message at the address & phone number of receipt.

Please input the receipt address & phone number in the field and select **OK** button. If it succeeded, **“OPERATION SUCCESSFUL!”** displays.



[Function Key Type]



[Touch Type]

5.7.2. BIN (Bank Identification Number) LIST

The **BIN LIST** is used to register the bank identification number. When the cardholders make transaction with the given BIN code, ATM doesn't request any additional fee. However, it is necessary to confirm whether it would be uses or not

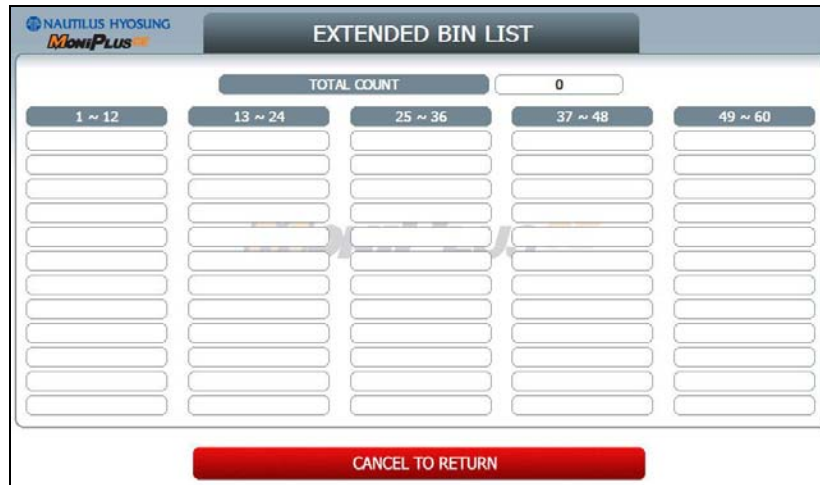
You can input and edit it by using such as **ADD, DELETE, EDIT, DELETE ALL** button.

Please press **EXTENDED BIN LIST** button on this menu to see the Extended Bin List. To go back to the previous screen, press the **CANCEL** key in pinpad.



5.7.2.1 EXTENDED BIN LIST

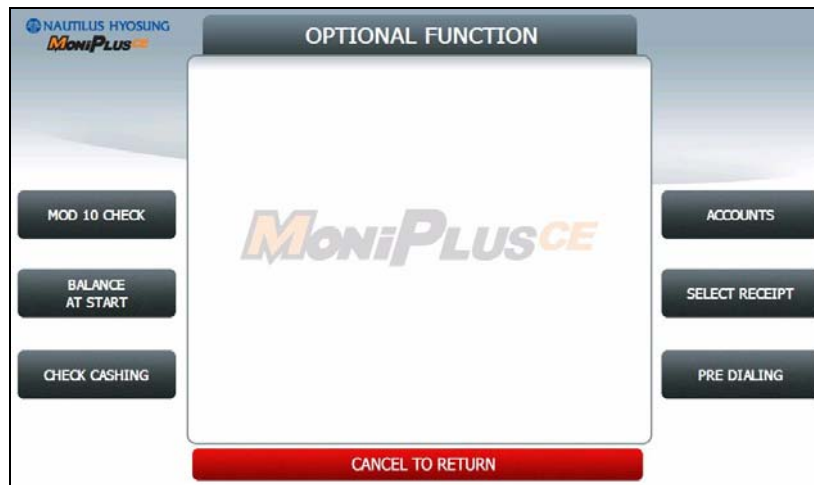
EXTENDED BIN LIST menu show the BIN LIST. This function support additional 3,000 BIN LIST exclusive of the basic 20 BIN LIST. Use **PREV** or **NEXT** button to show BIN LIST before or after. You can change EXTENDED BIN LIST via **FILE UPDATE** using RMS or USB. To go back to the previous screen, press the **CANCEL** key in pinpad.



5.7.3 OPTIONAL FUNCTION1 (Except for IC card readable card reader)

OPTIONAL FUNCTION1 menu contains **MOD 10 CHECK**, **BALANCE AT START**, **CHECK CASHING**, **ACCOUNTS**, **SELECT RECEIPT** and **PRE DIALING**. Please press each button on this menu to go to next screen.

To go back to the previous screen, press the **CANCEL** Key in pinpad



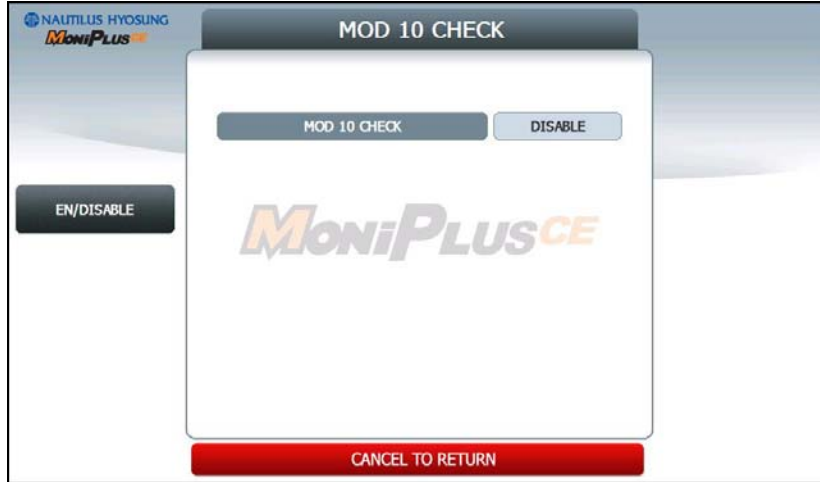
NOTE:

- 1) **CHECK CASHING** is displayed only if the message format is STANDARD1
- 2) **PRE DIALING** is displayed only if Network is Dial up
- 3) **BALANCE AT START** is supported in some countries but in others not.

5.7.3.1 MOD 10 CHECK

MOD 10 CHECK is to check the card data's validation.

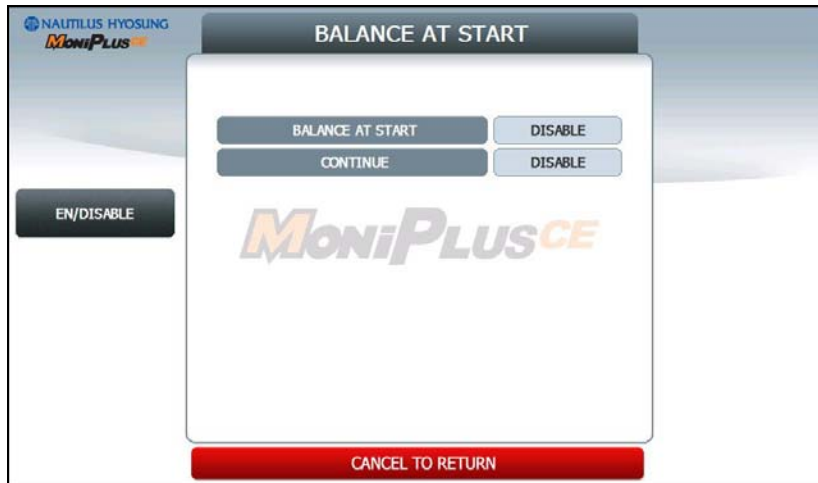
Please press **EN/DISABLE** button to set up **MOD 10 CHECK**.



5.7.3.2 BALANCE AT START

If **BALANCE AT START** is enabled, the screen with which a customer can check his/her balance will be inserted into the normal transaction flow.

Please press **EN/DISABLE** button to set up **BALANCE AT START** and **CONTINUE EN/DISABLE** button to set up whether it'll **CONTINUE** the **TRANSACTION** after **BALANCE AT START**. .



5.7.3.3 CHECK CASHING

This function is one of the options of the Value Added Service which exchanges checks for cash. To use the function, you should call technical support.

The certification screen will appear if you didn't certified.



5.7.3.4 ACCOUNTS

ACCOUNTS is to set up the accounts which is used on transaction. You can see CHECKING ACCOUNT, SAVINGS ACCOUNT and CREDIT CARD ACCOUNT however, only **CREDIT CARD ACCOUNT** can be set up.

Please press **CREDIT CARD EN/DISABLE** button to set up **CREDIT CARD ACCOUNT**.



5.7.3.5 SELECT RECEIPT

If **SELECT RECEIPT** is **ENABLED**, the ATM MACHINE will show the screen which a customer can select whether printing the receipt after a transaction or not.

Please press **EN/DISABLE** button to set up **SELECT RECEIPT**..

If **SELECT RECEIPT** is **DISABLED**, the ATM MACHINE will print out the receipt unconditionally.



5.7.3.6 PRE DIALING

PRE DIALING is a function to improve the performance speed of transaction by making a connection to the host server earlier than normal.

Please press **EN/DISABLE** button to set up **PRE DIALING** and one of three buttons (**AFTER CARD**, **AFTER PIN** and **AFTER ACCOUNT**) to determine the time when the ATM MACHINE makes a connection.

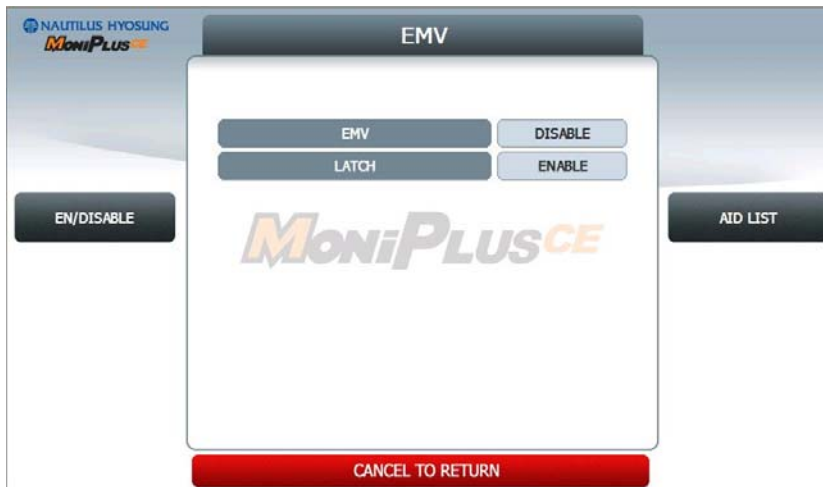


5.7.3.7 EMV (MAGTEK DIP, SANKYO DIP and so forth, in case of IC card readable card reader)

A supervisor of an ATM can select a card reader type. And both MAGTEK DIP and SANKYO DIP type card reader support IC transaction. So to set the IC card transaction (EMV) up, there is the 'EMV' button in OPTIONAL FUNCTION1 screen as depicted as below.



If a supervisor of an ATM pushes (or touches) **EMV** button, the screen would be changed into the one as depicted as below.



In the screen above, a supervisor of an ATM can choose either EMV transaction or Magnetic card transaction by pushing (or touching) **EN/DISABLE** button.

5.7.3.7.1 AID LIST

If a supervisor of an ATM pushes (or touches) **AID LIST** button, the screen would be changed into the one as depicted as below.

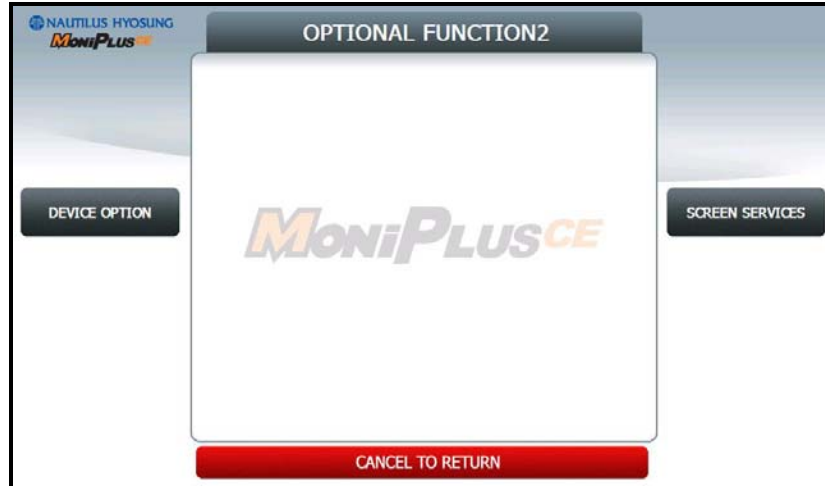


The AID is the abbreviation of 'Application ID' and it is needed in EMV transaction.

5.7.4 OPTIONAL FUNCTION2

OPTIONAL FUNCTION2 menu contains **DEVICE OPTION** and **SCREEN SERVICES**.

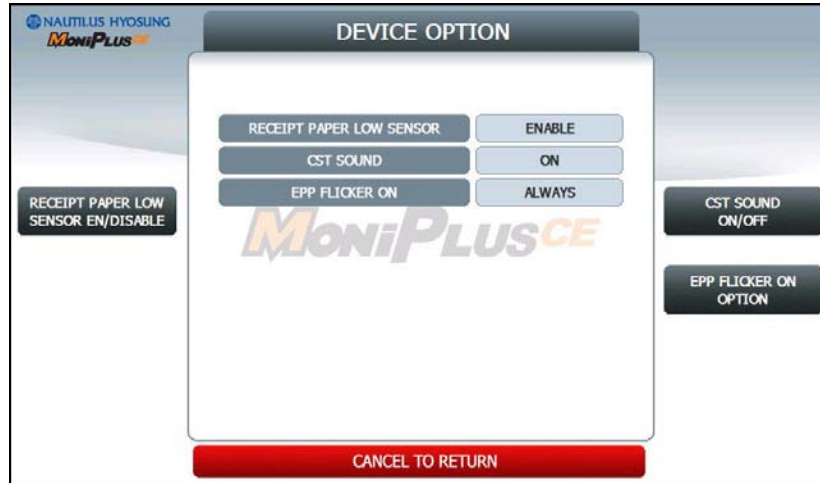
To go back to the previous screen, press the **CANCEL** Key in pinpad



5.7.4.1 DEVICE OPTION

DEVICE OPTION menu contains **RECEIPT PAPER LOW SENSOR EN/DISABLE**, **CST SOUND ON/OFF**, **EPP FLICKER ON OPTION**. Please press each button on this menu to set up items.

To go back to the previous screen, press the **CANCEL** Key in pinpad



5.7.4.2 SCREEN SERVICES

SCREEN SERVICES menu contains **CHANGE BACKGROUND** and **NOTICE**

Please press **CHANGE BACKGROUND** and **NOTICE** button on this menu to go to next screen.

To go back to the previous screen, press the **CANCEL** Key in pinpad

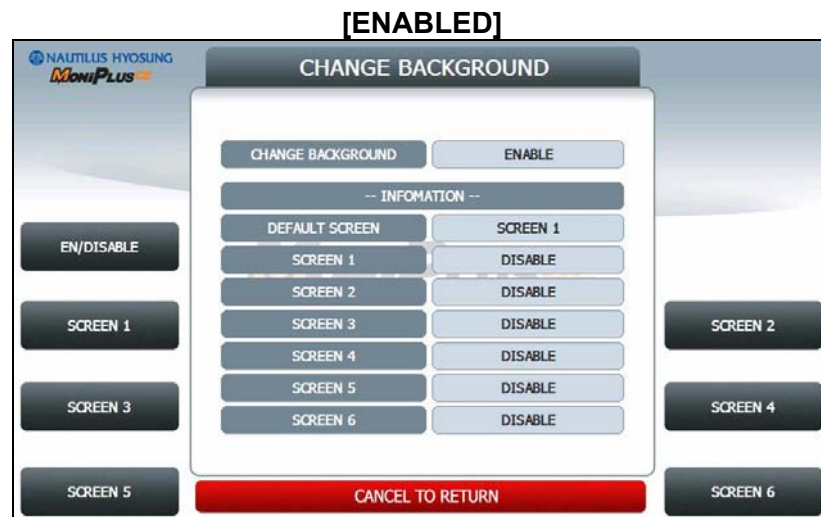


5.7.4.2.1 CHANGE BACKGROUND

CHANGE BACKGROUND function provides **SIX** different Background screens.

Please press **EN/DISABLE** button on this menu to set up for **CHANGE BACKGROUND**.

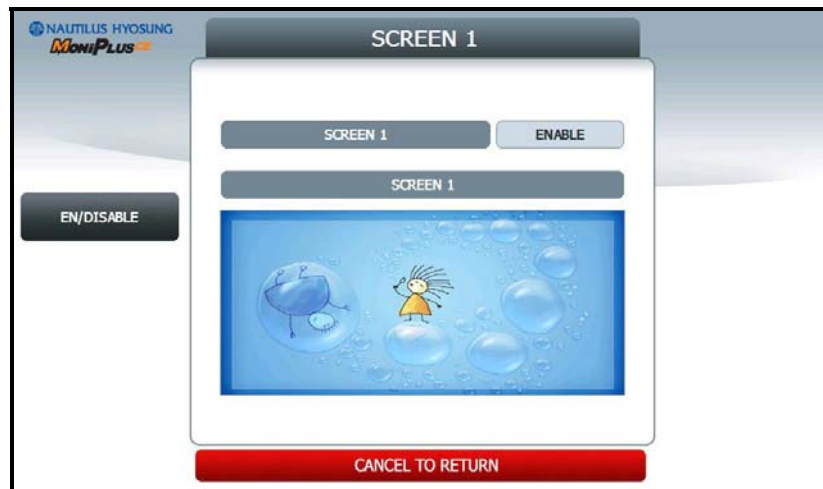
To go back to the previous screen, press the **CANCEL** Key in pinpad



The change background image can be updated by SW Update with JPG format images. For more information, please refer to “**Background image Update Guide**” document.

5.7.4.2.1.1 CHANGE BACKGROUND Screen n

Please press **SCREEN n EN/DISABLE** button to set up SCREEN n,

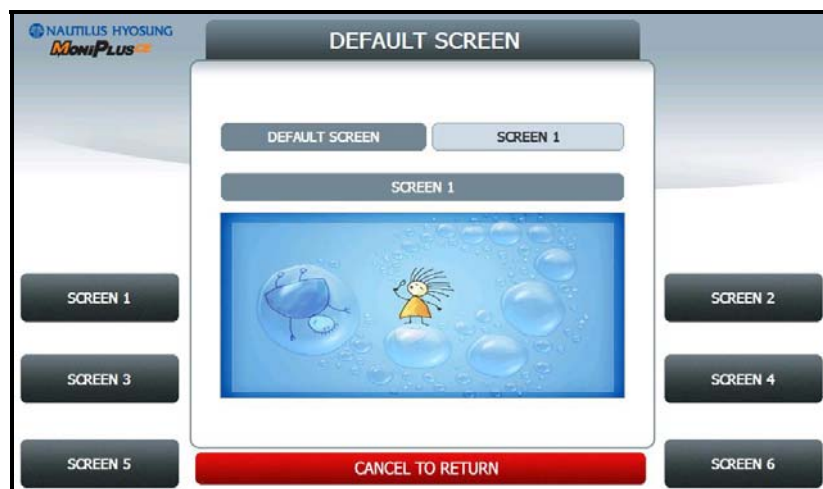


5.7.4.2.2 DEFAULT SCREEN

DEFAULT SCREEN function provides **SIX** different Background screens.

You can set up only one screen on the six screens

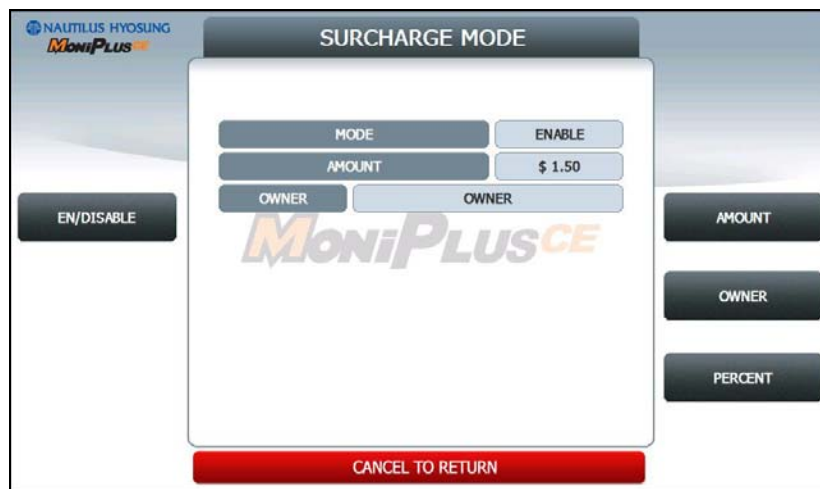
Please press **DEFAULT SCREEN n EN/DISABLE** button to set up SCREEN n,



5.7.5. SURCHARGE MODE

The **SURCHARGE MODE** contains the **EN/DISABLE** button for the surcharge warning screen and setting the surcharge amount and surcharge owner. When the **SURCHARGE MODE** is disabled and also if the data of card contains BIN number that was entered during installation, the surcharge warning message will not be displayed. When the **SURCHARGE MODE** is enabled, the **SURCHARGE OWNER, AMOUNT** and **SURCHARGE PERCENT** will be displayed in the surcharge warning screen during transaction. The factory default is surcharge enabled, surcharge amount is \$1.50 and the surcharge owner is none.

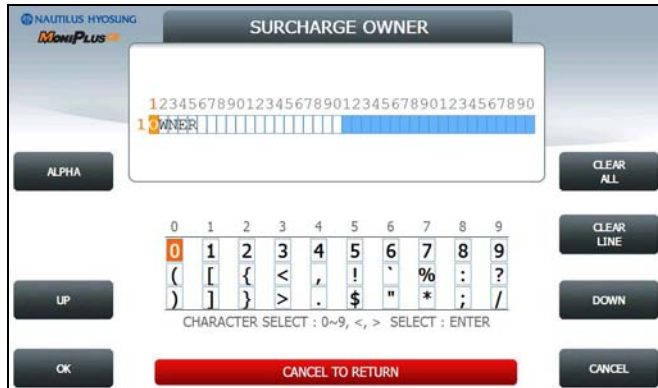
SURCHARGE PERCENT is to set up the percentage of surcharge.



5.7.5.1 SURCHARGE OWNER

The **SURCHARGE OWNER** function is used to edit the surcharge owner.

Please input the surcharge owner in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]



[Touch Type]

5.7.5.2 SURCHARGE PERCENT

The **SURCHARGE PERCENT** displays which are to set the surcharge percent.

The screenshot shows the 'SURCHARGE PERCENT' menu with the following settings:

Option	Value
EN/DISABLE	ENABLE
PERCENTAGE (%)	1
SURCHARGE LOCATION	BEGINNING

Warning Message: CUSTOMER WILL BE CHARGED THE GREATER OF SURCHARGE AMOUNT OR PERCENT

Buttons: EN/DISABLE, PERCENTAGE, LOCATION, WARNING MANNER, CANCEL TO RETURN

1) EN/DISABLE

- Set whether to use PERCENT SURCHARGE MODE.

2) PERCENTAGE

- Set PERCENTAGE (%).

3) WARNING MANNER

- Set whether to use maximum value or minimum value between **PERCENTAGE** and **SURCHARGE AMOUNT**. (GREATER: Maximum value, LESSER: Minimum value.)

4) LOCATION

- Set surcharge warning screen option
- **BEGINNING** : Shows Surcharge warning screen before customer selected amount.
- **AFTER AMOUNT** : Shows Surcharge warning screen after customer selected amount.

5.7.6. ADVERTISEMENT

ADVERTISEMENT function provides **COUPON**, **WELCOIME ADVERTISEMENT** and **TRANSACTION ADVERTISEMENT**.

Please press each button on this menu to go to next screen.



5.7.6.1 COUPON

Please press **COUPON TYPE** button to set up **BASIC COUPON** or **ENHANCED COUPON**.

If you set the **BASIC COUPON** and select **COUPON SETTING** button, **BASIC COUPON** setting screen will be displayed.

BASIC COUPON supports 2line 39column, **ENHANCED COUPON** supports 16line 39column.

If you set the **ENHANCED COUPON** and select **COUPON SETTING** button, **ENHANCED COUPON** setting screen will be displayed.



5.7.6.1.1 BASIC COUPON SETTING

Please press each button on this menu to go to next screen



5.7.6.1.1.2 BASIC COUPON n.

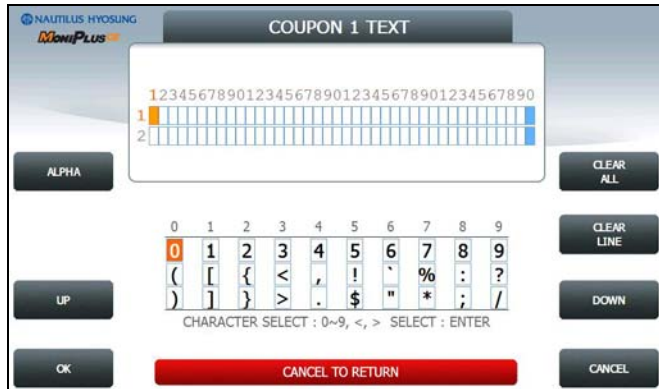
Please press **BASIC COUPON n EN/DISABLE** button to set up BASIC COUPON n,
Please press **COUPON n TEXT** button on this menu to go to next screen



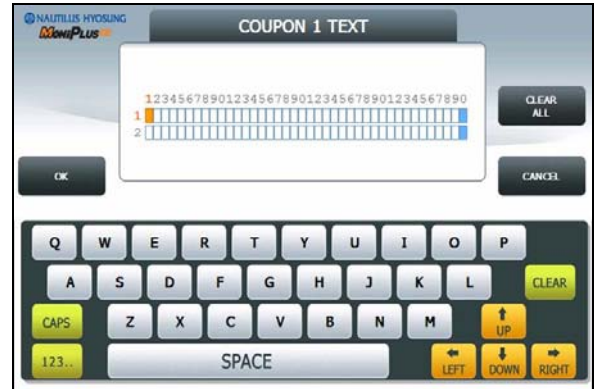
5.7.6.1.1.3 COUPON n. TEXT

The **COUPON n TEXT** function is used to edit the coupon n text.

Please input the welcome message in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



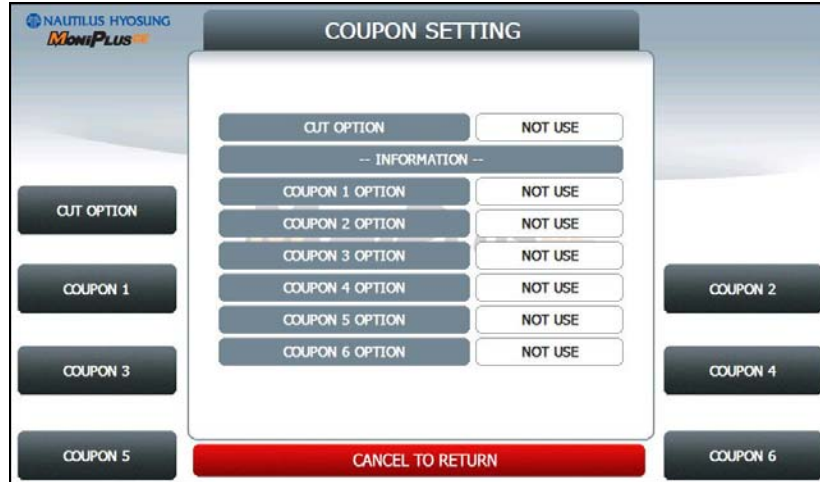
[Function Key Type]



[Touch Type]

5.7.6.1.2.1 ENHANCED COUPON SETTING

Please press **CUT OPTION** button to set up **AFTER RECEIPT** or **NOT USE**,
Please press each button on this menu to go to next screen



5.7.6.1.2.2 ENHANCED COUPON n.

Please press **ENHANCED COUPON n OPTION** button to set up **NOT USE**, **ALWAYS** and **USE TIME**.
START TIME and **END TIME** is only used **USE TIME** option and the range is 00 ~ 23
Please press **COUPON n TEXT** button on this menu to go to next screen

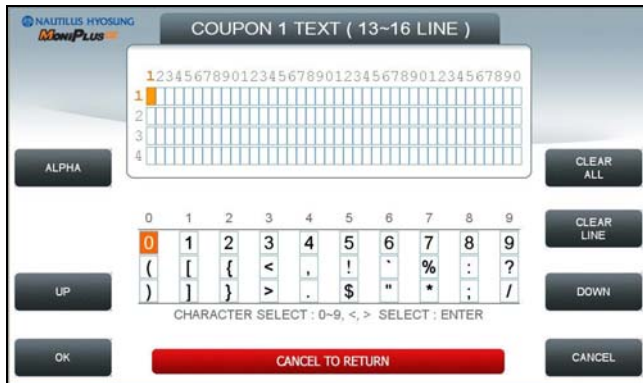
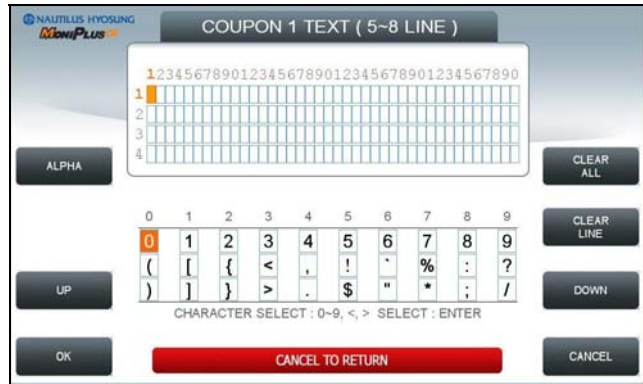
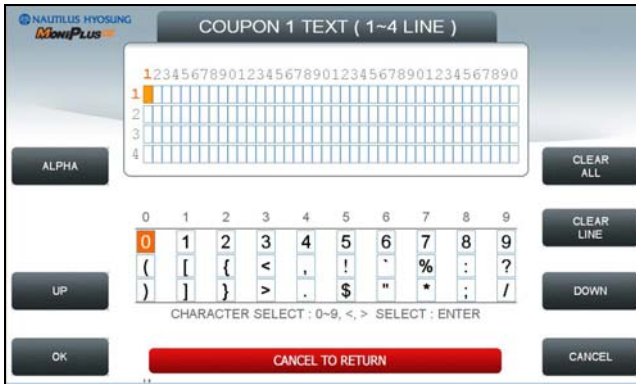


5.7.6.1.2.3 ENHANCED COUPON n. TEXT

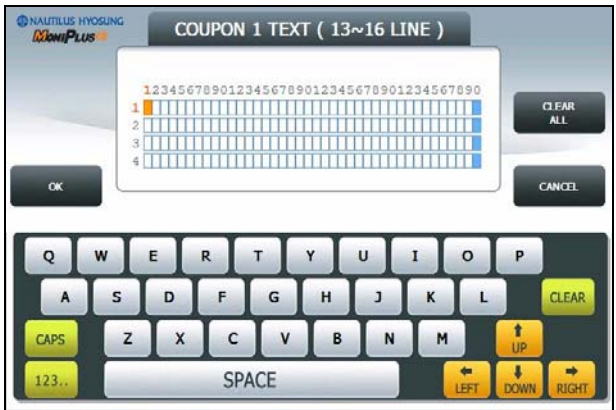
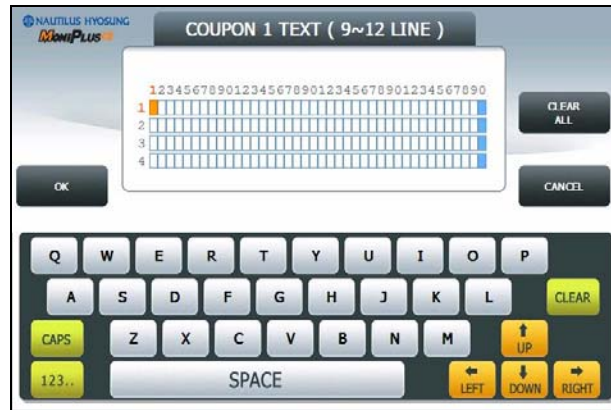
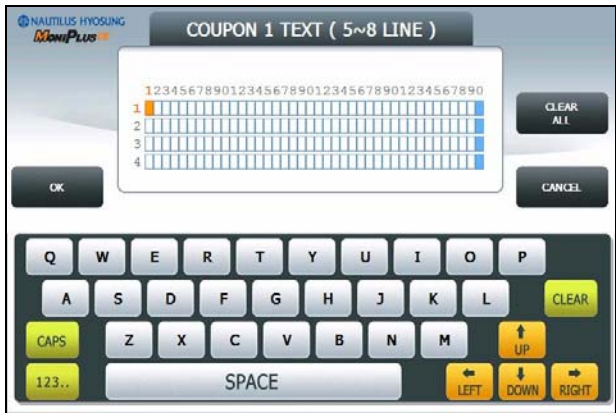
The **ENHANCED COUPON n TEXT** function is used to edit the coupon n text.

Please input the welcome message in the field and select **OK** button. If it succeeded, **“OPERATION SUCCESSFUL!”** displays.

[Function Key Type]



[Touch Type]



5.7.6.2 WELCOME ADVERTISEMENT

WELCOME ADVERTISEMENT function provides **SIX** different screens.

If you press the **TIMER** button, you can change the advertisement display timer and the range is between 5 and 30 in welcome screen. Please press each button on this menu to go to next screen.



The welcome advertisement image can be updated by SW Update with JPG format images. For more information, please refer to “**Image File Update Guide**” document.

5.7.6.2.1 SCREEN n.

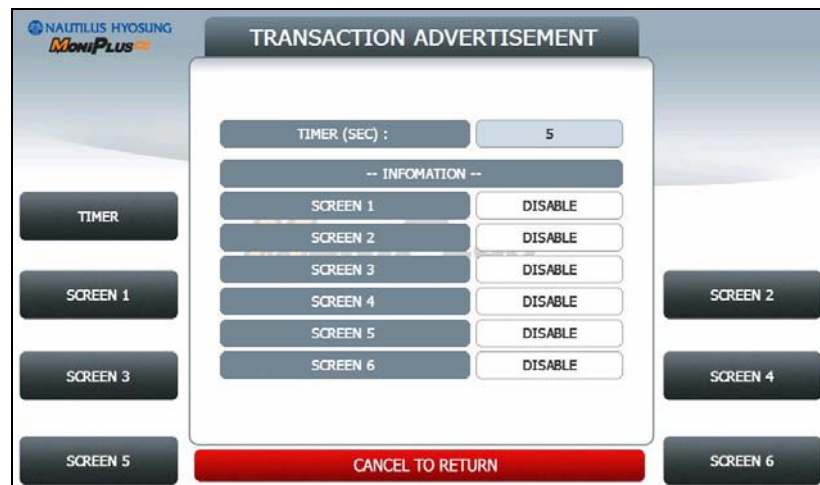
Please press **SCREEN n EN/DISABLE** button to set up SCREEN n,



5.7.6.3 TRANSACTION ADVERTISEMENT

TRANSACTION ADVERTISEMENT function provides **SIX** different screens.

If you press the **TIMER** button, you can change the advertisement display timer and the range is between 5 and 30 in welcome screen. Please press each button on this menu to go to next screen.



The transaction advertisement image can be updated by SW Update with JPG format images. For more information, please refer to “**Image File Update Guide**” document.

5.7.6.3.1 SCREEN n.

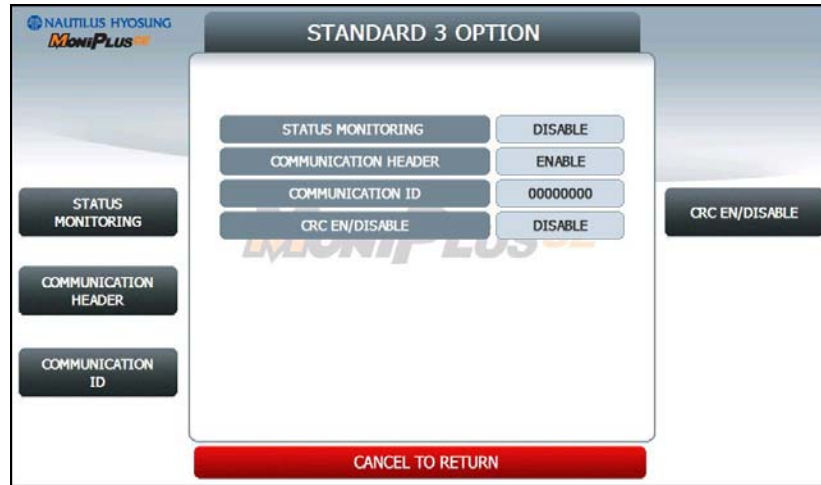
Please press **SCREEN n EN/DISABLE** button to set up SCREEN n,



5.7.7 STANDARD 3 OPTION

STANDARD 3 OPTION contains **STATUS MONITORING EN/DISABLE**, **COMMUNICATION HEADER**, **COMMUNICATION ID** and **CRC EN/DISABLE**.

In case of **COMMUNICATION HEADER** is enabled, **COMMUNICATION ID** option can be configured.



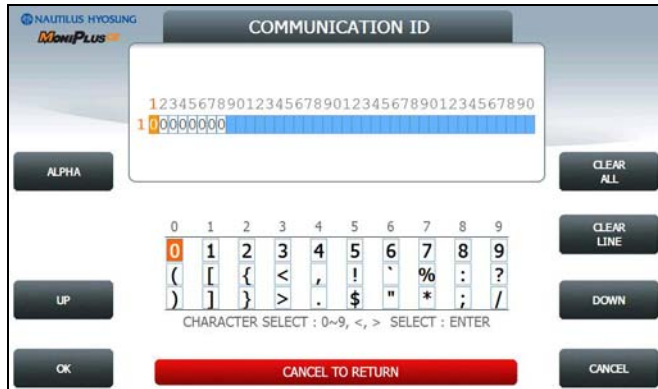
STANDARD 3 OPTION function is used to get the additional information when Triton message is selected.

- 1) **STATUS MONITORING** function is to decide whether status monitoring field in message is sent or not.
- 2) **COMMUNICATION HEADER** function is to decide whether communication header in message is included or not.
- 3) **COMMUNICATION ID** function is able to save the **COMMUNICATION ID**.
The **COMMUNICATION ID** has to be set if using the **COMMUNICATION HEADER** function.
- 4) **CRC(Cyclic Redundancy Checking) OPTION** function is to set up whether CRC is used or not during communication with host.

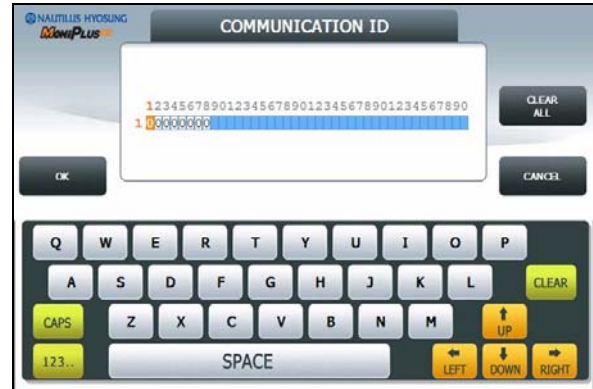
5.7.7.1 COMMUNICATION ID

The **COMMUNICATION ID** function is used to edit the communication id.

Please input the communication id in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



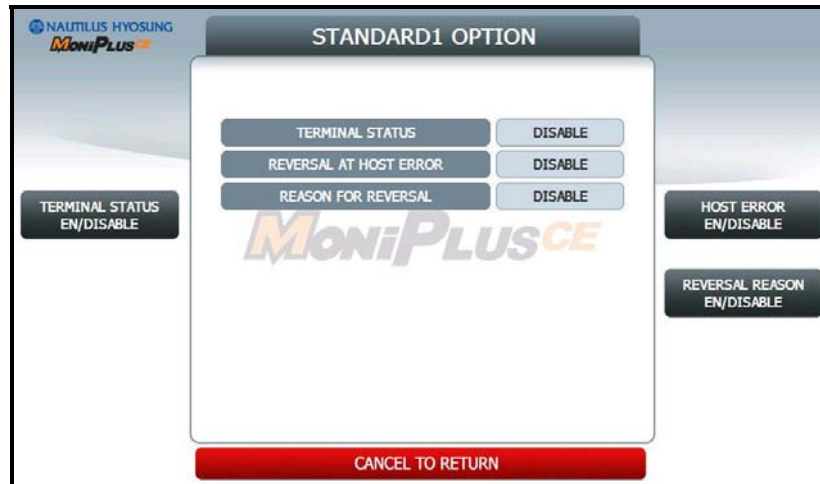
[Function Key Type]



[Touch Type]

5.7.8 STANDARD 1 OPTION

STANDARD 1 OPTION contains **TERMINAL STATUS EN/DISABLE**, **HOST ERROR EN/DISABLE** and **REVERSAL REASON EN/DISABLE**.



STANDARD 1 OPTION function is used to get the additional information when Triton message is selected.

- 1) **TERMINAL STATUS** function is to decide whether terminal status field in message is sent or not.
- 2) **HOST ERROR** function is to decide whether reversal message is sent or not when communication error occurred.
- 3) **REVERSAL REASON** function is to decide whether reason code("n") is sent or not when reversal message is sent to the host.

5.7.9 SELECT PROCESSOR

SELECT PROCESSOR menu contains **COMMUNICATION**, **MESSAGE FORMAT**, **EOT/ENQ OPTION**, **TCP/IP TYPE** and **REVERSAL RETRY COUNT**



NOTE:

- 1) **EOT / ENQ OPTION** is displayed only if the Network is Dial up or TCP/IP Type is VISA FRAMED
- 2) **TCP/IP TYPE** is displayed only if Network is TCP/IP

5.7.9.1 COMMUNICATION

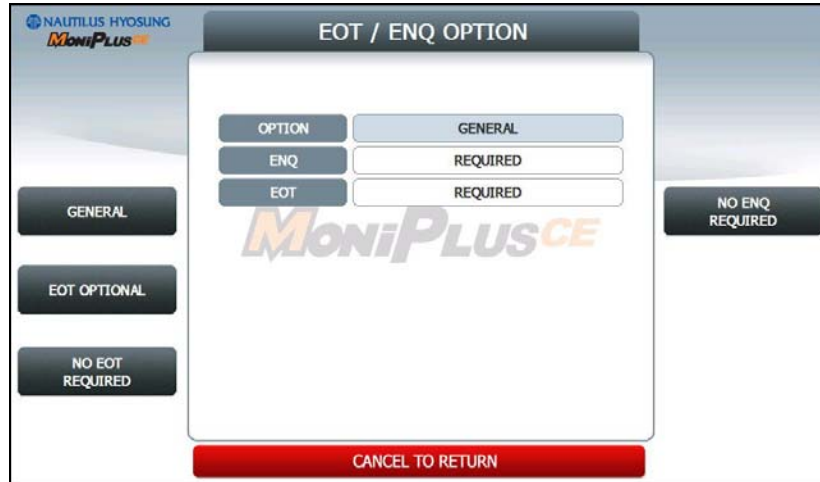
This is to set up a type of line to communicate with Host. Select **DIALUP** or **TCP/IP**. In case of setting up DIALUP, communicate with host using modem. And in case of setting up TCP/IP, communicate with host using LAN.



NOTE: In case of selecting "IN SERVICE" on OP MAIN, if the value is different from the original value when entering in OP mode, exit OP and execute reboot.

5.7.9.2 EOT/ENQ OPTION

EOT/ENQ OPTION contains GENERAL, EOT OPTIONAL, NO EOT REQUIRED and NO ENQ REQUIRED functions. You can select one of these options



5.7.9.3 MESSAGE FORMAT

This menu sets up message format to use during communicating with Host.

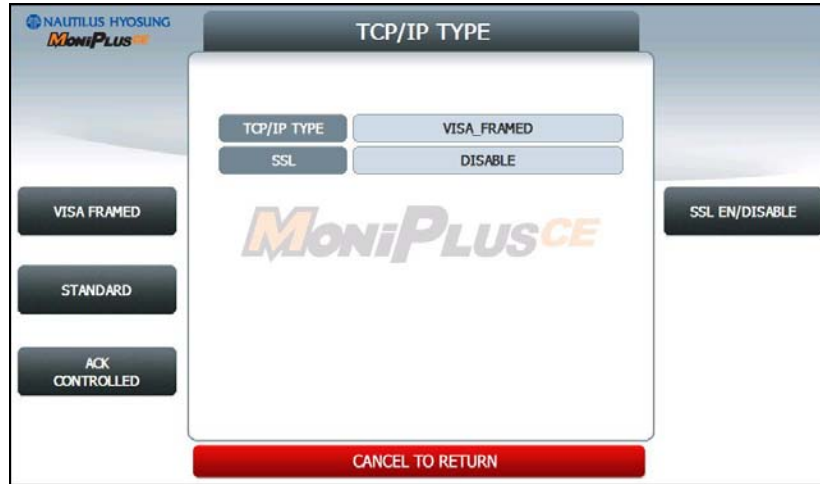
You can select one of message type to communicate with a data processing company or bank in this menu (**STANDARD1**, **STANDARD2**, **STANDARD3** and **EPS**). If **STANDARD3** is selected, **STANDARD3 OPTION** button is displayed on the **CUSTOMER SETUP** Screen.

STANDARD 1 is a HYOSUNG message type and **STANDARD 2** is a CSP200 message type, **STANDARD 3** is Triton 9600 message type and **EPS** is an extended CSP200 message type.



5.7.9.4 TCP/IP TYPE

In case of supporting **TCP/IP**, this is providing a function setting up communication flow to use when communicating with host. In this menu, you can change **TCP/IP TYPE** and can decide whether 'ENABLE' or 'DISABLE' about **SSL OPTION**. There are three kind of **TCP/IP** type in this TCP/IP COMMUNICATION menu
(STANDARD TCP/IP, VISA FRAMED TCP/IP, and ACK CONTROLLED TCP/IP).



[TCP/IP TYPE screen except for USA]



[TCP/IP TYPE screen for USA]

The differences between two screens as depicted as above are **SSL CERT** and **DOWNLOAD CERT FROM USB** buttons. If SSL EN/DISABLE is set as ENABLE, SSL CERT button would appear. And if

SSL CERT EN/DISABLE is set as ENABLE, DOWNLOAD CERT. FROM USB button would appear. SSL CERT.(Certificate issued by host to recognize the other side in communicating with each other) is the method for secure transaction If a owner of ATM want to use the certificate issued by a host, what he/she have to do is to copy certificate file ,renamed as “rootcert.pem” to USB root path. And then just push DOWNLOAD CERT. FROM USB button for downloading it from USB.

5.7.9.5 REVERSAL RETRY COUNT

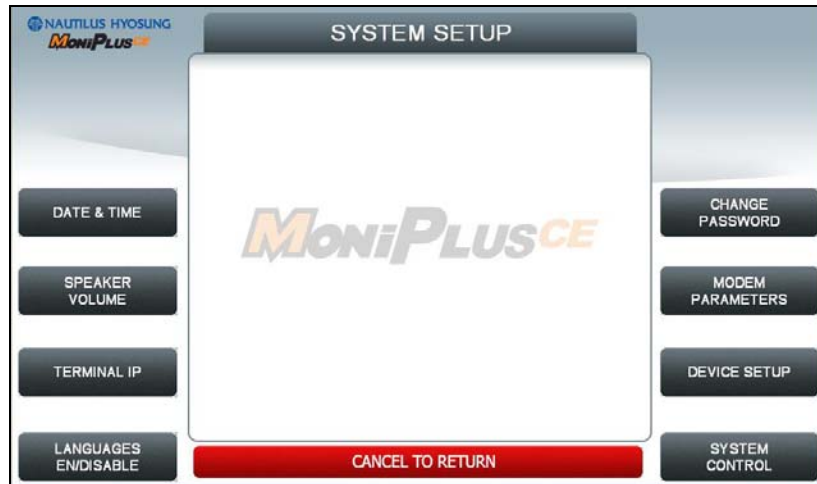
REVERSAL RETRY COUNT function is used to set the try count of reversal transaction. **CURRENT REVERSAL RETRY COUNT** displays count of current setting value. You can enter the count and then press **ENTER** (or **CONFIRM**) if you want to change try count of reversal transaction. (You should ask your DP about count of reversal transaction before change try count.)



5.8 SYSTEM SETUP

This system setup menu contains **DATE & TIME**, **CHANGE PASSWORD**, **SPEAKER VOLUME**, **MODEM PARAMETERS**, **TERMINAL IP**, **DEVICE SETUP**, **LANGUAGE EN/DISABLE** and **SYSTEM CONTROL**.

Please press each button on this menu to go to next screen. To go back to the previous screen, press the **CANCEL** key in pinpad.



NOTE:

- 1) **TERMINAL IP** is displayed only if the Network is TCP/IP.
- 2) **MODEM PARAMETERS** is displayed only if Network is Dial up.

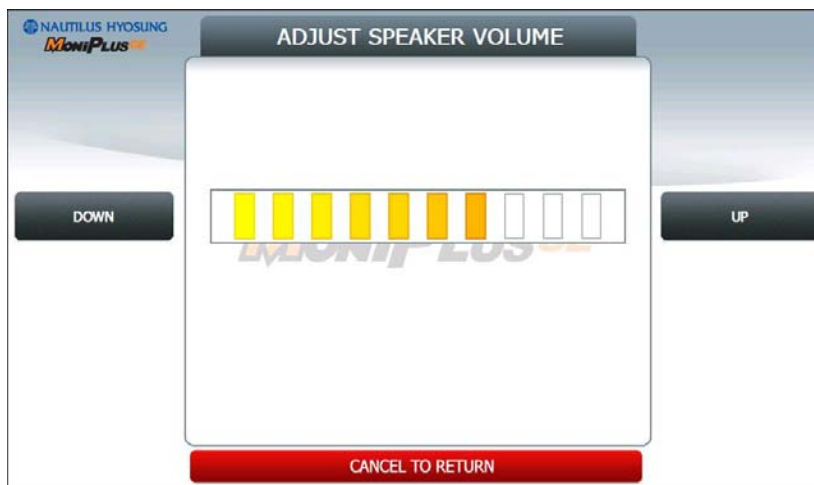
5.8.1 DATE & TIME

You can set system date and time by pressing **YEAR**, **HOUR**, **MONTH**, **MINUTE** and **DAY** button. If you press each menu, the cursor will be positioned and you can change the value. This value is saved by pressing **APPLY** key, on the other hand, to go back to the previous screen, press the **CANCEL** key in pinpad.



5.8.2 SPEAKER VOLUME

The **SPEAKER VOLUME** function is used to set speaker volume by using **DOWN** and **UP** buttons. Once the button is pressed, ATM beeps.



5.8.3 TERMINAL IP

TERMINAL IP menu contains **DHCP EN/DISABLE**, **IP ADDRESS**, **SUBNET MASK**, **GATEWAY** and **DNS** buttons. If you press **DHCP EN/DISABLE** button will change DHCP status, ENABLE to DISABLE, or DISABLE to ENABLE. In case of DHCP is disabled, **IP ADDRESS**, **SUBNET MASK**, **GATEWAY** and **DNS** buttons will be displayed.

TERMINAL IP	
DHCP	DISABLE
IP ADDRESS	150.11.5.111
SUBNET MASK	255.255.0.0
GATEWAY	150.11.1.254
DNS	0.0.0.0

If **DHCP** value is **ENABLE**, ATM uses **DYNAMIC IP** to connect to host. Otherwise, ATM uses **STATIC IP**. If you change DHCP value from **ENABLE** to **DISABLE**, you should set up **STATIC IP** again use **IP ADDRESS**, **SUBNET MASK**, **GATEWAY** and **DNS** buttons.

It is able to input up to 15 units such as XXX.XXX.XXX.XXX

5.8.4 LANGUAGE EN/DISABLE

You can select language type to be displayed in screen. There are three types of language **ENGLISH, SPANISH, FRENCH**. You can change default language pressing **DEFAULT LANGUAGE SELECT** button. If you press each **EN/DISABLE** button, one of ENABLE/DISABLE will be changed.



NOTE: The Language which is selected as **DEFAULT LANGUAGE** cannot be changed.

5.8.5 CHANGE PASSWORD

You can change PASSWORD. Depending on authority, there are three passwords **OPERATOR PASSWORD**, **SERVICE PASSWORD** and **MASTER PASSWORD**.



5.8.5.1 OPERATOR PASSWORD

This menu enables you to change current operator password as new one. To change the current password, you should input the proper one in current password field. The factory default value of operator password is "111111".



5.8.5.2 SERVICE PASSWORD

This menu enables you to change current service password as new one. To change the current password, you should input the proper one in current password field. The factory default value of service password is "222222".

The screenshot displays the 'SERVICE PASSWORD' menu. At the top left, the 'NAUTILUS HYOSUNG' logo and 'MiniPlus' branding are visible. The main title 'SERVICE PASSWORD' is centered at the top. Below the title, there are three input fields labeled 'CURRENT PASSWORD', 'NEW PASSWORD', and 'CONFIRM PASSWORD'. Underneath these fields is a numeric keypad with buttons for digits 1-9, 0, a decimal point, and a comma. To the right of the keypad are three function buttons: 'ENTER' (blue), 'CANCEL' (orange), and 'CLEAR' (yellow). At the bottom of the screen, a red bar contains the text 'CANCEL TO RETURN'.

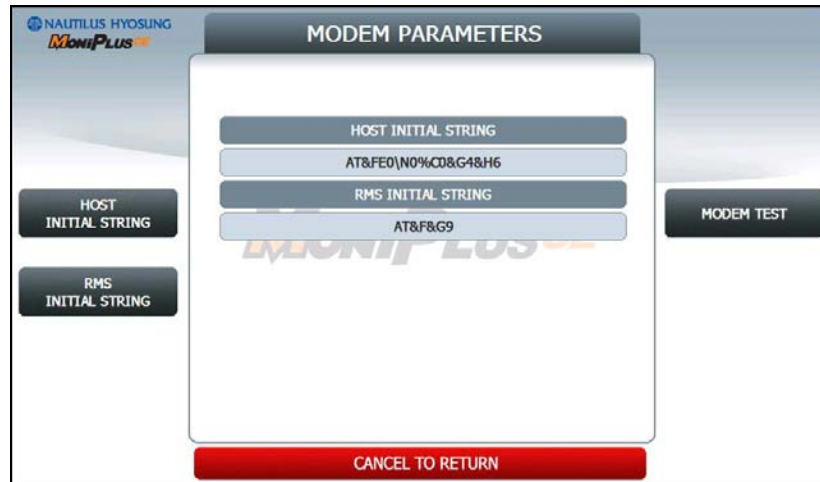
5.8.5.3 MASTER PASSWORD

This menu enables you to change current master password as new one. To change the current password, you should input the proper one in current password field. The factory default value of master password is "555555".

The screenshot displays the 'MASTER PASSWORD' menu. At the top left, the 'NAUTILUS HYOSUNG' logo and 'MiniPlus' branding are visible. The main title 'MASTER PASSWORD' is centered at the top. Below the title, there are three input fields labeled 'CURRENT PASSWORD', 'NEW PASSWORD', and 'CONFIRM PASSWORD'. Underneath these fields is a numeric keypad with buttons for digits 1-9, 0, a decimal point, and a comma. To the right of the keypad are three function buttons: 'ENTER' (blue), 'CANCEL' (orange), and 'CLEAR' (yellow). At the bottom of the screen, a red bar contains the text 'CANCEL TO RETURN'.

5.8.6 MODEM PARAMETERS

This MODEM PARAMETERS menu contains **HOST INITIAL STRING**, **RMS INITIAL STRING** and **MODEM TEST**.



1) INITIAL STRINGs

The **HOST INITIAL STRING** and **RMS INITIAL STRING** functions are used to edit the modem initial string when the special circumstance is required by a nonstandard modem initial string. Before editing the initial string, consult with service personnel.

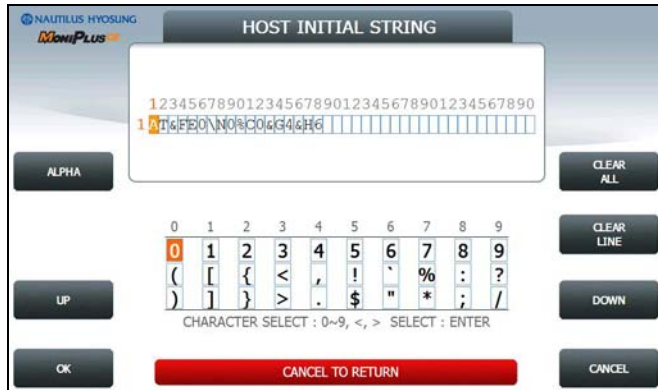
2) MODEM TEST

The **MODEM TEST** function is used to perform the modem reset test. When the error is occurred, contact the service personnel.

5.8.6.1 HOST INITIAL STRING

The **HOST INITIAL STRING** function is used to edit the host initial string.

Please input the host initial string in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]

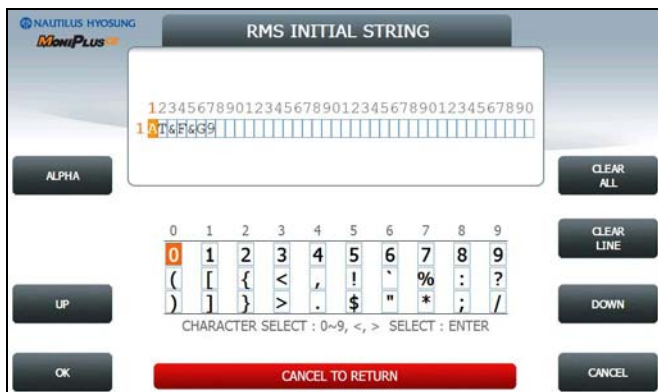


[Touch Type]

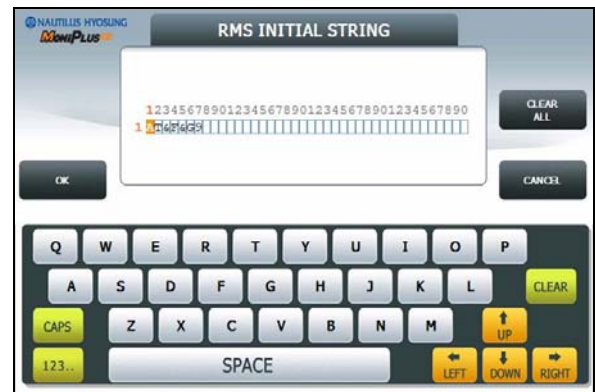
5.8.6.2 RMS INITIAL STRING

The **RMS INITIAL STRING** function is used to edit the rms initial string.

Please input the rms initial string in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]



[Touch Type]

5.8.7 DEVICE SETUP

This **DEVICE SETUP** menu contains **CDU SETUP**. Please press the **CDU SETUP** button on this menu to go to next screen.



NOTE: When you change CDU Setup Information, contact the service personnel.

NOTE: When you want to set CDU in MX4000W, there is no button named as CDU setup. This is because there is only one cassette in MX4000W. So you do not need to set it. In MX4000W, if this button is not hidden, there is possibility to set CDU from stable condition to unknown, not defined state.

5.8.7.1 CDU SETUP

This **CDU SETUP** menu contains **COUNTRY**, **CDU TYPE**, **CASSETTE VOLUME** and **EXECUTE**.

Please press each button on this menu to operate the related function..



Press the buttons **COUNTRY**, **CDU TYPE** and **CASSETTE VOLUME**. Then the CDU SETUP INFORMATION will be changed.

If you changed the information correctly, press the **EXECUTE** button to **APPLY**.

1) COUNTRY

USA	CANADA	KOREA	CHINA	JAPAN	MEXICO
DEUTSCH	INDONESIA	ENGLAND	TURKEY	ROMANIA	AUSTRALIA
INDIA	TAIWAN	EURO	VIETNAM	UKRAINA	ISRAEL
OTHER					

2) CDU TYPE

00	01	03	0b
41	43	47	80
81			

3) CASSETTE VOLUME

1 CASSETTE	2 CASSETTE	3 CASSETTE	4 CASSETTE
------------	------------	------------	------------

5.8.7.2 CARD READER SETUP

In **CARD READER SETUP**, you can select CARD READER (NH DIP Type, MAGTEK DIP Type, SANKYO DIP Type) in the screen as shown as below.



If you choose '**SANKYO DIP type card reader**' button, the hidden button-**ANTI SKIMMING**- would appear as depicted as below.



5.8.7.2.1 ANTI SKIMMING

If you push (or touch) 'ANTI SKIMMING' button, the screen for configuring the specifications of anti skimming will appear as depicted as below.



Each key has the function as explained as below.

- 1) **EN/DISABLE**: Used to determine whether ANTI SKIMMING will be used or not.
- 2) **SHUTTER EN/DISABLE**: Used to set the shutter up when an obstacle is attached to card reader.
- 3) **TIME THRESHOLD**: Used to determine the time interval when an obstacle is attached to card reader. For example, if the value of 'TIME THRESHOLD' is set as 10 seconds, after 10 seconds from the time when an obstacle would be attached to card reader, the ATM will recognize the attack to card reader.
- 4) **AUTO RECOVERY TIME**: Used to determine the time interval for recovering an ATM. For example, if the value of 'AUTO RECOVERY TIME' is set as 10 seconds, after 10 seconds from the time when an obstacle would be removed from ATM, the ATM will be in normal condition.
- 5) **APPLY**: Used to apply the configuration of 'ANTI SKIMMING'.

5.8.8 SYSTEM CONTROL

This **SYSTEM CONTROL** menu contains **SOFTWARE UPDATE**, **REBOOT**, **BACKUP ALL JOURNAL TO USB**, **BACKUP JOURNAL BY DATE TO USB**, **BACKUP LOG TO USB**, **BACKUP NVRAM**, **RESTORE NVRAM** and **CLEAR NVRAM**.

Please press each button on this menu to go to next screen or to operate the related function..

And if you want to go back to the previous screen, press the **CANCEL** key.



You can back up a various kinds of journal data and log data you want in this menu. Please make sure that USB drive is connected into USB slot before pressing the button. When **BACKUP ALL JOURNALS TO USB**, **BACKUP JOURNAL BY DATE TO USB** or **BACKUP LOG TO USB** button is selected, this data will be sent into USB flash drive. When **SOFTWARE UPDATE** is entered, it will change to the screen of **SOFTWARE UPDATE**. This is because Software Update functionality is supported at **SYSTEM CONTROL** menu. When **SYSTEM CONTROL** is submitted the files in USB flash drive will be copied to the ATM.

Terminal configuration data is saved at NVRAM, so **BACKUP NVRAM** and **RESTORE NVRAM** button is to use the backup and restore terminal configurations.

NOTE:

- 1) How to update the software, please refer to the Appendix.
- 2) **BACKUP NVRAM** and **RESTORE NVRAM** Button is only displayed when security door is opened.

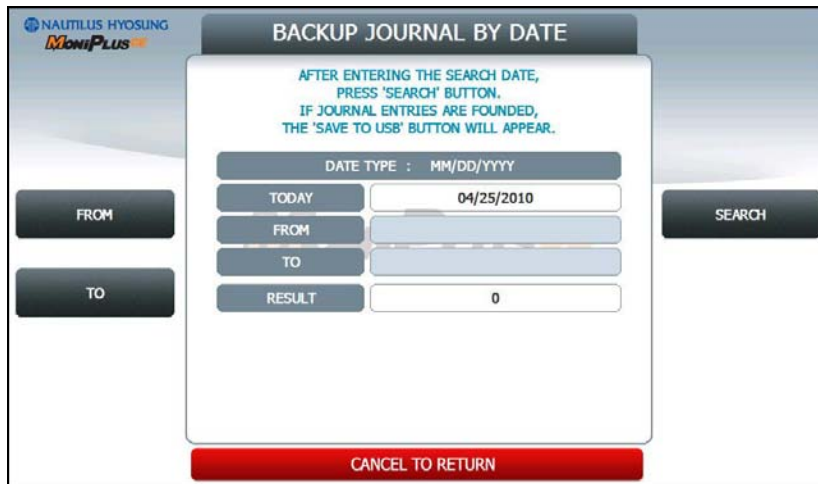
5.8.8.1 REBOOT

If you press the **YES** button, the ATM will restart.



5.8.8.2 BACKUP JOURNAL BY DATE TO USB

Input the **START DATE** and **END DATE** using **FROM** and **TO** buttons. And press the **SEARCH** button. Then, the journal date between START DATE and END DATE will be sent to USB drive.



5.8.8.3 CLEAR NVRAM

To clear NVRAM on the ATM, begin by entering the Operator Function Menu using the Master Password. Then enter **SYSTEM SETUP**, **SYSTEM CONTROL** and **CLEAR NVRAM** in sequence.



1) CLEAR ALL

This will delete all programmed parameters and make all setting information (including passwords) to the default settings. This does NOT include the master keys which are stored in EPP.

2) CLEAR SETTING

This will delete all programmed parameters and make all information (including passwords) to the default settings. This does NOT include the master keys which are stored in EPP, denomination, journal data.

3) CLEAR JOURNAL

This will delete all journal data permanently

4) CLEAR TRANS. SEQUENCE NO.

This function will reset the journal sequence number to <0000>. This may be useful if you switch processing or switch Terminal ID numbers and want to keep new records.

5) CLEAR LOG

This will delete all logs permanently

NOTE: Be careful when using these features (NVRAM clearing) – The initialized data can NOT be recovered.

5.8.8.4 SET THE TYPE OF MACHINE

After you select **CLEAR ALL** or **CLEAR SETTING** button, the screen will be changed into the screen as same as below.



However, **MX4000W**, **NH1800SE** buttons will show up only if the ATM is NH1800SE or MX4000W. So if you are in doing some manipulations in NH2700 or NH2700T, there are no buttons as above. This is because only in NH1800SE and MX4000W, there is necessity to select the type of machine. It means that S/W itself can't distinguish NH1800SE from MX4000W automatically. So before clearing NVRAM you must select the type of machine.

After selecting the type of machine, just push **APPLY AND CLEAR** button. And then the screen would be changed into one as same as below to confirm your wish of clearing data in NVRAM.



5.9 HOST SETUP

[DIALUP] This host setup menu contains **KEY MANAGEMENT**, **TELEPHONE NUMBER**, **TERMINAL ID**, **HEALTH CHECK MESSAGE**, **REMOTE MONITOR**, **ROUTING ID** and **AUTO DAY TOTAL**

[TCP/IP] This host setup menu contains **KEY MANAGEMENT**, **HOST ADDRESS**, **TERMINAL ID**, **HEALTH CHECK MESSAGE**, **REMOTE MONITOR**, **ROUTING ID** and **AUTO DAY TOTAL**.

Pressing function key beside menu button goes to next screen. To go back to the previous screen, press the **CANCEL** key in pinpad.

[DIALUP]



[TCP/IP]



NOTE: **ROUTING ID** is displayed only if the message format is STANDARD1, 2 and EPS

5.9.1 KEY MANAGEMENT (EPP is 128K)

START SCREEN



Enter the **PASSWORD 1** and **PASSWORD 2** to execute **KEY MANAGEMENT**.
(Default **PASSWORD 1** is '000000'. And default **PASSWPRD 2** is '000000' as well)

If you enter **PASSWORD 1** and **PASSWORD 2** correctly, the main screen of **KEY MANAGEMENT** will be displayed as below.



5.9.1.1 KEY MODE

The **KEY MODE** can be changed by pressing **KEY MODE** button. Write down the description here.

There are various kinds of KEY MODE. Those are [**DES**], [**TDES**], [**DUAL MASTER KEY**], [**MAC**], [**TDES, MAC**], [**TDES, TMAC**], [**UNIQUE KEY, DES**], [**UNIQUE KEY, TDES**] and [**UNIQUE KEY, MAC**].

Accessing the KEY INDEX

- 1) Select the **HOST SETUP** in the OPERATOR FUNCTION menu.
- 2) Select the **KEY MANAGEMENT** in the HOST SETUP menu.
- 3) Select the **KEY MODE** in the KEY MANAGEMENT menu. Change the KEY MODE..

5.9.1.2 KEY INDEX

The **KEY INDEX** function is used to set the KEY INDEX. The range is 0 to 15.

You can enter multiple master keys and have to select one of them. For security issue, DP may change key index when they need to change keys.

Accessing the KEY INDEX

- 1) Select the **HOST SETUP** in the OPERATOR FUNCTION menu.
- 2) Select the **KEY MANAGEMENT** in the HOST SETUP menu.
- 3) Select the **KEY INDEX** in the KEY MANAGEMENT menu. Input the KEY INDEX and press ENTER key.

5.9.1.3 CHECK KEY

The CHECK KEY function is used to display the check sum of all injected Keys. The key which is displayed as “_____” means it is in empty state.

The authorized people can verify the injected key(s) with this menu after key injection.



Accessing the CHECK MASTER KEY

- 1) Select the **HOST SETUP** in the OPERATOR FUNCTION menu.
- 2) Select the **KEY MANAGEMENT** in the HOST SETUP menu.
- 3) Select the **CHECK KEY** in the KEY MANAGEMENT menu.
- 4) It will display the check sum of all injected master key.

5.9.1.4 EDIT KEY

The **EDIT KEY** function is used to enter the Master Key, Unique Key and Mac Key.
.The authorized people by bank or DP will enter the Key(s) with this menu.





Accessing the EDIT KEY

- 1) Select the **HOST SETUP** in the OPERATOR FUNCTION menu.
- 2) Select the **KEY MANAGEMENT** in the HOST SETUP menu.
- 3) Select the **EDIT KEY** in the KEY MANAGEMENT menu.

A. HOW TO EDIT MASTER KEY

- 1) Press **MASTER KEY PART A** button
- 2) Enter the **MASTER KEY INDEX**.
- 3) Enter the **MASTER KEY PART A**.
- 4) Verify the **MASTER KEY PART A**.
- 5) After inputting the **MASTER KEY PART A**, the **CHECK SUM** will be displayed. Press **ENTER** after confirming the check sum.
- 6) Press **MASTER KEY PART B** button
- 7) Enter the **MASTER KEY INDEX**.
- 8) Enter the **MASTER KEY PART B**
- 9) Verify the **MASTER KEY PART B**.
- 10) After inputting the **MASTER KEY PART B**, the **CHECK SUM** will be displayed. Press **ENTER** after confirming the check sum.

NOTE: You have to input the **SAME KEY INDEX** for **MASTER KEY PART A** and **MASTER KEY PART B**.

B. HOW TO EDIT UNIQUE KEY

- 1) Press **UNIQUE KEY PART A** button
- 2) Enter the **UNIQUE KEY INDEX**.
- 3) Enter the **UNIQUE KEY PART A**.
- 4) Verify the **UNIQUE KEY PART A**.
- 5) After inputting the **UNIQUE KEY PART A**, the **CHECK SUM** will be displayed. Press **ENTER** after confirming the check sum.
- 6) Press **UNIQUE KEY PART B** button
- 7) Enter the **UNIQUE KEY INDEX**.
- 8) Enter the **UNIQUE KEY PART B**
- 9) Verify the **UNIQUE KEY PART B**.
- 10) After inputting the **UNIQUE KEY PART B**, the **CHECK SUM** will be displayed. Press **ENTER** after confirming the check sum.

NOTE: You have to input the **SAME KEY INDEX** for **UNIQUE KEY PART A** and **UNIQUE KEY PART B**.

B. HOW TO EDIT MAC KEY

- 1) Press **MAC KEY PART A** button
- 2) Enter the MAC KEY INDEX.
- 3) Enter the **MAC KEY PART A**.
- 4) Verify the **MAC KEY PART A**.
- 5) After inputting the **MAC KEY PART A**, the **CHECK SUM** will be displayed. Press **ENTER** after confirming the check sum.
- 6) Press **MAC KEY PART B** button
- 7) Enter the MAC KEY INDEX.
- 8) Enter the **MAC KEY PART B**
- 9) Verify the **MAC KEY PART B**.
- 10) After inputting the **MAC KEY PART B**, the **CHECK SUM** will be displayed. Press **ENTER** after confirming the check sum.

NOTE: You have to input the **SAME KEY INDEX** for **MAC KEY PART A** and **MAC KEY PART B**.

5.9.2 KEY MANAGEMENT (EPP is 512K)

5.9.2.1 ENTER MASTER KEY

START SCREEN

If you select 'KEY MANAGEMENT' in 'HOST SETUP' screen, you will see the one as same as below.



[STANDARD 1- RKT SUPPORTED]



[STANDARD 3- RKT NOT SUPPORTED]

If you select the 'ENTER MASTER KEYS' button as depicted as above, you will see the screen as same as below to confirm whether you want to enter the screen for implanting master keys or not.



Enter the **PASSWORD 1** and **PASSWORD 2** to execute **KEY MANAGEMENT**.
(Default PASSWORD 1 is '000000'. And default PASSWPRD 2 is '000000' as well)

If you enter **PASSWORD 1** and **PASSWORD 2** correctly, the main screen of KEY MANAGEMENT will be displayed as below.



5.9.2.1.1 KEY MODE

If you choose 'REMOTE KEY INFO' button in previous page, you will see the screen as depicted as below.

The screenshot shows a web interface titled 'REMOTE KEY INFO'. It contains a table with 8 rows of key information. The first row has a value '87654321' for 'EPP Serial Number', while the others are 'OK'. A red button at the bottom says 'CANCEL TO RETURN'.

Field Name	Value
EPP Serial Number	87654321
CA Public Key	OK
EPP Public Key	OK
EPP Private Key	OK
EPP Public Key Signature	OK
Serial Number Signature	OK
HOST Public Key	OK
Download Public Key	OK

CANCEL TO RETURN

There are 8 elements and these are used to support 'Remote Key Transfer(RKT)' each. The 6 elements from Top one –EPP Serial Number- should be needed to implement the environment of RKT.

5.9.2.1.2KEY MODE

The **KEY MODE** can be changed by pressing **KEY MODE** button. Write down the description here.

There are various kinds of KEY MODE. Those are [TDES(3)], [TDES, MAC(7)], and [TDES, TMAC(11)].

5.9.2.1.3 CHECK KEY

The CHECK KEY function is used to display the check sum of all injected Keys. The key which is displayed as “_____” means it is in empty state.

The authorized people can verify the injected key(s) with this menu after key injection.

PAGE	KEY NAME	USE	TYPE	LENGTH	KCV
1	MASTERK3	0x20	1	16	FB 05 4C
1	K3	0x2	2	16	BF 0A F3
2	MACK3	0x20	7	16	FB 05 4C
2	K5	0x4	5	16	58 45 30
6	MACK	0x20	7	8	DC 20 73
6	K4	0x4	5	8	53 E7 45

CANCEL TO RETURN

5.9.2.1.4 EDIT KEY

The **EDIT KEY** function is used to enter the Master Key, Unique Key and Mac Key.
.The authorized people by bank or DP will enter the Key(s) with this menu.



If you choose '**MASTER KEY (TRIPLE)**', which is used to encrypt the Personal Identity Number(PIN), you will see the screen as depicted as below.



5.9.2.1.4.1 EDIT MASTERK3

If you select the button of 'MASTERK3', you will see the screen as depicted as below.



If you choose 'YES' button, you will see the screen as depicted as below.



If you choose 'ENTRY' button, you will see the screen as depicted as below.



If entering the first part 32-digit master key is successful, you will see the screen as depicted as below.



In this screen, if you want to import the first part 32-digit master key, what you have to do is just selecting the 'IMPORT' button.

The next thing left is to import the second 32-digit master key. If you choose the 'IMPORT' button in previous page, you will see the screen as depicted as below to continue the procedure.



The procedure to import the second master key is as same as the first one. The whole process to import two master keys can be summarized as below.

[SUMMARY]

FOR IMPORTING 2 DIFFERENT PIN MASTER KEYS

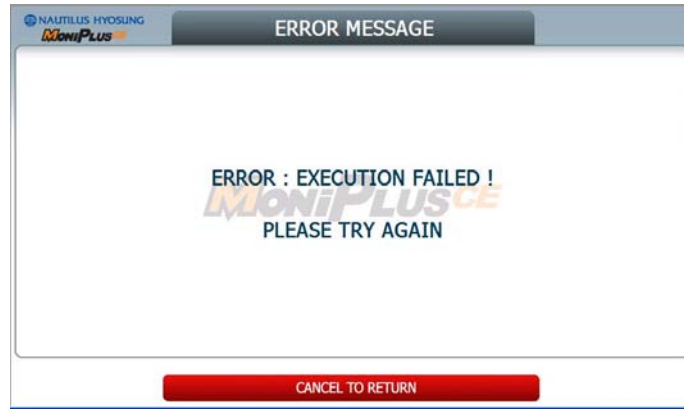
- 1) Select the HOST SETUP in the OPERATOR FUNCTION menu.
- 2) Select the KEY MANAGEMENT in the HOST SETUP menu.
- 3) Select the EDIT KEY in the KEY MANAGEMENT menu.

NOTE:

- 1) There is **no procedure for verifying the imported master key**, so you must be careful in entering master key number.
- 2) If there is **no difference between PART A PIN MASTER KEY and PART B PIN MASTER KEY**, there would be error in importing whole master keys.

5.9.2.1.4.2 MASTERK3 IMPORTING ERROR

If your importing 2 PIN MASTER KEYS is wrong, you will see the screen as depicted as below.



5.9.2.1.4.3 EDIT MACK3.

Editing MAC MASTER KEYS is same to editing PIN MASTER KEYS. But if user choose 'TDES' by 'KEY MODE' button, there is no need to import MAC MASTER KEYS. So the screen as depicted as below is only shown when a owner of ATM choose 'TDES, TMAC(11)' mode.



For Example, if a owner of ATM select 'TDES, MAC(7)' mode, the screen as depicted as below will be shown on the screen.



And if you choose MAC MASTER KEY(SINGLE) button, you will see the screen as depicted as below.



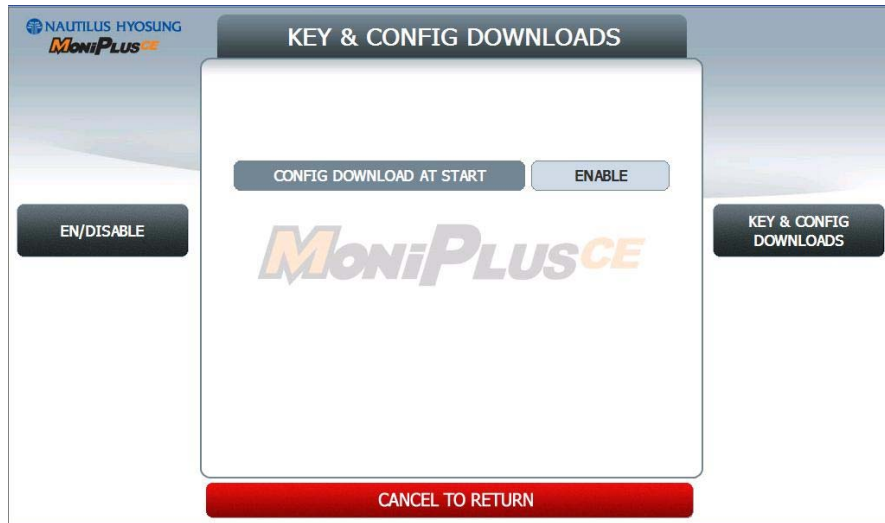
5.9.2.1.5 CHANGE PASSWORD

If you want to change the password for entering 'KEY MANAGEMENT', you can do that by just selecting change password in **KEY MANAGEMENT** screen. If you push (or touch) the '**CHANGE PASSWORD**' button, you can see the screen as depicted as below.



5.9.2.2 KEY & CONFIG DOWNLOAD

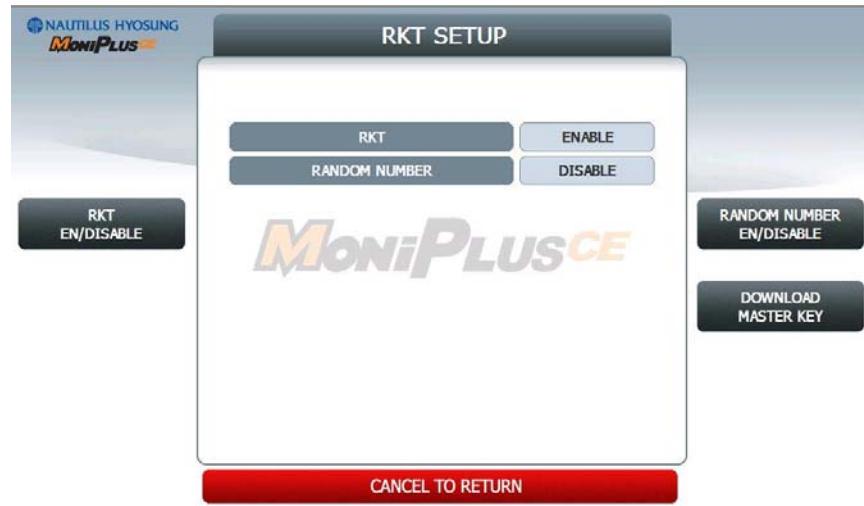
If a user want to receive '**WORKING KEY**' (NOT RECEIVING MASTER KEY!!!), he/she can do that by just selecting 'KEY & CONFIG DOWNLOAD' on the 'KEY MANAGEMENT ' screen as depicted as 5.9.2.1(explained before) . After selecting it, the screen as below would appear.



If '**CONFIG DOWNLOAD AT START**' is set as '**ENABLE**', the ATM would receive a '**WORKING KEY**' when the ATM is switched on.

5.9.2.3 RKT SETUP

If a user want to receive '**MASTER KEY**' (NOT RECEIVING WORKING KEY!!!), he/she can do that by just selecting 'RKT SETUP' on the 'KEY MANAGEMENT ' screen as depicted as 5.9.9.1(explained before) . After selecting it, the screen as below would appear.



First of all, this RKT menu can only appear in the case of user`s selecting the message format of '**STANDARD1**'. So do not be embarrassed at seeing no appearance of RKT menu.

If '**RKT EN/DISABLE**' is set as '**ENABLE**', the hidden button would be toggled up to be seen. '**RANDOM NUMBER EN/DISABLE**' makes it possible to insert random number into transmitted MASTER KEY to enhance the security of ATM – HOST communication.

'**DOWNLOAD MASTER KEY**' make it feasible to receive the **MASTER KEY** from a **HOST** at once.

5.9.3 TELEPHONE NUMBER (Only Dial-Up)

If you press each button on this menu, phone number of host can be input. You can input character, number and special symbol up to 1~20 digits by using '<' or '>'.

This function is used to enter the primary phone number and the back-up phone number of the host. When dialing to host is failure (busy, no answer or etc), ATM switches to other phone number automatically.



5.9.4 HOST ADDRESS

HOST ADDRESS contains **URL EN/DISABLE**, **HOST ADDRESS 1**, **PORT NUMBER 1**, **HOST ADDRESS 2** and **PORT NUMBER 2**.

Press **PORT NUMBER 1** and **PORT NUMBER 2** buttons, and then the values can be input on this screen. These values can be saved by pressing **ENTER** key

HOST ADDRESS 1 and **HOST ADDRESS 2** buttons go to the next page.

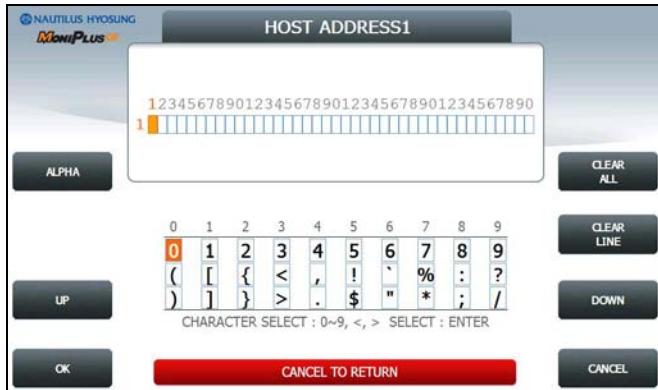
To go back to the previous screen, press the **CANCEL** key in pinpad.



5.9.4.1 HOST ADDRESS 1

The **HOST ADDRESS 1** function is used to edit the host address 1.

Please input the host address 1 in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]

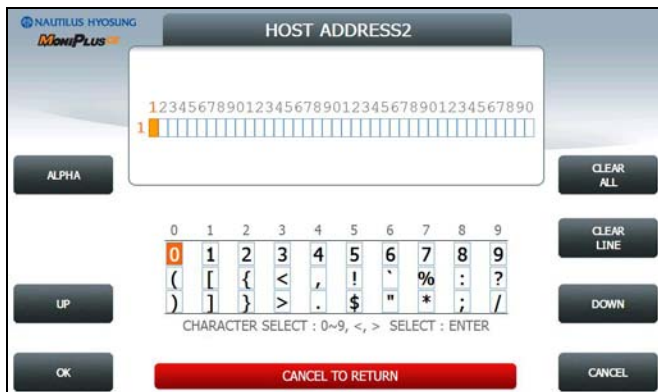


[Touch Type]

5.9.4.2 HOST ADDRESS 2

The **HOST ADDRESS 2** function is used to edit the host address 2.

Please input the host address 2 in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.



[Function Key Type]



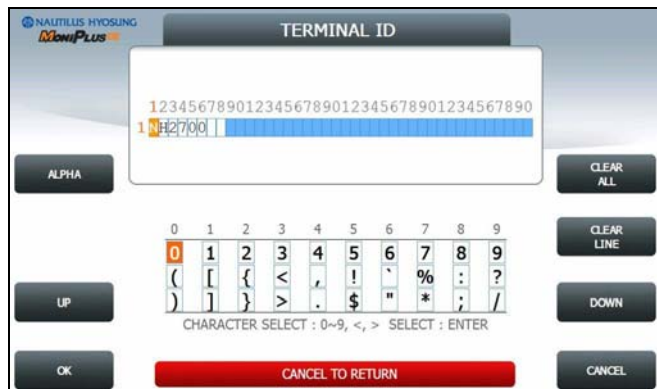
[Touch Type]

5.9.5 TERMINAL ID

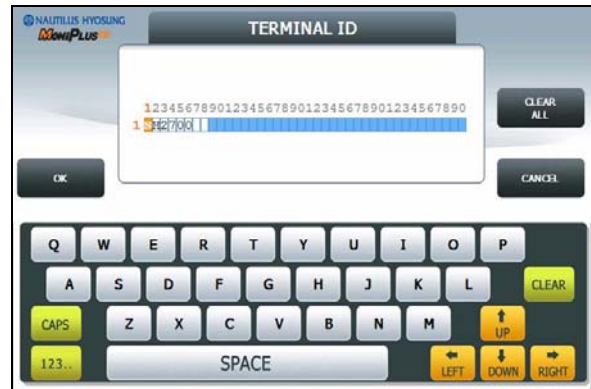
The **TERMINAL ID** function is used to edit the terminal id number of ATM.

Please input the terminal id in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.

Host will identify ATM by looking at terminal ID. Terminal ID will be included in host message and will be printed on the receipt.



[Function Key Type]



[Touch Type]

5.9.6 HEALTH CHECK MESSAGE

If you press **EN/DISABLE** button, either "ENABLE" or "DISABLE" can be selected. ATM sends its status periodically to the host when **HOST SEND** is set up to "Enable". The interval is dependent on "**SEND INTERVAL**".

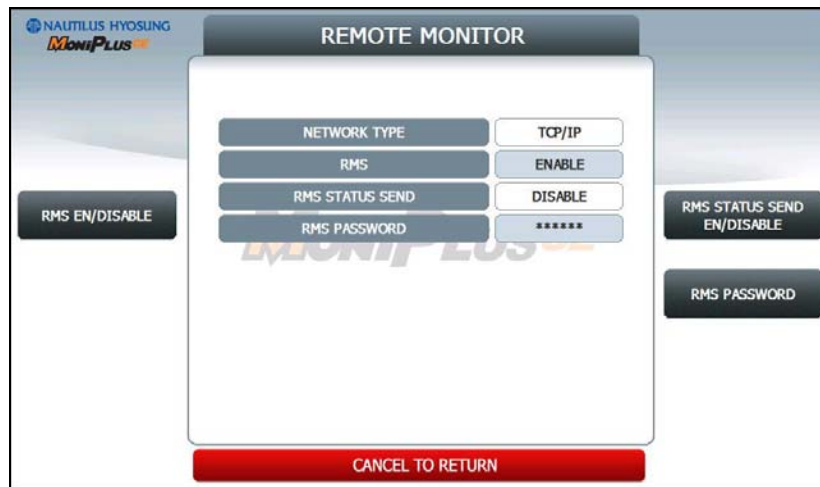
If you press **SEND INTERVAL** button, the value of SEND INTERVAL can be adjusted. (1 ~ 24). This value is saved by pressing **ENTER** button.



5.9.7 REMOTE MONITOR

- Display which is to set the information for using Remote Management System (RMS)

- 1) **RMS EN/DISABLE** function is used to connect to the RMS mode to enable or to disable. The default option is "ENABLE".
- 2) **RMS STATUS SEND EN/DISABLE** function is used to send the status message to RMS in enable or in disable.
- 3) The **RMS PASSWORD** function is used to set the RMS password to connect to ATM from RMS.



5.9.7.1 RMS EN/DISABLE

[DIALUP] Display which is to set the **RMS RING COUNT** for the reception on standby of the ATM.

[TCP/IP] Display which is to set the **RMS LISTENING PORT** for the reception on standby of the ATM.

Default port is 5555



5.9.7.2 RMS STATUS SEND EN/DISABLE

- Display which is to set the function to transfer STATUS to RMS from the ATM.

[DIAL-UP]

RMS STATUS SEND	
STATUS SEND	ENABLE
INTERVAL	0
PHONE 1	0046
PHONE 2	0046

Buttons: EN/DISABLE, INTERVAL, PHONE NUMBER 1, PHONE NUMBER 2, CANCEL TO RETURN

1) RMS STATUS SEND

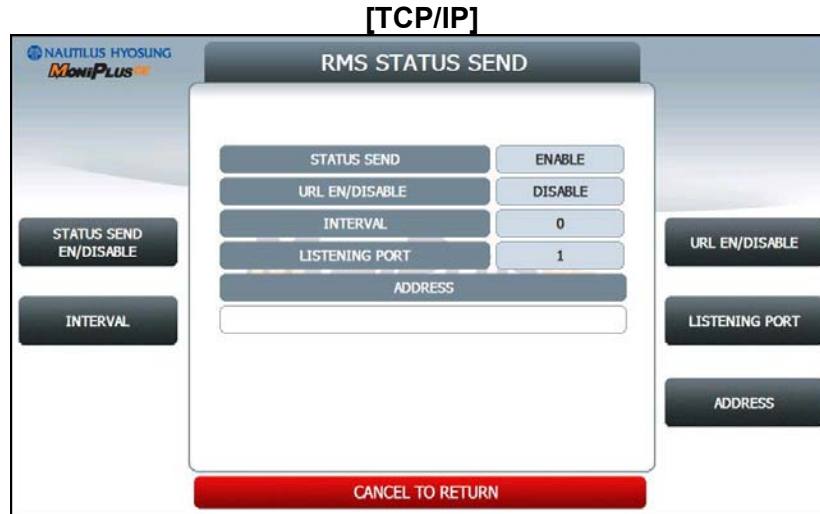
- Display whether RMS STATUS SEND function is ENABLE or DISABLE.
- Set the value using **EN/DISABLE** button.

2) INTERVAL

- Display "RMS STATUS SEND" cycle (unit: hours)
- Set the value using **INTERVAL** button. (Input the number from 1 to 24.)

3) PHONE 1, PHONE 2

- Display RMS TELEPHONE NUMBER for RMS COMMUNICATION
- Set the values using **PHONE NUMBER 1** and **PHONE NUMBER 2**. (Input the number up to 20.)



1) RMS STATUS SEND

- Display whether RMS STATUS SEND function is enabled or not.
- Set the value using **EN/DISABLE** button.

2) RMS INTERVAL

- Display "RMS STATUS SEND" cycle (unit: hours)
- Set the value using **INTERVAL** button. (Input the number from 1 to 24.)

3) URL EN/DISABLE

- Display whether to use URL or IP ADDRESS. If the value is ENABLE, that means the ATM uses URL ADDRESS.
- Set the value using **URL EN/DISABLE** button.

4) RMS ADDRESS

- Display "RMS ADDRESS".
- Set the value using **RMS ADDRESS** button. If you press this button, It goes to next screen.

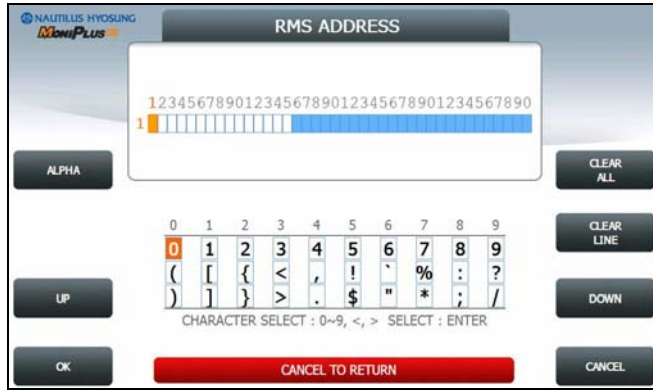
5) RMS LISTENNING PORT

- Display "RMS LISTENING PORT".
- Set the value using **RMS LISTENING PORT** button. (Input the number from 0 to 65535)
- Default port is 9999

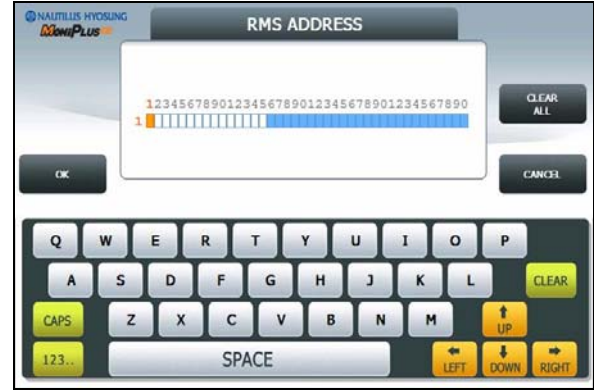
5.9.7.2.1 RMS ADDRESS

The **RMS ADDRESS** function is used to edit the rms address.

Please input the rms address in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays



[Function Key Type]



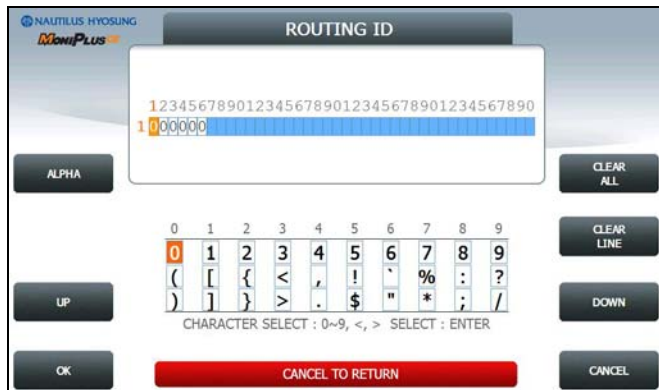
[Touch Type]

5.9.8 ROUTING ID

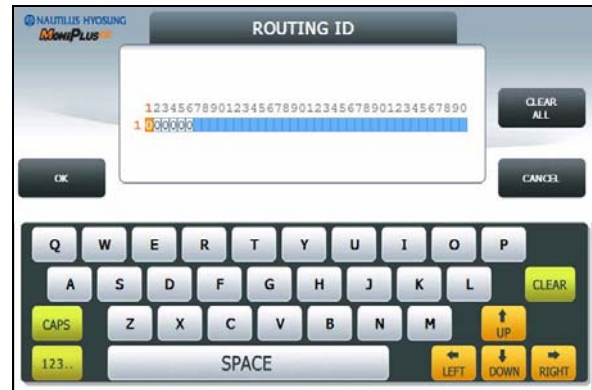
The **ROUTING ID** function is used to edit the Routing ID Number of ATM. Routing ID refers to the Bank ID. This field is contained to STANDARD 1, STANDARD 2 and EPS format.

Please input the routing id in the field and select **OK** button. If it succeeded, “**OPERATION SUCCESSFUL!**” displays.

To go back to the previous screen, press the **CANCEL** key in pinpad.



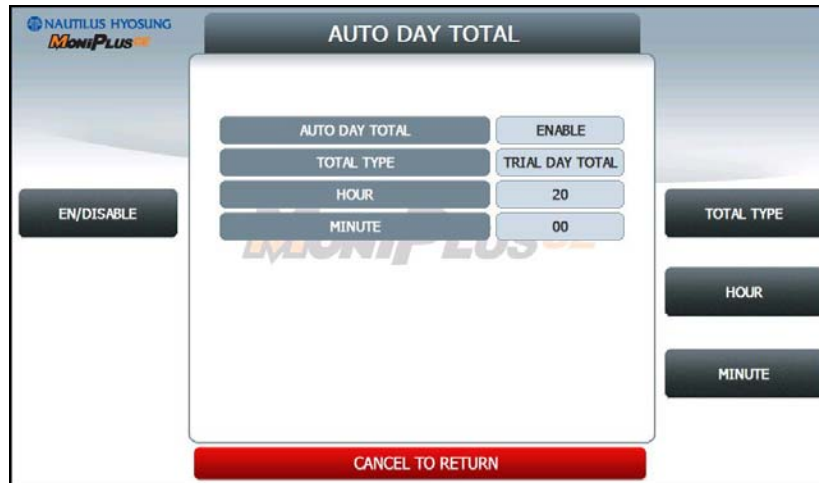
[Function Key Type]



[Touch Type]

5.9.9 AUTO DAY TOTAL

AUTO DAY TOTAL feature allows the ATM to complete a Day Total operation (Without Actually closing out the machine) at a predetermined time each day. 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 enabling Auto Day Total 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.



1) EN/DISABLE

- Display whether AUTO DAY TOTAL function is enabled or not.
- Set the value using **EN/DISABLE** button.

2) TOTAL TYPE

- Display AUTO DAY TOTAL TYPE
 DAY TOTAL: ATM sends total to your processor then initialize total
 TRIAL DAY TOTAL: ATM sends total to your processor
- Set the value using **TOTAL TYPE** button.

3) HOUR / MINUTE

- Display the time for the ATM to total itself
- Set the value using **HOUR** and **MINUTE** button.

5.10 TRANSACTION SETUP

This transaction setup menu contains **DISPENSE LIMIT**, **LOW CURRENCY CHECK EN/DISABLE**, **FAST CASH** and **DENOMINATION**. By pressing each button, you can execute each function or enter each sub menu. To go back to the previous screen, press the **CANCEL** key in pinpad.



1) DISPENSE LIMIT

This function is used to set the maximum amount of notes that can be dispensed per transaction. The amount must be a multiple of denomination. And the maximum dispensed count a transaction must not be over a total of 40 notes.

(eg. You can't input amount over \$4000 on DISPENSE LIMIT if the denomination is set as \$100 on ATM.)

NOTE: In MX4000W, the maximum limit to dispense notes in one transaction physically is 20. So you can't input amount over \$400 if the denomination is set as \$20 on ATM.

2) LOW CURRENCY CHECK EN/DISABLE

This function is used to set the detection of cassette low level (100 bills or less). If enabled, hardware will report the low condition to the software and the machine will go to "OUT OF SERVICE" mode under low note condition.

5.10.1 FAST CASH

FAST CASH function is used to set the cash amount which is to be displayed on the FAST CASH screen. The maximum amount must be less than the **DISPENSE LIMIT**.

You can set 6 kinds of values which are frequently requested by customer using this function. By using this function, customers withdraw the money more easily.



5.10.2 DENOMINATION

This function is used to set the denomination of note to be set in the cassette. Pressing function key beside menu button selects the cassette to set the denomination of note. Input the note value you want and press the **ENTER** key in the pinpad. If you completed the all cassette setting, you have to press **APPLY** button to effect the value changes.

DENOMINATION	
MUST PRESS 'APPLY' BUTTON TO EFFECT THE VALUE CHANGES	
CDU CURRENCY	USD
1ST CASSETTE	10
2ND CASSETTE	N/A
3RD CASSETTE	N/A
4TH CASSETTE	N/A
<div style="display: flex; justify-content: space-between;"> CANCEL TO RETURN APPLY </div>	

NOTE: After Clearing all the information of NVRAM, the information of currency would be deleted. So you must set the currency again as \$10, 20, 50, 100, 200. If there is no information of currency, the screen will display error code of '20005(00)'.

NOTE: In setting the information of currency, you must log on as Master authority-default password for logging on as Master is "555555" as explained in the first chapter. -and before pressing **APPLY** button, the door of ATM must be opened. This is because only person who have the authority to open the door, can set the currency information which is very important to the owner of ATM as he want to change..

5.11 SITE MAP

This site map shows the structure of the operator menu tree to aid in searching menu. In case of touch type, if you press each menu **SETTLEMENT, JOURNAL, REPORT, DIAGNOSTICS, CUSTOMER SETUP, SYSTEM SETUP, HOST SETUP** or **TRANSACTION SETUP**, then it will enter each sub-menu.



5.12 QUICK REPLENISH

This menu provides convenience for replenishing note at once. This menu consists of **DAY TOTAL, CASSETTE TOTAL, ADD CASH** and **RESULT**.

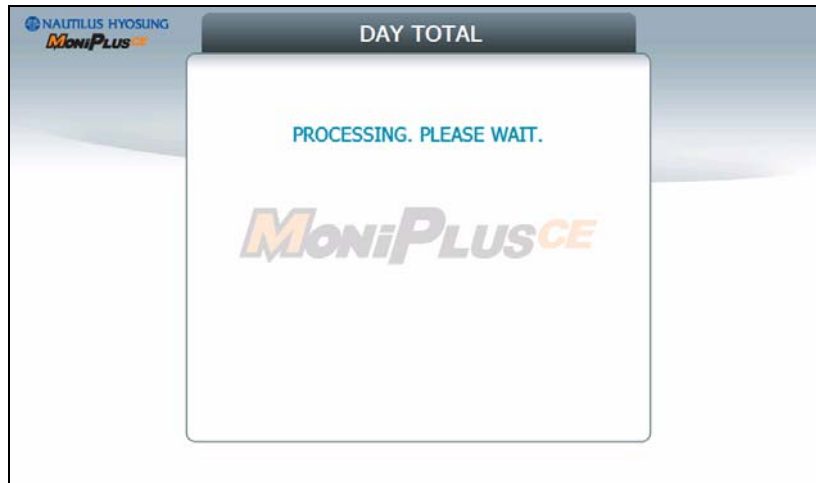


If you press **YES** button, the QUICK REPLENISH will start.

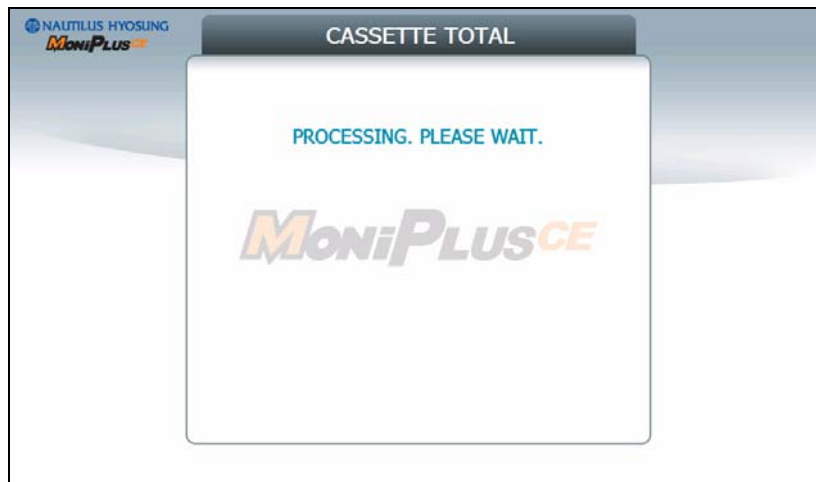
5.12.1 DAY TOTAL / CASSETTE TOTAL

It will perform **DAY TOTAL** and **CASSETTE TOTAL** first.

- 1) **DAY TOTAL** : Do settlement with host. After settlement, clear transaction information.



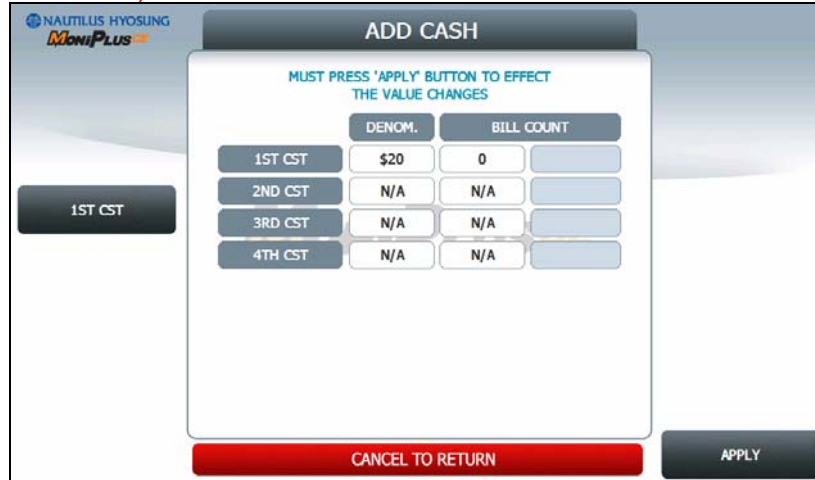
- 2) **CASSETTE TOTAL** : Clear note count information.



5.12.2 ADD CASH

After performing **DAY TOTAL** and **CASSETTE TOTAL**, **ADD CASH** screen will be shown as below. By pressing button on this menu, you can select cassette to add note count. (Cassette numbers are designated from top to bottom). Input the note count you want to add and press the **ENTER** key in the pinpad. If you completed the all cassettes, you have to press **APPLY** button to effect the value changes.

NOTE: The total note count you enter must not exceed the maximum note count. (Max. note count : 2,000/CST)



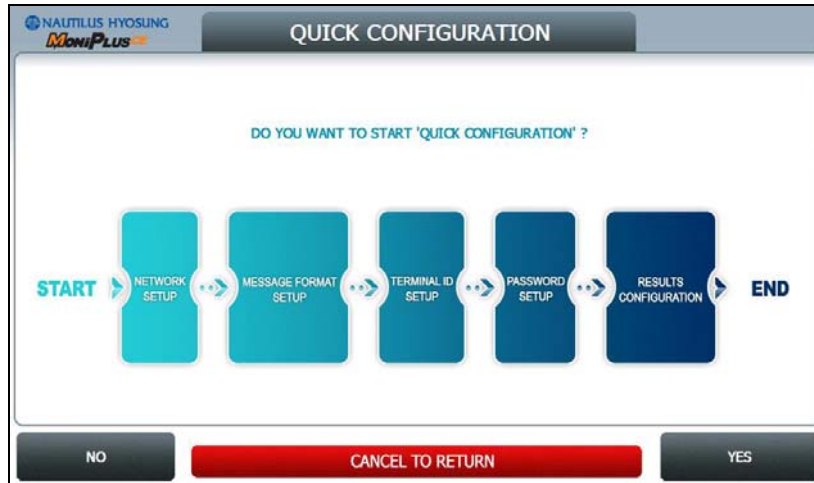
5.12.3 RESULT

After performing **QUICK REPLENISH**, the result will be shown as below.



5.13 QUICK CONFIGURATION

This menu provides convenience to configure **ATM Setup Information** at once. This menu consists of **NETWORK SETUP**, **MESSAGE FORMAT SETUP**, **TERMINAL ID SETUP**, **PASSWORD SETUP** and **RESULT CONFIGURATION**.



5.13.1 TCP/IP

This chapter shows how to configure for TCP/IP Setup Information.

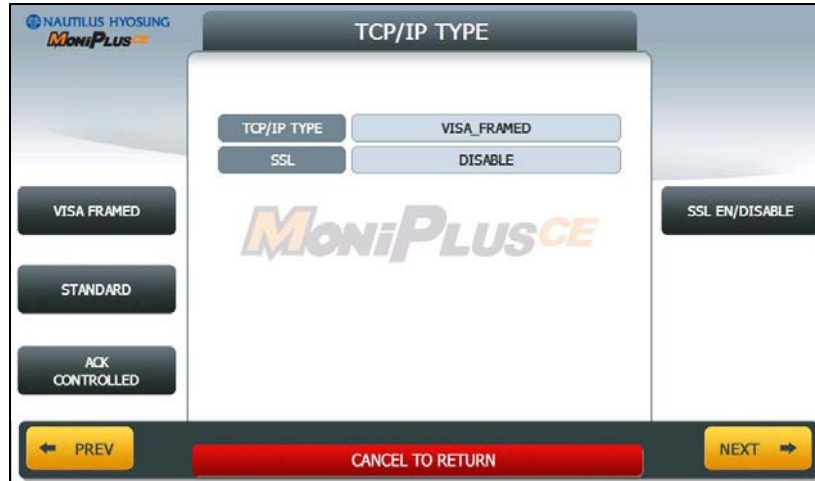
5.13.1.1 COMMUNICATION

This is to set up a type of line to communicate with Host. Select **TCP/IP**. In case of setting up TCP/IP, communicate with host using LAN.



5.13.1.2 TCP/IP TYPE

In case of supporting **TCP/IP**, this is providing a function setting up communication flow to use when communicating with host. In this menu, you can change **TCP/IP TYPE** and can decide whether 'ENABLE' or 'DISABLE' about **SSL OPTION**. There are three kind of **TCP/IP** type in this TCP/IP COMMUNICATION menu
(STANDARD TCP/IP, VISA FRAMED TCP/IP, and ACK CONTROLLED TCP/IP).



[The screen except for USA]

NOTE: When you press **NEXT** button, if you configured TCP/IP TYPE to VISA FRAMED, then it goes to Section No 5.13.1.3. If not, then it goes to Section No. 5.13.1.4.

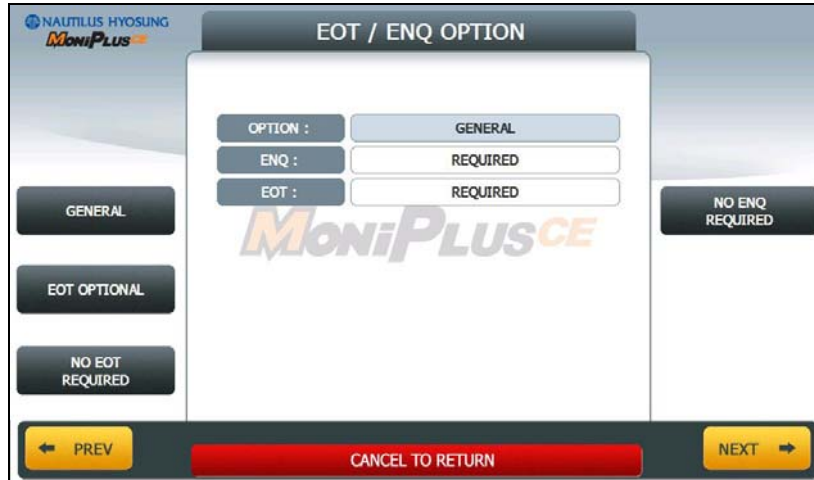


[The screen for USA]

SSL CERT. EN/DISABLE was explained before. So in this chapter it will be skipped.

5.13.1.3 EOT/ENQ OPTION

EOT/ENQ OPTION contains GENERAL, EOT OPTIONAL, NO EOT REQUIRED and NO ENQ REQUIRED functions. You can select one of these options.



5.13.1.4 HOST ADDRESS

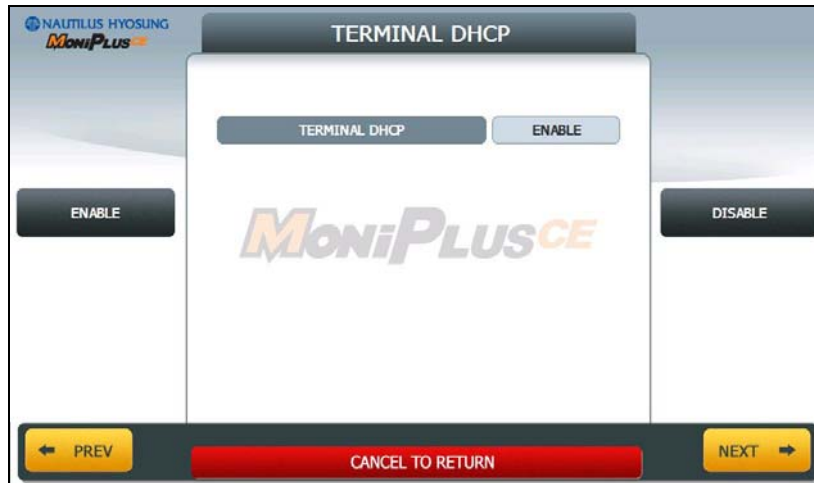
HOST ADDRESS contains URL EN/DISABLE, HOST ADDRESS 1 and PORT NUMBER 1.

Press **PORT NUMBER 1** button, and then the values can be input on this screen. These values can be saved by pressing **ENTER** key. The **HOST ADDRESS 1** button is used to edit the host address 1. Please input the host address 1 in the field.



5.13.1.5 TERMINAL DHCP

If **DHCP** value is **ENABLE**, ATM uses **DYNAMIC IP** to connect to host. Otherwise, ATM uses **STATIC IP**. If you configure DHCP value to **DISABLE** and press **NEXT**, it goes to **TERMINAL IP SETUP** Screen.



NOTE: When you press **NEXT** button, if you configured DHCP to **DISABLE**, then it goes to Section No 5.13.1.6. If not, then it goes to Section No. 5.13.1.7.

5.13.1.6 TERMINAL IP

Set up **STATIC IP** using **IP ADDRESS**, **SUBNET MASK**, **GATEWAY** and **DNS** buttons. It is able to input up to 15 units such as XXX.XXX.XXX.XXX



5.13.1.7 MESSAGE FORMAT

This menu sets up message format to use during communicating with Host.

You can select one of message type to communicate with a data processing company or bank in this menu (**STANDARD1**, **STANDARD2**, **STANDARD3** and **EPS**).

STANDARD 1 is a HYOSUNG message type and **STANDARD 2** is a CSP200 message type, **STANDARD 3** is Triton 9600 message type and **EPS** is an extended CSP200 message type.



NOTE: When you press **NEXT** button, if you configured MESSAGE FORMAT to STANDARD 3, then it goes to Section No 5.13.1.9. If not, then it goes to Section No. 5.13.1.8.

5.13.1.8 ROUTING ID

The **ROUTING ID** function is used to edit the Routing ID Number of ATM. Routing ID refers to the Bank ID. This field is contained to STANDARD 1, STANDARD 2 and EPS format.

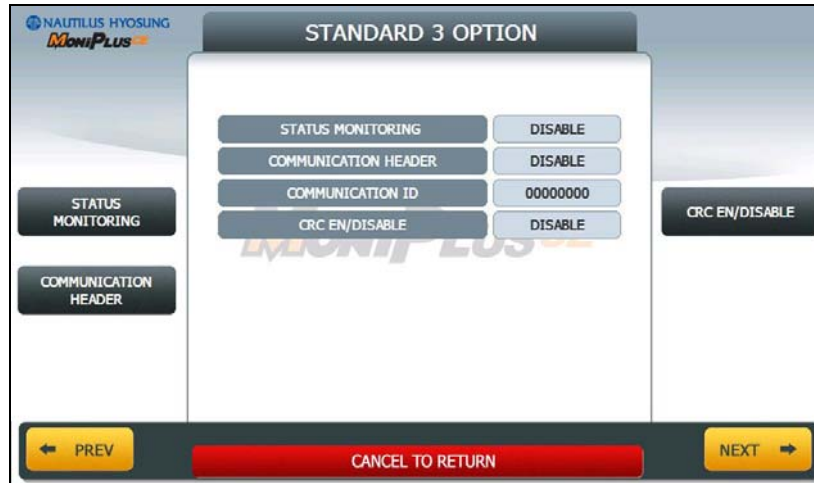


NOTE: When you press **NEXT** button, it goes to Section No 5.13.1.10.

5.13.1.9 STANDARD3 OPTION

STANDARD 3 OPTION contains **STATUS MONITORING EN/DISABLE**, **COMMUNICATION HEADER**, **COMMUNICATION ID** and **CRC EN/DISABLE**.

In case of **COMMUNICATION HEADER** is enabled, **CRC EN/DISABLE** option can be configured.



STANDARD 3 OPTION function is used to get the additional information when Triton message is selected.

- 1) **STATUS MONITORING** function is to decide whether status monitoring field in message is sent or not.
- 2) **COMMUNICATION HEADER** function is to decide whether communication header in message is included or not.
- 3) **COMMUNICATION ID** function is able to save the **COMMUNICATION ID**.
The **COMMUNICATION ID** has to be set if using the **COMMUNICATION HEADER** function.
- 4) **CRC(Cyclic Redundancy Checking) OPTION** function is to set up whether CRC is used or not during communication with host.

5.13.1.10 TERMINAL ID

The **TERMINAL ID** function is used to edit the terminal id number of ATM.

Host will identify ATM by looking at terminal ID. Terminal ID will be included in host message and will be printed on the receipt.



5.13.1.11 PASSWORD SETUP (MASTER PASSWORD)

This menu enables you to change current master password as new one. To change the current password, you should input the proper one in current password field. The factory default value of master password is "555555".



5.13.1.12 RESULT

After performing **QUICK CONFIGURATION**, the result will be shown as below.



5.13.2 DIAL UP

This chapter shows how to configure for DIALUP Setup Information.

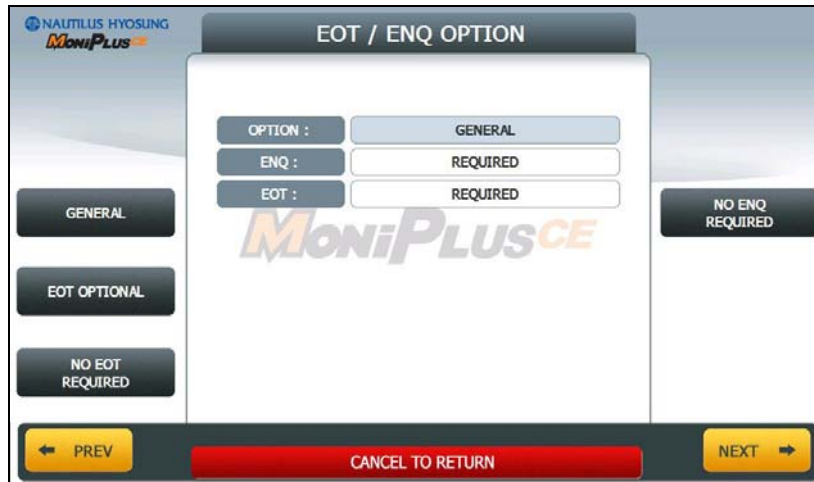
5.13.2.1 COMMUNICATION

This is to set up a type of line to communicate with Host. Select **DIALUP**. In case of setting up DIALUP, communicate with host using modem.



5.13.2.2 EOT/ENQ OPTION

EOT/ENQ OPTION contains **GENERAL**, **EOT OPTIONAL**, **NO EOT REQUIRED** and **NO ENQ REQUIRED** functions. You can select one of these options.



5.13.2.3 TELEPHONE NUMBER (HOST PHONE 1)

If you press each button on this menu, phone number of host can be input. You can input character, number and special symbol up to 1~20 digits by using '<' or '>'.



5.13.2.4 MESSAGE FORMAT

This menu sets up message format to use during communicating with Host.

You can select one of message type to communicate with a data processing company or bank in this menu (**STANDARD1**, **STANDARD2**, **STANDARD3** and **EPS**).

STANDARD 1 is a HYOSUNG message type and **STANDARD 2** is a CSP200 message type, **STANDARD 3** is Triton 9600 message type and **EPS** is an extended CSP200 message type.



NOTE: When you press **NEXT** button, if you configured MESSAGE FORMAT to STANDARD 3, then it goes to Section No 5.13.2.6. If not, then it goes to Section No. 5.13.2.5.

5.13.2.5 ROUTING ID

The **ROUTING ID** function is used to edit the Routing ID Number of ATM. Routing ID refers to the Bank ID. This field is contained to STANDARD 1, STANDARD 2 and EPS format.

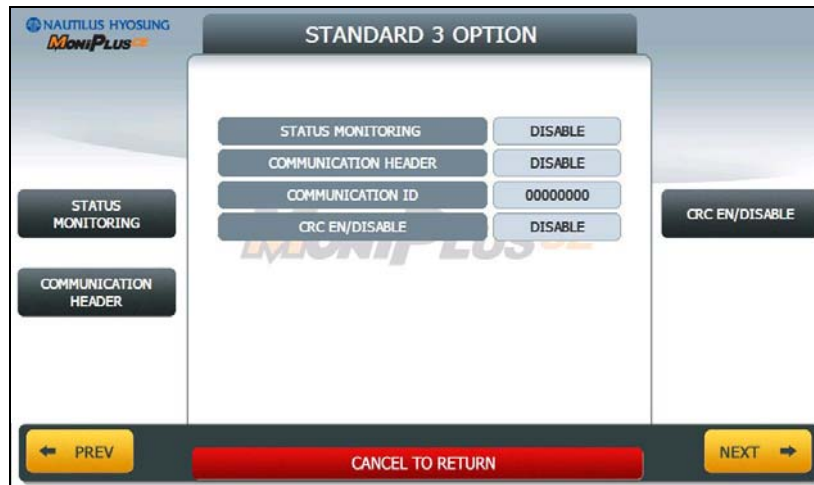


NOTE: When you press **NEXT** button, it goes to Section No 5.13.2.7.

5.13.2.6 STANDARD3 OPTION

STANDARD 3 OPTION contains **STATUS MONITORING EN/DISABLE**, **COMMUNICATION HEADER**, **COMMUNICATION ID** and **CRC EN/DISABLE**.

In case of **COMMUNICATION HEADER** is enabled, **CRC EN/DISABLE** option can be configured.



STANDARD 3 OPTION function is used to get the additional information when Triton message is selected.

- 1) **STATUS MONITORING** function is to decide whether status monitoring field in message is sent or not.
- 2) **COMMUNICATION HEADER** function is to decide whether communication header in message is included or not.
- 3) **COMMUNICATION ID** function is able to save the **COMMUNICATION ID**.
The **COMMUNICATION ID** has to be set if using the **COMMUNICATION HEADER** function.
- 4) **CRC(Cyclic Redundancy Checking) OPTION** function is to set up whether CRC is used or not during communication with host.

5.13.2.7 TERMINAL ID

The **TERMINAL ID** function is used to edit the terminal id number of ATM.

Host will identify ATM by looking at terminal ID. Terminal ID will be included in host message and will be printed on the receipt.



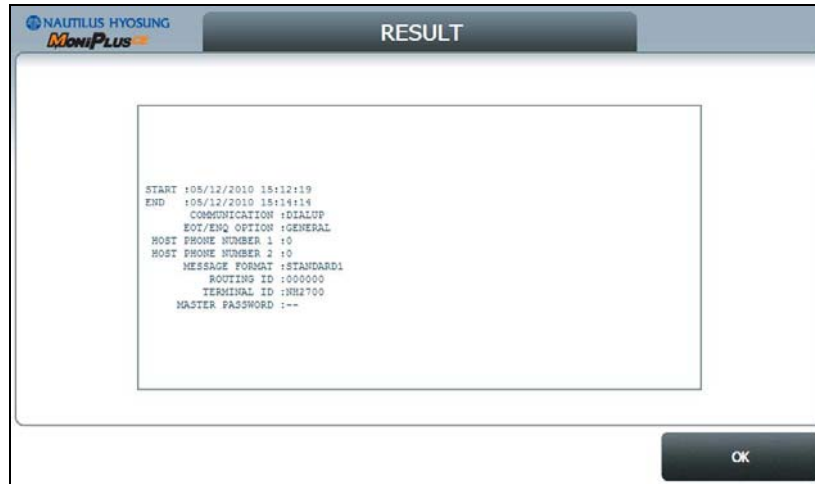
5.13.2.8 PASSWORD SETUP (MASTER PASSWORD)

This menu enables you to change current master password as new one. To change the current password, you should input the proper one in current password field. The factory default value of master password is "555555".



5.13.2.9 RESULT

After performing **QUICK CONFIGURATION**, the result will be shown as below.



Chapter 6. Installation

6. Installation

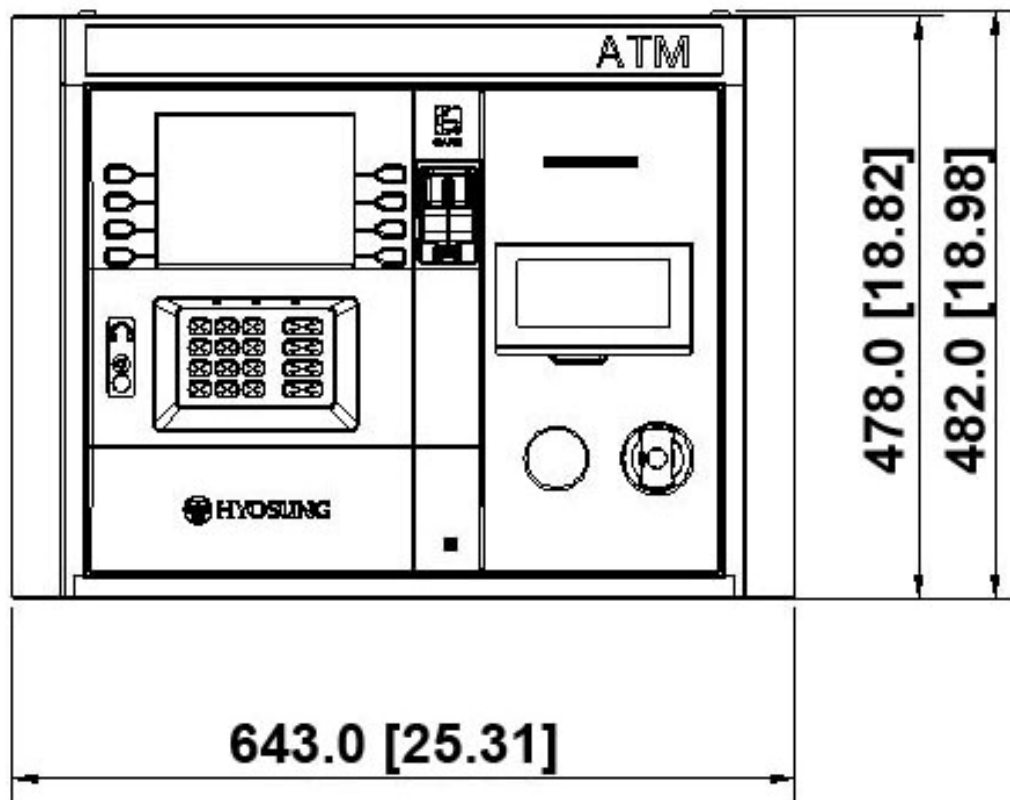
6.1 Installation Information

Installation condition and space

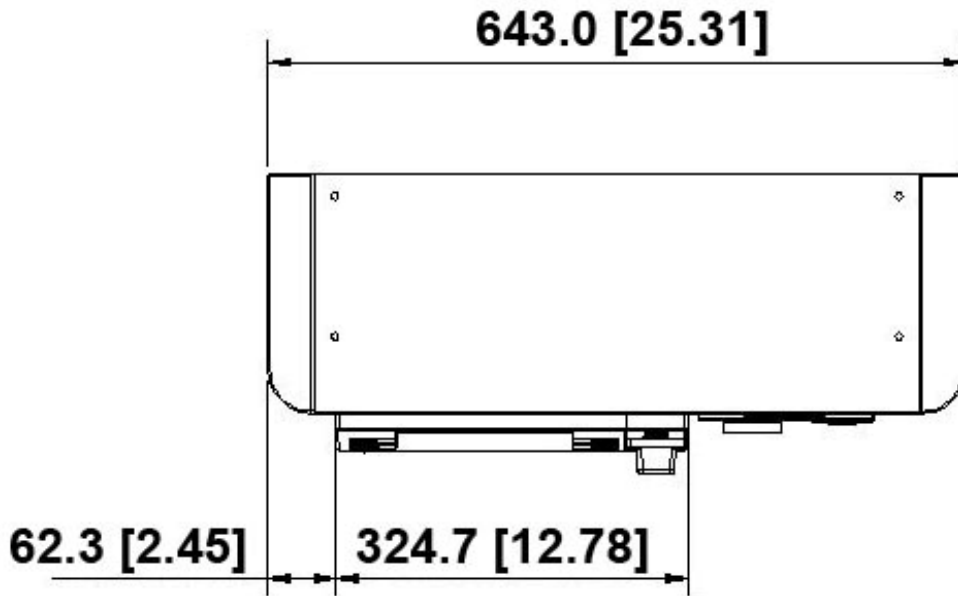
Following conditions should be met before installing equipment.

1. Temperature while operating should be between 41°F - 95°F.
2. Relative humidity while operating should be between 25% < RH < 85%, Non-Condensed.
3. Avoid locations where intense direct light is reflected off the LCD screen.
4. Avoid locations where strong static electricity can occur.
5. Avoid placing the product next to equipment that produces electromagnetic waves. It could interfere with data transfer.
6. The floor must allow easy wheelchair access from the front or the side.
7. Space required for servicing the machine should be considered before installation.

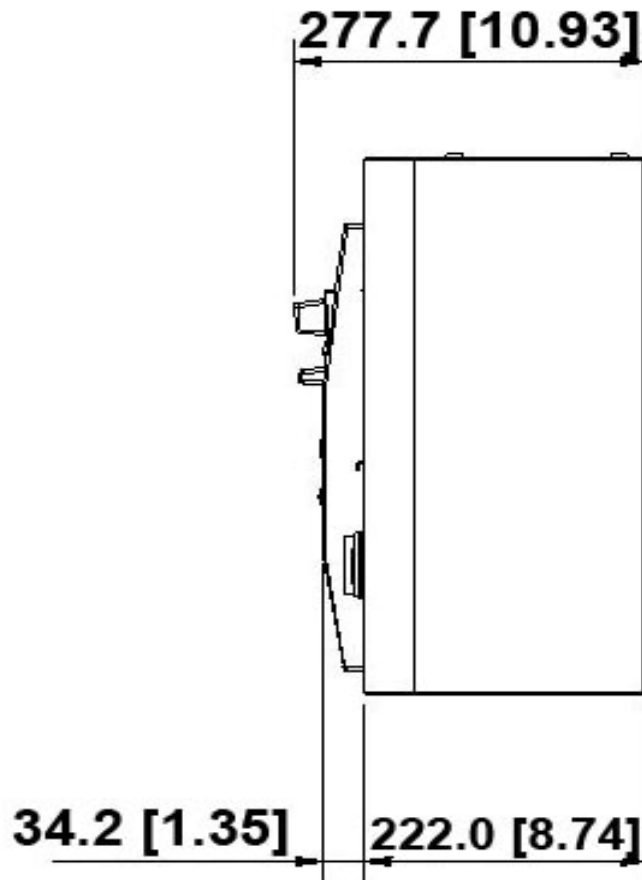
ATM Dimension-Front View



ATM Dimension-Plan View



ATM Dimension-Side View

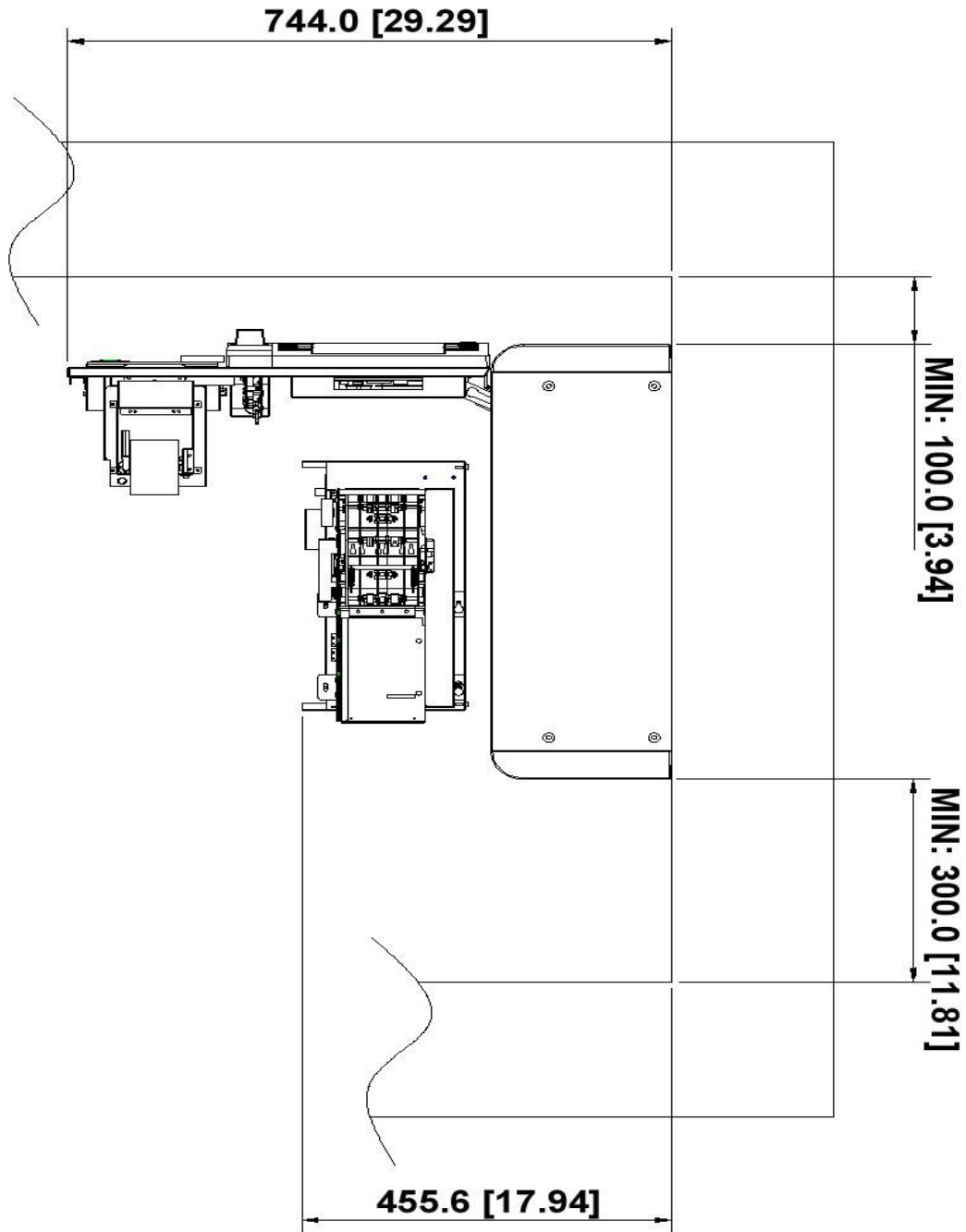


Installation and Service Clearance

Following diagram is describing the areas required for installing and servicing the MX-4000W.

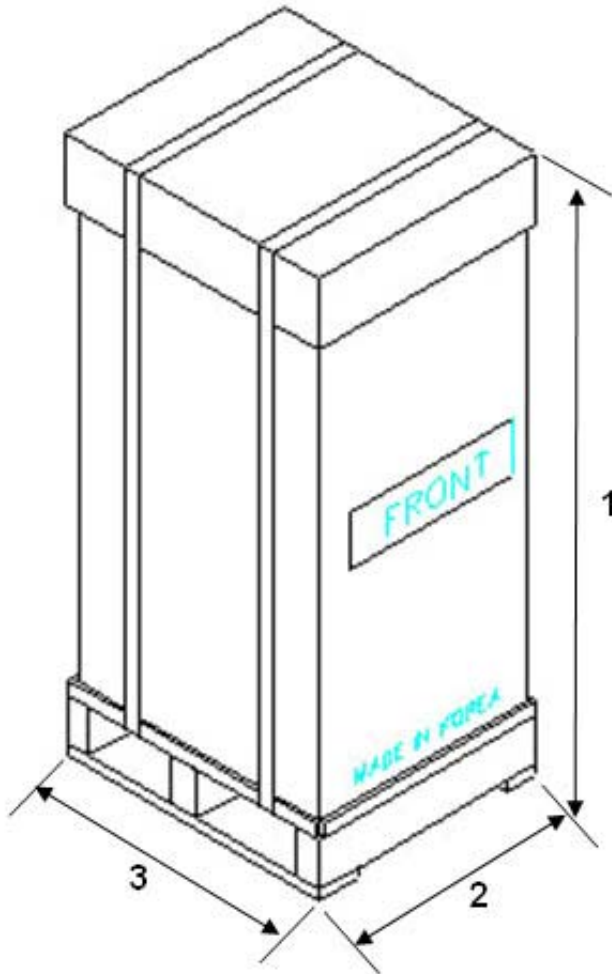
NOTE: All the unit in the dimension is mm and () is inch scale.

Hyoung recommends it is more convenient for your service personnel to have enough maintenance space as described below to service this ATM machine



Packing Dimensions

In some cases it may be necessary to store the ATM (in its box) before it is installed. See figure below for information on the dimensions of out box including two MX-4000W ATMs.



1	760mm [29.92]
2	920mm [36.22]
3	840mm [33.07]

NOTE:

1. The dimensions of a boxed MX-4000W ATM are 620x770x425mm (24.41x30.31x16.73inch, HXWXD).
2. Approximate weight of each MX-4000W ATM is 99.21~110.23lb (45~50 Kg). Actual weight will vary depending on ATM component configuration.

6.2 System Installation

Unpacking

1. Cut the straps that are fastened around the box with a knife. (See Fig.6.1 below) Be careful when cutting the straps.
2. Use an appropriate tool to remove the nails from the pallet. (See Fig.6.2 below)
3. Remove the lid, then box from the top. Do not discard the packaging materials until you have verified any shipping damage claim. Contact your distributor immediately if you see any shipping damage. Store the box in a safe place to re-use or discard of appropriately.
4. Verify the contents carefully with the packing list to be sure all items listed are included. Notify your distributor of any shortages.

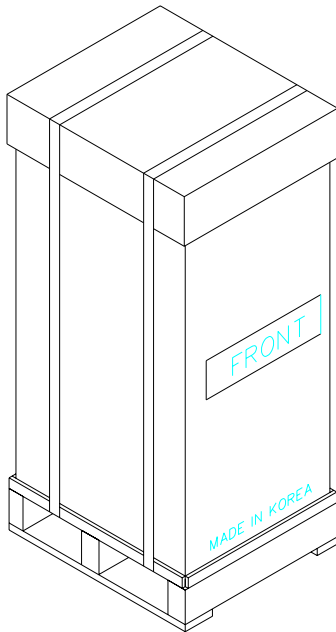


Fig.6.1

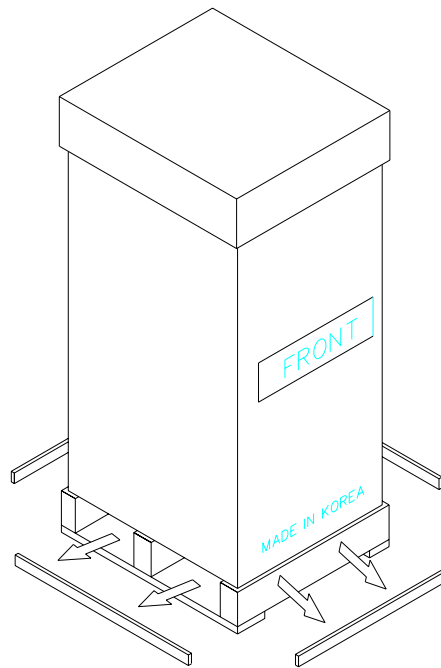


Fig.6.2

CAUTION: In order to move the machine and place it in a proper location, you should seek the help of professionals trained in moving heavy equipment.

Physical Installation-Wall Mounting

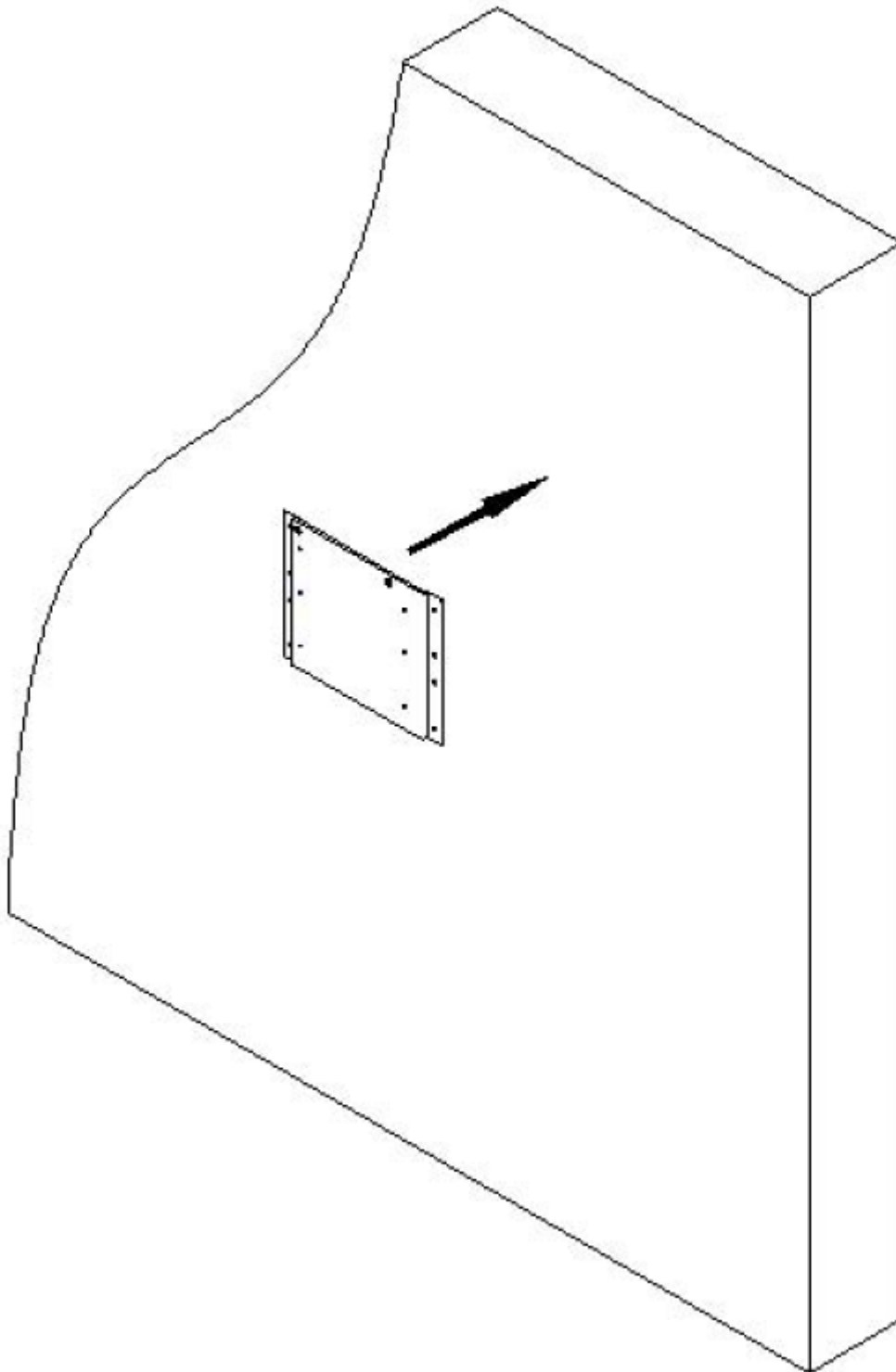
To install MX-4000W ATM, perform the following steps (referring to the picture in the following pages),

NOTE:

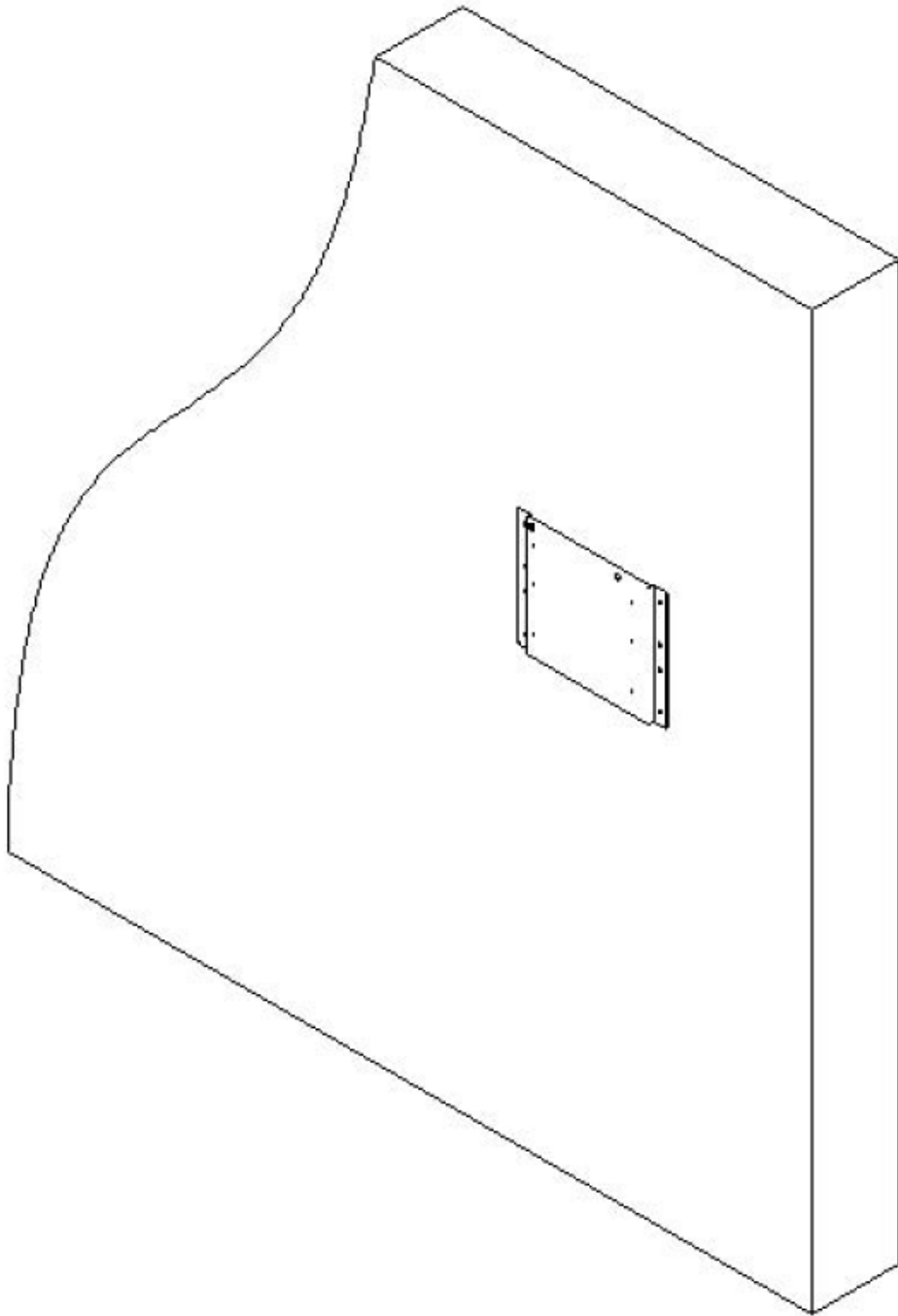
- **Prior to the installation, you will need to prepare the hardware (e.g. shank) to mount the mounting frame bracket.** Due to the variety of walls and their composition, Nautilus Hyosung can not supply the hardware you may require. The maximum shank diameter of the mounting hardware is 1/5 inch.
- **It is the owner's responsibility to ensure that the machine is anchored securely. Personal injury and equipment damage can occur if the machine is not properly secured.**

1. Unlock the key lock and press the Push_End button to open the front door.
2. Take out the cash dispenser unit by pulling it out and separate the mounting frame bracket. (Unfasten the screws, 6ea)
3. Attach the mounting frame bracket separated in the previous step on the wall using the hardware prepared in advance. It is recommended that the bottom of the mounting frame bracket is 1m (39.37inch) off the floor to help meet ADA guidelines.
4. Hang the ATM on the mounting frame bracket and fasten the screws (6ea) unfastened in the step of 2.
5. To take the power cable and LAN cable out of the ATM, separate the bracket on the bottom inside the ATM. After taking them out, place the bracket on its original position.

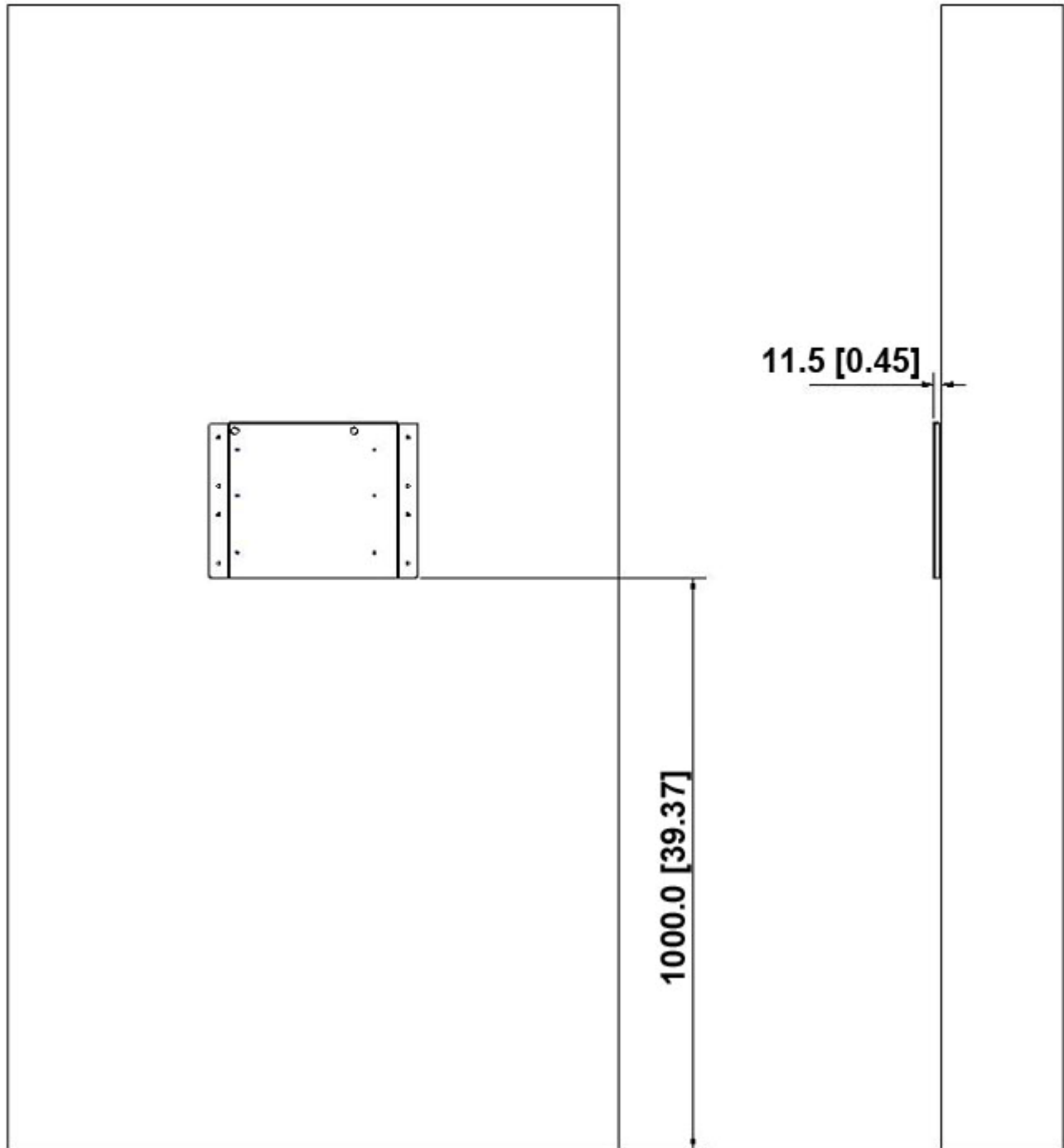
- Attaching the mounting frame bracket separated from the ATM



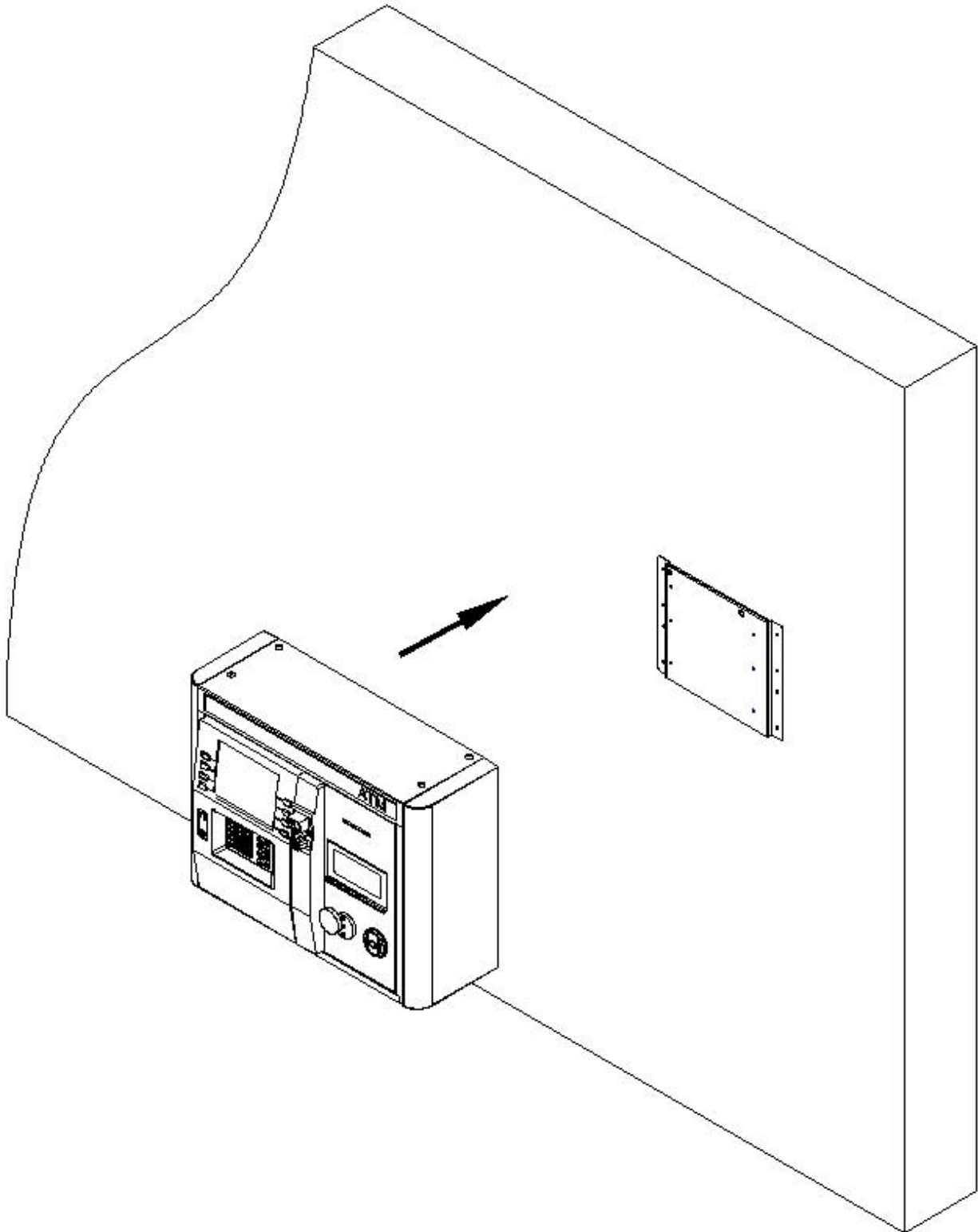
- **Attaching the mounting frame bracket using the hardware (e.g. shank, studs, and so on)**



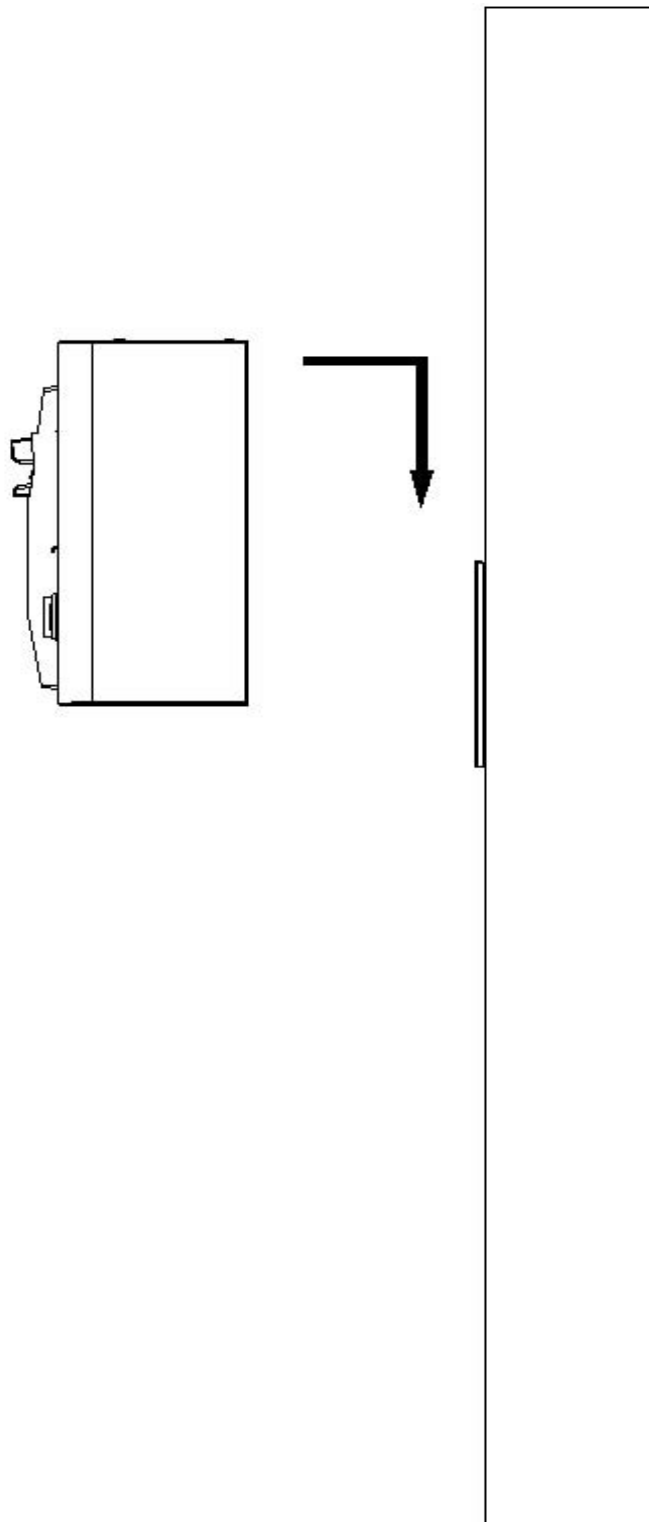
- To help meet ADA guidelines, it is recommended that the bottom of the mounting frame bracket is 1m (39.37inch) off the floor.



- Hanging the ATM on the mounting frame bracket.

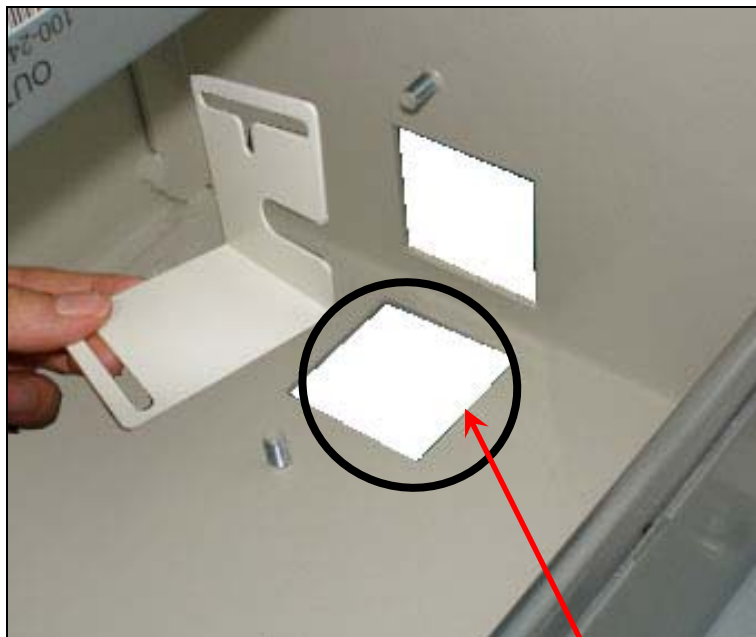


- Hanging the ATM on the mounting frame bracket and fastening the screws (6ea)



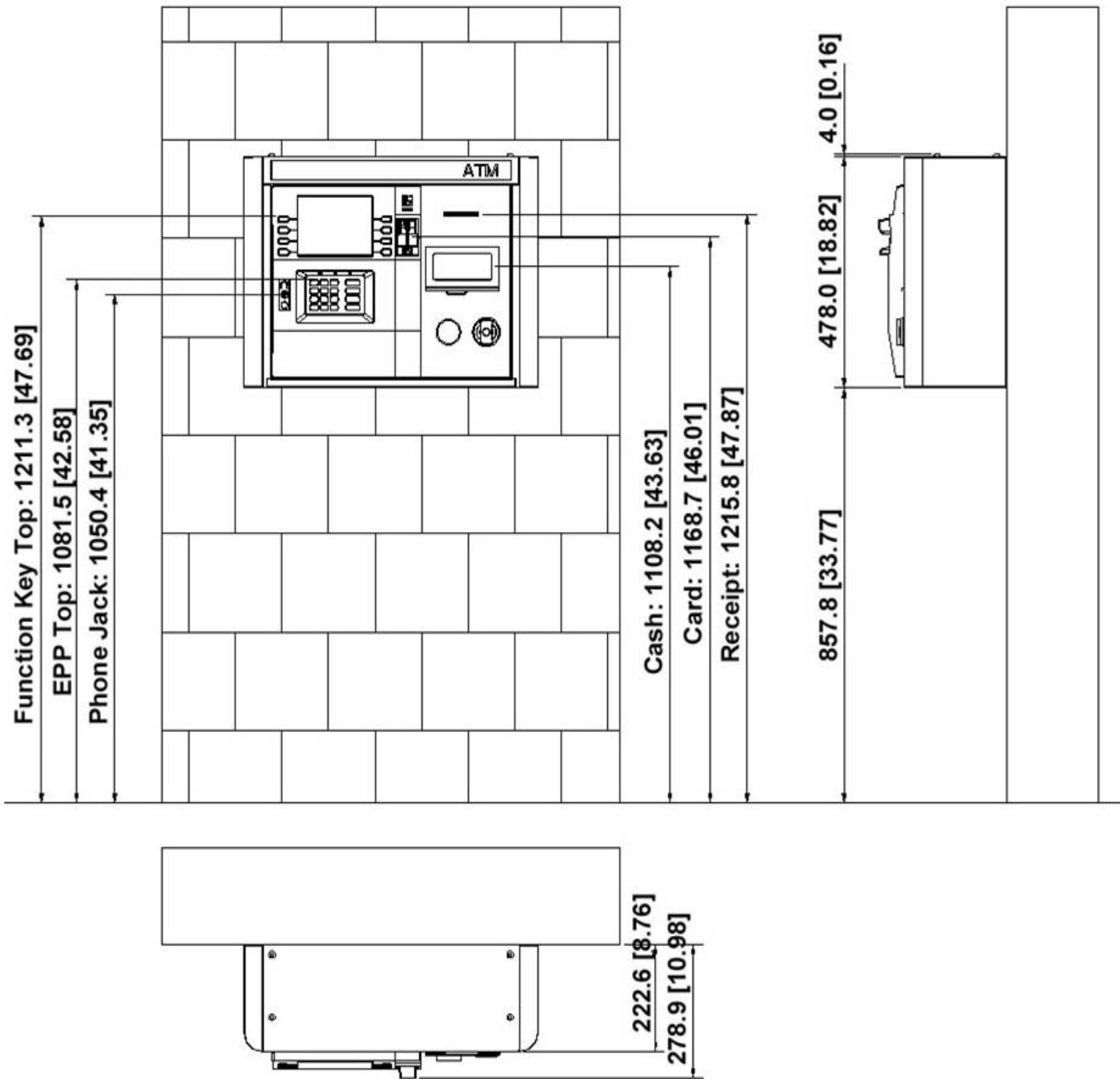
- **Taking out the power & LAN cable from the ATM**

To take the power cable and LAN cable out of the ATM, separate the bracket on the bottom inside the ATM. After taking them out, place the bracket on its original position.



**Power & LAN Cable Hole when installing
MX-4000W on the wall**

•The external appearance after the completion of installation



Chapter 7. Appendix

7. Appendix

7.1 Error Code Table

Card Reader

Error Code	Description	Trouble shooting
8217091	Card in card reader	Remove card
1101910	LOST CARD", DEV_MCU	
9723010	Failed to open device	Check the serial port or cable
9723011	Communication error	Check the serial port or cable
9723016	Time out to receive data	Check the serial port or cable
9723019	Polling down	Check the serial port or cable
9730100	IC CARD DENIAL	
9730200	IC CARD ONLINE DATA ERROR	
9730300	IC CARD ERROR	
97913XX	DEV_MCU Time over Error Code	1. Reboot ATM 2. Call your attendant
97923XX	DEV_MCU FATALERROR (WARNING)	1. Reboot ATM 2. Call your attendant
9799301	MCU RETRACT OVER	Clear the count of retracted card at OP mode
90001	Card Read Error	1. Check Magnetic Card 2. Check Card Read module and cable connection
90002	Invalid IC card communication	1. Power Off/On 2. Check DIP MCR 3. Check cable connection
90003	DIP MCR latch failure	1. Power Off/On 2. Check DIP MCR (Clamp Lever) 3. Check cable connection
90004	DIP MCR unlatch failure	1. Power Off/On 2. Check DIP MCR (Clamp Lever) 3. Check cable connection

Error Code	Description	Trouble shooting
90005	DIP MCR power on failure	1. Power Off/On 2. Check DIP MCR 3. Check cable connection
90006	DIP MCR power off failure	1. Power Off/On 2. Check DIP MCR 3. Check cable connection
9311200	Fail to connect device	Check the serial port or cable
9312300	Fail to close device	Check the serial port or cable
9313200	Fail to send command to device	Check the serial port or cable
9313300	Abnormal communication	Check the serial port or cable
9341100	Fail to create sensor polling thread	1.Reboot ATM 2.Call your attendant
9341300	Sensor polling thread is terminated	1.Reboot ATM 2.Call your attendant
93A560 0	Exception is occurred	1.Reboot ATM 2.Call your attendant
93A950 0	Fail to connect ESU or setting fail	Check the connect status of ESU
3100100	Send to undefined command	1.Reboot ATM 2.Call your attendant
3100200	Command execution is impossible	1.Reboot ATM 2.Call your attendant
3100400	Command data error	1.Reboot ATM 2.Call your attendant
3101000	Latch sensor is abnormal	1.Reboot ATM 2.Call your attendant
3102000	Card has not been read yet or others errors	Call your attendant
3102100	No Start sentinel	Call your attendant
3102200	VRC Error	Call your attendant
3102300	No End sentinel. Too many data	Call your attendant
3102400	LRC Error	Call your attendant
3102500	No mac.stripe or No encoded card	Call your attendant

Error Code	Description	Trouble shooting
3102700	SS-ES-LRC card	Call your attendant
3103000	Detection of Power failure	Call your attendant
3106000	Abnormal condition was found on the power-line(Vcc) of ICC(or SAM)	Call your attendant
3106100	The receiving error of ATR	Call your attendant
3106200	The card(SAM) does not accept this protocol	Call your attendant
3106300	IC Card communication error(No answer)	Call your attendant
3106400	IC Card communication error(Other)	Call your attendant
3106500	IC Card is not activated	Call your attendant
3106600	IC Card returned ATR which is not supported ISO/IEC7816-3	Call your attendant
3106900	IC Card returned ATR which does not match EMV2000 V4.0	Call your attendant
3107000	F-FROM write error	Call your attendant
3107100	CRC error of User program code area of ESU	Call your attendant
3107200	EEPROM operation error	Call your attendant
3107600	Transmission error between ESU and ICRW	Call your attendant
3109500	ESU is broken-down or disconnected	Call your attendant
3109600	Metallic fraud object is detected	Call your attendant
3109900	_INTERNAL_ERROR error is occurred and Fail to get error code from DLL	Call your attendant
D0006	CARD NOT SUPPORTED	Check your card

Error Code	Description	Trouble shooting
D0014	Invalid Card Number	Check your account
D0054	Expire Card	Check your card
D0057	Transaction not Permitted – Card	Check your card
IDN0X	DIP MCR connection failure	1. Power Off/On 2. Check DIP MCR 3. Check cable connection

Receipt Printer

Error Code	Description	Trouble shooting
9721000	Software Error	System Reboot
9722010	Serial Port Open fail	Communication Port and Line Check
9722DN0	Communication Error	Communication Line Check
2080100	Head Up Error	Lever Close
2080300	Paper Jam	Jam Paper Removal
2080400	Paper Out	Paper Supplement
2080800	Cutter Jam	Cutter Check

Cash Dispenser

Error Code	Description	Trouble shooting
00000	Normal Status	
4V001	Feeding Time-out between CHECK Sensor and SONAR Sensor	
4V002	Feeding Time-out between SONAR Sensor and DIVERT Sensor	
4V003	Feeding Time-out between DIVERT Sensor and EXIT Sensor	
4V004	Feeding Time-out between DIVERT Sensor and REJECT Sensor	
4V005	A Note Is Staying at EXT Sensor	
4V006	Ejecting the Note Suspected as Rejected	
4V007	Abnormal Note Management (Flow Processing Error)	
4V008	Abnormal Note Management (Flow Processing Error)	
4V009	Rejecting the Note Suspected as Ejected	
4V00B	Detecting Notes on the Path Before Start of Pick-up	
4V00C	Too Many Pick-up Events During Dispensing from One Cash Cassette (Limits of Total Pickup : 50 Notes Including all the Rejected)	
4V00D	Too Many Rejects During Dispensing from One Cash Cassette (Limit: 20 notes)	
4V00E	Abnormal Termination During Purge Execution	
4V011	Detecting Trouble in Motor or Slit Sensor Before Dispensing	
4V012	Not Detecting Reject Tray before Start or for Operation	
4V013	Failed to Calibrate Sensors	
4V014	More Banknotes than the Requested are Dispensed.	
4V015	Dispensing is Not Terminated within 90 Seconds.	

Error Code	Description	Trouble shooting
4V016	Recognizing Abnormal Command	
4V017	Recognizing Abnormal Parameters on the Command	
4V018	Download Sequence is incorrect.	
4V019	Failure of Write	
4V01A	Not to Give Verify command on Reset after Downloading Program	
4V01B	Failure of Writing EEPROM	
4V01C	Mismatches Checksum of EEPROM on Writing EEPROM	
4V01D	Error in Dispense Serial Number or Identification Number of Dispense Command (in case of the same value of Serial)	
4V01E	ACK Message was not return from host after dispenser transmit response	
4V01F	Detect Notes in Exit Sensor at Purge	
4V020	Divert Sensor is Always On.	
4V021	Exit Sensor is Always On.	
4V022	Reject Sensor is Always On.	
4V023	Sonar Sensor is Always On.	
4V024	Failure of Auto-Calibration for Sonar Sensor	
4V026	Back-Feeding Time-out at DIVERT Sensor	
4V028	Divert Sensor is Always Off.	
4V029	Exit Sensor is Always Off.	
4V02A	Reject Sensor is Always Off.	
4V02B	Sonar Sensor is Always Off.	

Error Code	Description	Trouble shooting
4V030	Path1 Sensor is Always On.	
4V031	Check1 Sensor is Always On.	
4V032	CST_IN1 Sensor is Always On.	
4V033	Path2 Sensor is Always On.	
4V034	Check2 Sensor is Always On.	
4V035	CST_IN2 Sensor is Always On.	
4V036	Path3 Sensor is Always On.	
4V037	Check3 Sensor is Always On.	
4V038	CST_IN3 Sensor is Always On.	
4V039	Path4 Sensor is Always On.	
4V03A	Check4 Sensor is Always On.	
4V03B	CST_IN4 Sensor is Always On.	
4V040	Path1 Sensor is Always Off.	
4V041	Check1 Sensor is Always Off.	
4V042	CST_IN1 Sensor is Always Off.	
4V043	Path2 Sensor is Always Off.	
4V044	Check2 Sensor is Always Off.	
4V045	CST_IN2 Sensor is Always Off.	
4V046	Path3 Sensor is Always Off.	
4V047	Check3 Sensor is Always Off.	
4V048	CST_IN3 Sensor is Always Off.	
4V049	Path4 Sensor is Always Off.	

Error Code	Description	Trouble shooting
4V04A	Check4 Sensor is Always Off.	
4V04B	CST_IN4 Sensor is Always Off.	
40047	Banknote Pick Up Error in the Cassette1 on NEAREND State	
4005B	Banknote Pick Up Error in the Cassette2 on NEAREND State	
4009F	Banknote Pick Up Error in the Cassette3 on NEAREND State	
4007C	Banknote Pick Up Error in the Cassette4 on NEAREND State	
4V054	Jamming or sensor failure in the Cash Cassette1	
4V055	Jamming or sensor failure in the Cash Cassette2	
4V056	Jamming or sensor failure in the Cash Cassette3	
4V057	Jamming or sensor failure in the Cash Cassette4	
40047	Not Detecting Cash Cassette1 before Start or for Operation	
4005B	Not Detecting Cash Cassette2 before Start or for Operation	
4009F	Not Detecting Cash Cassette3 before Start or for Operation	
4007C	Not Detecting Cash Cassette4 before Start or for Operation	
4V05C	Cash Cassette1 is Near-End (In Case of Near End Detection Mode)	
4V05D	Cash-Cassette2 is Near-End (In Case of Near End Detection Mode)	
4V05E	Cash-Cassette3 is Near-End (In Case of Near End Detection Mode)	
4V05F	Cash-Cassette4 is Near-End (In Case of Near End Detection Mode)	
97447	Pick-up Error in Cassette1 (Banknotes exist in Cash Cassette1)	
9745B	Pick-up Error in Cassette2 (Banknotes exist in Cash Cassette1)	
9749F	Pick-up Error in Cassette3 (Banknotes exist in Cash Cassette1)	

Error Code	Description	Trouble shooting
9747C	Pick-up Error in Cassette4 (Banknotes exist in Cash Cassette1)	
4V080	Detect Note in Cassette 1 Check Sensor	
4V081	Detect Note in Cassette 2 Check Sensor or Path 2	
4V082	Detect Note in Cassette 3 Check Sensor or Path 3	
4V083	Detect Note in Cassette 4 Check Sensor or Path 4	
4V089	Detect Note in Sonar Sensor before pick up	
4V08A	Detect Note in Diverter Sensor before pick up	
4V08B	Detect Note in Exite Sensor before pick up	
4V08C	Detect Note in Reject Sensor before pick up	
97197	Error by the unmatched number of bills	
9740101	In case that the type of the denomination is abnormal.	
9740102	In case that there isn't denomination in the list to set.	
971A7	In case that the denomination that SP knows, is different from the denomination that EP knows.	

Modem

Error Code	Description	Trouble shooting
D030000	Modem is not responding	Check the modem controller.
D030100	The target call address has call blocking enabled.	1. Check modem cable 2. Contact to technician support team
D030200	The specified terminal identifier is invalid.	1. Check modem cable 2. Contact to technician support team
D030300	All call appearances on the specified address are currently in use.	1. Check modem cable 2. Contact to technician support team
D030400	The disable address parameter contains dialing control characters that are not processed by the service provider.	1. Check modem cable 2. Contact to technician support team
D030500	The specified country/region code is invalid.	1. Check modem cable 2. Contact to host and phone company
D030600	The operation failed for an unspecified or unknown reason.	Contact to technician support team
D030700	Insufficient resources to complete the operation	Contact to technician support team

Miscellaneous

Error Code	Description	Trouble shooting
1030100	DEV_PIN (Key data error from host)	Contact to host
2000400	Vault door open	Close the vault door. Check door switch.
9701010	Failed to connect communication between SP of PIN and EP of one	Check if communication cable or COM port is not connected
9701012	Failed to deliver to data of EPP's SP	Check if communication cable or COM port is not connected
9701016	Received data time out of EPP	Check if communication cable or COM port is not connected
9701017	Delivered data time out of EPP	Check if communication cable or COM port is not connected
9701031	Failed to read Register of EPP	Reboot ATM
9701040	Failed to produce Thread of EPP	Reboot ATM
9701060	Failed to create buffer	Reboot ATM
9701111	BCC error of EPP	Check BCC logic of EPP
9701151	EPP is down when it receives an 'Get Status' command	1. Reboot ATM 2. Replace pinpad
9701152	EPP is down when it receives an 'Clear Func Key' command	1. Reboot ATM 2. Replace pinpad
9722020	File Open Error	1. Reboot ATM 2. Call your attendant
9722060	Memory Allocate Error (PrintForm Allocate IndexBuffer Fail)	1. Reboot ATM 2. Call your attendant
9722068	Invalid Media Name	1. Reboot ATM 2. Call your attendant
97221A2	Invalid Unit	1. Reboot ATM 2. Call your attendant
97221C1	Form is not Found	1. Reboot ATM 2. Call your attendant
97221C4	Form Name is NULL	1. Reboot ATM 2. Call your attendant
97221C5	Invalid Form	1. Reboot ATM 2. Call your attendant

Error Code	Description	Trouble shooting
97221C6	PrintForm() offset is Invalid	1. Reboot ATM 2. Call your attendant
97221C7	Invalid Form (Too many Fields)	1. Reboot ATM 2. Call your attendant
97221D1	Media is not Found	1. Reboot ATM 2. Call your attendant
97221D3	Media Overflow when form size is larger than media size	1. Reboot ATM 2. Call your attendant
97221D4	Media Name is NULL	1. Reboot ATM 2. Call your attendant
97221D5	Invalid Media (Attribute for Media definition is not proper)	1. Reboot ATM 2. Call your attendant
97221D6	Invalid Media (Area size is larger than media size)	1. Reboot ATM 2. Call your attendant
97221D7	Invalid Media (Size of Media Name is exceeded to 2048 bytes totally)	1. Reboot ATM 2. Call your attendant
97221E1	Field is not Found	1. Reboot ATM 2. Call your attendant
97221E2	Field Error (This Field must have initial value)	1. Reboot ATM 2. Call your attendant
97221E3	Non-Indexed value for Indexed Field	1. Reboot ATM 2. Call your attendant
97221E4	Invalid Field	1. Reboot ATM 2. Call your attendant
97221E5	Invalid Field (This Field's width is 0)	1. Reboot ATM 2. Call your attendant
9740020	Failed to create file	1. Reboot ATM 2. Call your attendant
9740025	Failed to copy file	1. Reboot ATM 2. Call your attendant
9745500	System power off while dispensing	

Error Code	Description	Trouble shooting
97915XX	DEV_BRM Time over Error Code	1. Reboot ATM 2. Call your attendant
97916XX	DEV_PBM Time over Error Code	1. Reboot ATM 2. Call your attendant
97918XX	DEV_PIN Time over Error Code	1. Reboot ATM 2. Call your attendant
9791AXX	DEV_FNG Time over Error Code	1. Reboot ATM 2. Call your attendant
9791BXX	DEV_VFD Time over Error Code	1. Reboot ATM 2. Call your attendant
97925XX	DEV_BRM FATALERROR (WARNING)	1. Reboot ATM 2. Call your attendant
97926XX	DEV_PBM FATALERROR (WARNING)	1. Reboot ATM 2. Call your attendant
97928XX	DEV_PIN FATALERROR (WARNING)	1. Reboot ATM 2. Call your attendant
9792AXX	DEV_FNG FATALERROR (WARNING)	1. Reboot ATM 2. Call your attendant
9792BXX	DEV_VFD FATALERROR (WARNING)	1. Reboot ATM 2. Call your attendant
9799901	DOOR CHECK	1. Reboot ATM 2. Call your attendant
9799902	LIGHT ERROR	1. Reboot ATM 2. Call your attendant
9799903	SPL ERROR	1. Reboot ATM 2. Call your attendant
9799904	PIN ERROR	1. Reboot ATM 2. Call your attendant
9799905	SENSOR CHECK	1. Reboot ATM 2. Call your attendant
9799907	UPS ERROR	1. Reboot ATM 2. Call your attendant

Error Code	Description	Trouble shooting
9799908	SCREEN ERROR	1. Reboot ATM 2. Call your attendant
991@@@91	ON TRANSACTION POWER OFF	1. Check power supply 2. Check backup battery
D000100	Error while modem initializing	Check the modem connection and the modem test.
D000200	Reversal transaction failure	Check for any CDU error codes and the number of notes dispensed to customer.
D000300	PIN ERROR	Transaction was denied by host
D000400	INVALID PIN	Reboot ATM
D000500	BANK UNAVAILABLE	Transaction was denied by host
D000600	CARD NOT SUPPORTED	Transaction was denied by host
D000700	INSUFFICIENT FUNDS	Transaction was denied by host
D000800	INELIGIBLE TRANSACTION	Transaction was denied by host
D000900	INELIGIBLE ACCOUNT	Transaction was denied by host
D001000	DAILY LIMIT EXCEEDED	Transaction was denied by host
D001100	UNABLE TO PROCESS	Transaction was denied by host
D001200	Invalid transaction	Check the transaction from the host and try again.
D001300	Invalid amount	Check the transaction from the host and try again.
D001400	Invalid card number	Check the transaction from the host and try again.
D001500	UNABLE TO PROCESS	Transaction was denied by host
D001600	WITHDRAWAL LIMIT ALREADY REACHED	Transaction was denied by host
D001700	INVALID AMOUNT	Transaction was denied by host
D001800	EXTERNAL DECLINE	Transaction was denied by host

Error Code	Description	Trouble shooting
D001900	SYSTEM ERROR	Transaction was denied by host
D002000	Surcharge screen should have been displayed	Check the transaction from the host and try again. Check BIN List
D002100	ROUTING LOOKUP PROBLEM	Transaction was denied by host
D002200	UNABLE TO PROCESS	Transaction was denied by host
D002300	TRANSACTION NOT SUPPORTED	Transaction was denied by host
D002400	Exceeds Issuer Withdrawal Limit	Check the transaction from the host and try again.
D003900	No Credit Account	Check the transaction from the host and try again.
D005100	Insufficient Funds	Check the transaction from the host and try again. Try Balance Inquiry
D005200	No Checking Account	Check the transaction from the host and try again.
D005300	No Savings Account	Check the transaction from the host and try again.
D005400	Expire Card	Check the transaction from the host and try again.
D005500	Incorrect Pin	Check the transaction from the host and try again.
D005700	Transaction not Permitted – Card	Check the transaction from the host and try again.
D005800	Transaction not Permitted – Terminal	Check the transaction from the host and try again.
D006100	Exceeds Withdrawal Limit	Check the transaction from the host and try again.
D007500	PIN Tries Exceeded	Check the transaction from the host and try again.
D007800	No Account	Check the transaction from the host and try again.
D008000	Invalid Date	Check the transaction from the host and try again.

Error Code	Description	Trouble shooting
D008300	Can not Verify PIN	Check the transaction from the host and try again. Try different cards.
D008600	Can not Verify PIN	Check the transaction from the host and try again. Try different cards.
D009100	Bank Unavailable	Check the transaction from the host and try again.
D009200	System Unavailable	Check the transaction from the host and try again.
D009300	Transaction Serial Number mismatch	Check the terminal setting from the host.
D009400	Record format mismatch.	Check the terminal setting from the host.
D009500	Routing ID mismatch.	Check the terminal setting from the host.
D009600	Terminal ID mismatch.	Check the terminal setting from the host.
D009700	Response Type mismatch (Reversal)	Check the terminal setting from the host.
D009800	Response Type mismatch (Day Close)	Check the terminal setting from the host.
D009900	Response Type mismatch (Config.)	Check the terminal setting from the host.
D009A00	Response Type mismatch (Withdrawal/Balance/Transfer)	Check the terminal setting from the host.
D009B00	STX error	Check the terminal setting from the host.
D009C00	ETX error	Check the terminal setting from the host.
D009D00	FS out (after response code)	Check the terminal setting from the host.
D009E00	FS out (after retrieval reference number)	Check the terminal setting from the host.
D009F00	FS out (after system trace audit number)	Check the terminal setting from the host.
D00A000	FS out (after account balance)	Check the terminal setting from the host.

Error Code	Description	Trouble shooting
D00A100	FS out (after available balance)	Check the terminal setting from the host.
D00A200	FS out (after surcharge amount)	Check the terminal setting from the host.
D00A300	FS out (after authorization response text)	Check the terminal setting from the host.
D00A400	ETX wrong position	Check the terminal setting from the host.
D00A500	FS out (after total cash dispense amount)	Check the terminal setting from the host.
D00A600	FS out (after total non-cash dispense amount)	Check the terminal setting from the host.
D00A700	FS out (after total surcharge amount)	Check the terminal setting from the host.
D00A800	FS out (after config surcharge amount)	Check the terminal setting from the host.
D00A900	ETX out (config)	Check the terminal setting from the host.
D00AC00	Invalid data received from the host (MAC data mismatch)	Check the terminal setting from the host.
D00B000	TERMINAL ID MISMATCHED	
D00B100	TRANSACTION CODE MISMATCHED	
D00B200	SECOND FIELD ID CODE MISMATCHED	
D00B300	FIRST DES KEY WRONG SIZE	
D00B400	SURCHARGE AMOUNT WRONG SIZE	
D00B500	Sequence Number MISMATCHED	
D00B600	INVALID RESPONSE CODE ERROR	
D00B700	Authorization Number Error	
D00B800	BUSINESS DATE Error	
D00B900	Transaction time Number Error	
D00BA00	BUSINESS DATE Error	

Error Code	Description	Trouble shooting
D00BB00	Balance amount Error	
D00BC00	Actual Surcharge Error	
D00BD00	Sequence Number MISMATCHED	
D00BF00	BUSINESS DATE Error	
D00C000	Settlement Error	
D00C100	Host Mac result error	Check the key mode and MAC value
D00C200	ATM Mac result error	Check the key mode and MAC value
D011100	REVERSAL DECLINED	
D022200	PIN CHANGE DECLINED	
D100000	No connection	1. Check phone number 2. Check modem cable 3. Contact phone company
D110000	Cannot receive ENQ from the host	1. Check phone number 2. Check modem cable 3. Contact telephone company
D120000	Transmission error : Failed to receive the whole data within 5 seconds after requesting the modem to send the data.	1. Check modem and modem cable connection 2. Contact telephone company
D130000	Receiving NAK more than 3 times	1. Check modem and modem cable connection 2. Contact telephone company
D140100	Disconnected by Unknown Reason	1. Check modem and modem cable connection 2. Contact telephone company
D140200	Disconnected by rejected call from remote party	Try again later.
D140300	Disconnected because the local phone was picked up	Try again later.
D140400	Disconnected by Forwarded	1. Check modem and modem cable connection 2. Contact telephone company
D140500	Disconnected by Unreachable	1. Check modem and modem cable connection 2. Contact telephone company

Error Code	Description	Trouble shooting
D140600	Disconnected by Congestion	1. Check modem and modem cable connection 2. Contact telephone company
D140700	Disconnected by Incompatible	1. Check modem and modem cable connection 2. Contact telephone company
D140800	Disconnected by un-known reason	1. Check modem and modem cable connection 2. Contact telephone company
D140900	Disconnected by Bad Address	1. Check modem and modem cable connection 2. Contact telephone company
D141000	Disconnected by Unavailable	1. Check modem and modem cable connection 2. Contact telephone company
D150000	1. Modem dial connection time-out (while dialing the modem). 2. No response from host for 60 seconds.	1. Check modem and modem cable connection 2. Contact telephone company
D160100	Disconnected by Bad Address	1. Check modem and modem cable connection 2. Contact telephone company
D160200	Disconnected by Unavailable	1. Check modem and modem cable connection 2. Contact telephone company
D160300	Disconnected by Out of Order	1. Check modem and modem cable connection 2. Contact telephone company
D170000	No carrier (while sending/receiving data after dial connection)	Check host.
D170100	No Carrier during ENQ data receive from host	Check host.
D170200	No Carrier before sending data send to host	Check host.
D170300	No Carrier during sending data send to host	Check host.
D170400	No Carrier during ACK/NAK data send to host	Check host.
D170500	No Carrier during ACK/NAK data receive from host	Check host.
D170600	No Carrier during receiving data	Check host.

Error Code	Description	Trouble shooting
D170700	NAK retry error.	1. Check modem and modem cable connection 2. Contact telephone company
D170800	Send retry error	1. Check modem and modem cable connection 2. Contact telephone company
D170900	Modem initialize fail	Check modem
D171000	Modem Comport Failed	Check modem
D180000	No Dial Tone(in Modem dial connection)	Check telephone line connection. Test Modem.
D190000	No Answer	Contact telephone company (Check telephone line connection. Check phone number.)
D200000	Dial(Line) busy	Try again later. Check phone number.
D210000	Time out(30sec.) for initializing modem before Modem Dial connecting	Check telephone line connection. Test Modem.
D220000	not receiving EOT from HOST	Check telephone line connection. Test Modem. Check host.
D230000	No response from Host - Dialing time out to Host	Check telephone line connection. Test Modem. Check phone number.
D250000	Cannot connect to the host	Check telephone line connection
D251000	Timeout while Sending	Check telephone line connection
D251100	Communication error while Sending	Check telephone line connection
D251200	Socket error while Sending	Check telephone line connection
D251300	Timeout while Receiving	Check telephone line connection
D251400	Communication error while Receiving	Check telephone line connection
D251500	Socket Error while Receiving	Check telephone line connection
D320000	No response from Host/Dialing time out to Host	Check telephone line connection
D320100	Outbound call is aborted	Check telephone line connection. Test Modem.
D320200	Fail to dial out	Check telephone line connection. Test Modem.
D320300	No Line Reply	

Error Code	Description	Trouble shooting
D320400	Get Line ID Failed	
D320500	Modem Comport Failed	
D320600	Call Failed	
D320700	No Answer	
D320800	Modem Call Other Error	
D410000	CRC Mismatch	Check telephone line connection
D410100	No CRC Received	Make sure that the host is using CRC
DA0xxx0	Host Denial Error	Refer to E7. Description for error code organization
F000100	Number of Bill is not inputted	Enter number of bill. (required)
F000200	Parameter is not properly set (Surcharge Owner)	Enter surcharge owner. (required)
F000300	Parameter is not properly set (Surcharge Amount)	Enter surcharge amount. (required)
F000400	Parameter is not properly set (Adver. Text refreshing timer)	Enter Ad text refresh timer.
F000500	Parameter is not properly set (Advertisement text)	Enter Ad text.
F000600	Parameter is not properly set (Dispense limit)	Enter Dispense limit.
F000700	Parameter is not properly set (Denomination)	Enter Denomination. (required)
F000800	Parameter is not properly set (Fast Cash)	Enter Fast Cash amount.
F000900	Master Key Index invalid	Check Master key index.
F000A00	Master Key empty	Enter Master key. (required)
F000B00	Host Phone Number is not inputted	Enter Host phone number. (required)
F000C00	Error Retry Timer is not inputted	Enter Retry timer.
F000D00	RMS Password is not inputted in RMS Enable	Enter RMS password.

Error Code	Description	Trouble shooting
F000E00	RMS Phone Number is not inputted in RMS Enable	Enter RMS phone number.
F000F00	Terminal Number is not inputted	Enter Terminal number. (required)
F001000	Routing ID is not inputted	Enter Routing ID. (required)
F001100	Master Key Serial Number is not inputted	Enter Master key serial number.
F001200	Non-Cash Type text is not inputted	Enter Non-cash type text.
F001300	Parameter is not properly set	Check proper parameters in setting.
F001400	NVRAM Failure	Try to clear NVRAM
F001500	ATM Serial No. Empty	Enter ATM serial number. (required)
F001600	Default master password was not changed	
F001F00	Machine serial number is not set	Check serial number. 2. Set serial number.
F002F00	Host type is not set	Check host type. 2. Set host type.
F003F00	Communication ID invalid (only triton)	Contact to technician support team .
F004F00	EPP(Pinpad) key mode is invalid	1. Check modem cable 2. Contact to technician support team
F005F00	Denomination is invalid	1. Check modem cable 2. Contact to technician support team
F006F00	Failed Host Connection!	1. Check Host Connection. 2. Contact to technician support team.
F007F00	Invalid Exchange Rate	Download the exchange rate from RMS
F00FF00	Failed to write Journal	1.Back up journal to thumb drive 2.Clear journal 3.Reboot ATM
FFFFFFF	NVRAM is broken	1. Reset Master Password 2. Clear NVRAM

Error Code	Description	Trouble shooting
POWERAB	UPS ABNORMAL	Check UPS
POWERAC	POWER OUT OR AC OFF	Check AC power status and environment
POWERBA	BATTERY LOW	1. Check AC power status and environment 2. Check UPS
SDN0100	Service Panel (SPL) communication error	Check the cables and connections.

Description for error code organization

If an error occurs, you can understand cause of error through error code and help operator to judge situation.

Below example is forms and contents for error code "5-40047(00)".

1. 5 in front "-" is procedure number, and you can analysis the procedure that an error occurs through that number.
 - 1) Procedure number, the number in front of "-", is none as follow situations :
 - (1) Reboot the system when errors occur:
 - (2) Fail to restore automatically when errors occur:
 - (3) When transferring from Operator Mode to Transaction Mode not ruling out the error.
 - 2) "1" – After users insert the card, procedure number is 1.
 - 3) "3" – When sending message from ATM to Host, procedure number is 3.
 - 4) "5" – When receiving transaction success message from Host, procedure number is 5.
 - 5) "6" – After confirming notes during withdrawal, procedure number is 6.
 - 6) "9" – When receiving transaction refusal message from Host, procedure number is 9.
2. "40047(00)" back of "-" is a description for an error. (Refer to Error Code)
3. If an error occurs, below message will be displayed on the screen.

TERMINAL ID : XXXXXXXXXXXXXXXX ERROR CODE : 5-40047(00) ERROR DESCRPTION
--

HOST DENIAL ERROR CODE

1. When receiving HOST DENY message, below error code will be displayed on the screen.

TERMINAL ID : XXXXXXXXXXXXXXXX ERROR CODE : 9-DA0XX(X0) ERROR DESCRIPTION

-When HOST DENY ERROR CODE is 2 byte, DA0XX(00) will be displayed.

(Value of XX means denial code.)

- When HOST DENIAL ERROR CODE is 3 bytes, DA0XX(X0) will be displayed.

(Value of XXX means denial code.)

7.2 Installation Guide

7.2.1 Software Quick Installation Guide

- **Clear NVRAM**

(1) NVRAM

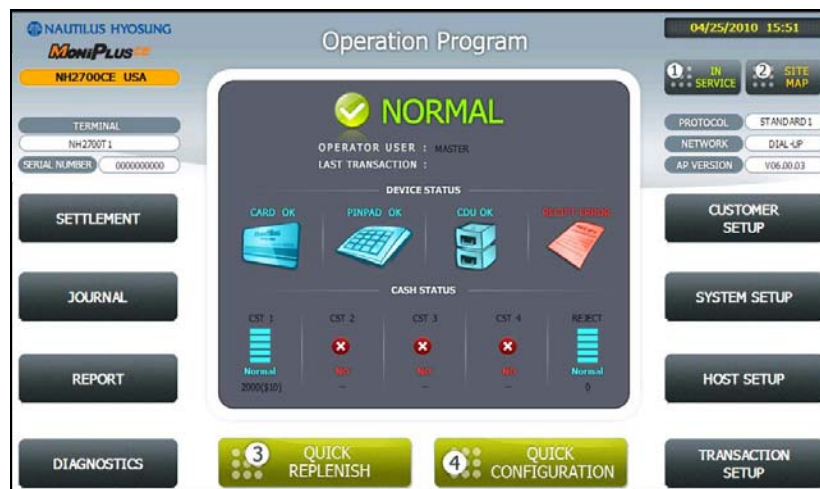
There are many important data in the NVRAM such as journal and configuration data.

To clear all of configuration and journal data to the initial status, clear NVRAM after S/W installation.

If you upgrade ATM machine operating in the field, you must backup journal and remember configuration information before clearing NVRAM.

(2) Clear NVRAM

1) Enter Supervisor Menu as Master Password



2) Select "SYSTEM SETUP" menu



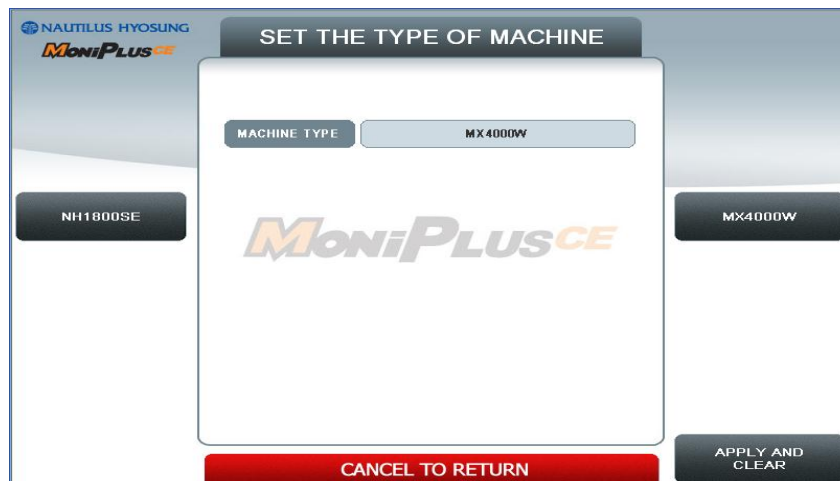
3) Select "SYSTEM CONTROL" menu



4) Select "CLEAR ALL" menu.



4-1) In S/W released for USA, there is necessity to check the type of machine only in the case of NH1800SE and MX4000W. So if you select CLEAR ALL button or CLEAR SETTING button, the next screen would be changed as like as below to check the type manually.



After choosing the type of machine, just push 'APPLY AND CLEAR' button. And then changed machine kind would be applied to information of S/W.

5) Confirm and select "Yes" menu.

6) All NVRAM data will be cleared and ATM will be automatically rebooted.

7.2.2 Installation Guide

- DIAL-UP INITIAL SETTING

(1) DIAL-UP SETTING

1) Input Master password to enter main screen.



2) Select "HOST SETUP" menu.



3) Select "TELEPHONE NUMBER" menu.

The screenshot shows a touch-screen interface for a Nautilus Hyosung MoniPLUSCE device. At the top left, the logo 'NAUTILUS HYOSUNG MoniPLUSCE' is visible. The main title of the screen is 'TELEPHONE NUMBER'. Below this title, there are two rows of input fields. The first row is labeled 'HOST PHONE 1' and contains the number '0589'. The second row is labeled 'HOST PHONE 2' and contains the number '0590'. In the center of the screen, the 'MoniPLUSCE' logo is displayed in a large, stylized font. At the bottom of the screen, there is a prominent red button with the text 'CANCEL TO RETURN' in white. On the left and right sides of the screen, there are dark grey buttons labeled 'HOST PHONE 1' and 'HOST PHONE 2' respectively.

- 4) Be sure to input the telephone numbers both in the HOST PHONE #1 and in the HOST PHONE #2 after selecting "HOST PHONE #1" and "HOST PHONE #2" menu and click 'ENTER' on the pinpad.
- 5) After above procedures, press **IN SERVICE** button or '1' key on the pinpad in the main screen.

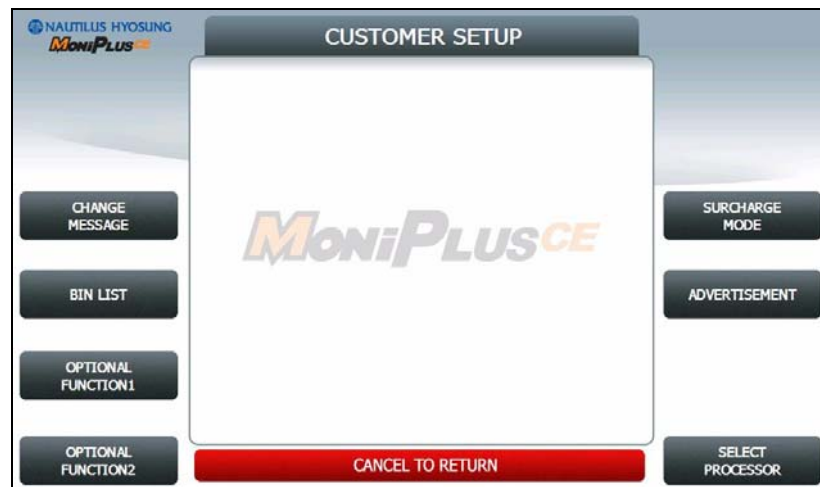
● TCP/IP INITIAL SETTING

(1) TCP/IP SETTING

1) Input Master password to enter main screen.



2) Select "CUSTOMER SETUP" menu.



3) Select "SELECT PROCESSOR" menu.



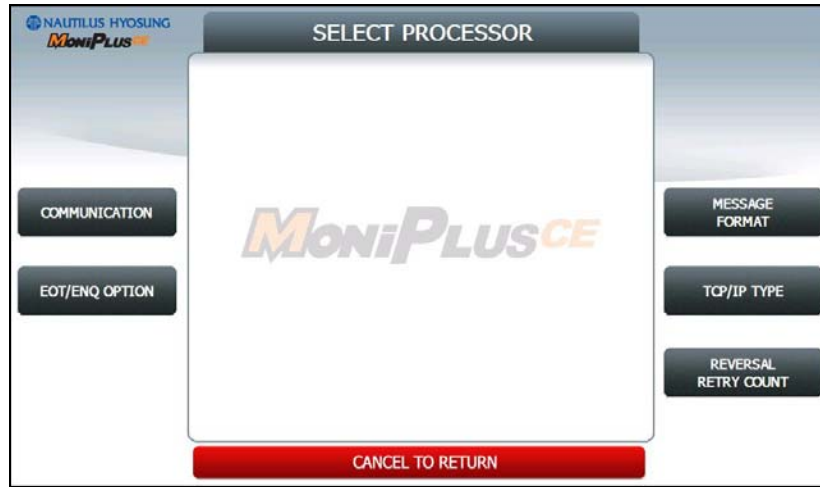
4) Select "COMMUNICATION" menu.



5) Select "TCP/IP" menu and message in the COMMUNICATION box will be changed from DIALUP to TCP/IP.

6) Click 'CANCEL' button and SELECT PROCESSOR screen will be back.

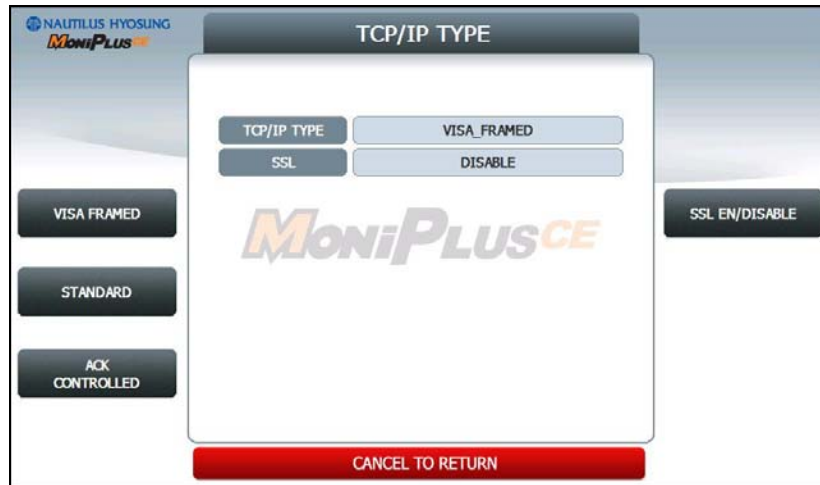
7) Select "MESSAGE FORMAT" menu in the SELECT PROCESSOR screen.



8) Select "STANDARD1" menu in the MESSAGE FORMAT screen. Click 'CANCEL' button to go SELECT PROCESSOR screen.



- 9) Select "TCPIP TYPE" menu in the SELECT HOST screen.
- 10) Set "STANDARD" in the TCP/IP TYPE menu and set DISABLE in the SSL OPTION menu. Click 'CANCEL' button to go SELECT PROCESSOR screen.



- 10-1) In S/W released for USA, there is the menu for SSL CERT. EN/DISABLE as like as below. If a owner want to use SSL CERT(certificate issued by host to recognize the other side when communicating with each other) please, set the SSL CERT. EN/DISABLE as 'ENABLE'.



And there is a certificate in USB, please download it by just pressing 'DOWNLOAD CERT. FROM USB' button. However, the thing you should remember in this step is to make the certificate named as 'rootcert.pem' and locate this certificate in root path in USB drive.

11) Click 'CANCEL' button and CUSTOMER SETUP screen will be shown. Click 'CANCEL' button once more to go to the OP MAIN screen. And select "SYSTEM SETUP" menu.



12) Select "TERMINAL IP" menu.

13) Set "DHCP EN/DISABLE" as DISABLE to activate buttons related with "STATIC IP"



14) Select "IP ADDRESS", "GATEWAY", "SUBNET MASK" and "DNS" and set the input values individually.

15) Select "HOST SETUP" menu in the OP MAIN screen.

16) Select “HOST ADDRESS” menu in the HOST SETUP screen.



17) Select “URL EN/DISABLE” menu in the HOST ADDRESS screen.



18) Select “HOST ADDRESS 1”, “PORT NUMBER 1”, “HOST ADDRESS 2”, “PORT NUMBER 2” in the HOST ADDRESS screen and set input values individually.

19) After finishing all setting up, press **IN SERVICE** button ‘1’ or **CANCEL** key on the pinpad in the main screen. Then ATM will be rebooted automatically with the “REBOOTING” message shown.

7.3 Transaction Screen Flow

This chapter shows you the demonstration screen.

7.3.1 TRANSACTION PROCESS (ENGLISH)

7.3.1.1 AP MAIN

This is a main AP screen and the customer can start to do transaction by inserting and quickly removing the card on card reader.



7.3.1.2 SELECT LANGUAGE

Language a customer would like to use in transaction can be selected in this screen.



[Function Key Type]



[Touch Type]

7.3.1.3 ENTER PIN

This screen is to enter PIN of customer's card



7.3.1.4 SELECT TRANSACTION

This screen is to select transaction type the customer wants to transact such as withdrawal, balance inquiry and transfer is selected in this screen.



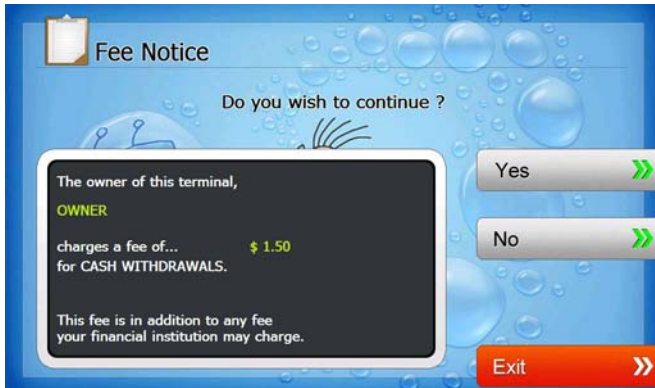
[Function Key Type]



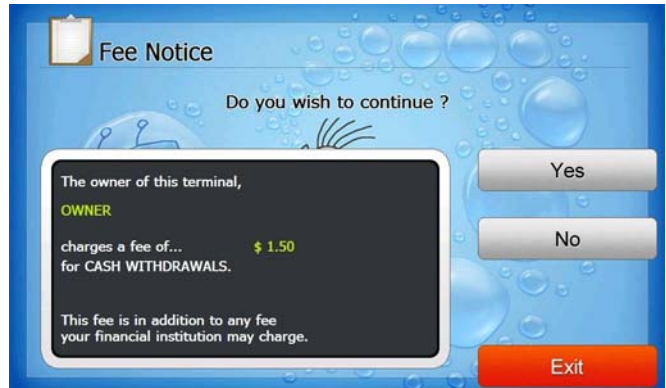
[Touch Type]

7.3.1.4.1 WITHDRAWAL: FEE NOTICE

This screen is to show a customer the information of surcharge.



[Function Key Type]



[Touch Type]

7.3.1.4.2 WITHDRAWAL: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she wants to get the receipt or not.



[Function Key Type]



[Touch Type]

7.3.1.4.3 WITHDRAWAL: SELECT ACCOUNT (Checking, Saving, Credit Card)

This screen is to ask a customer where he/she wants to withdraw in checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.1.4.4 WITHDRAWAL: SELECT THE AMOUNT OF WITHDRAWAL

This screen is to select the amount of withdrawal. If there is not any amount to withdraw, please select the "OTHER" key and can input the amount the customer would like to withdraw.

1) Amount Selection

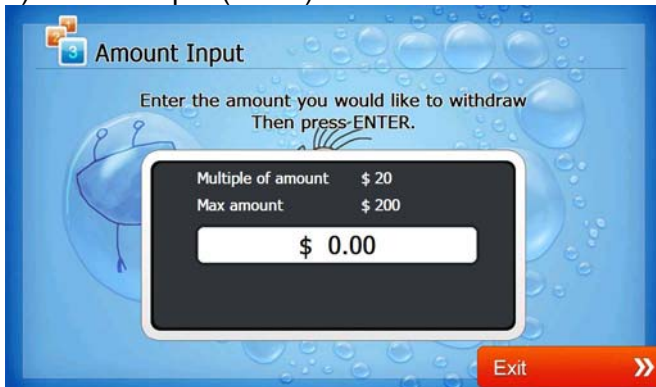


[Function Key Type]

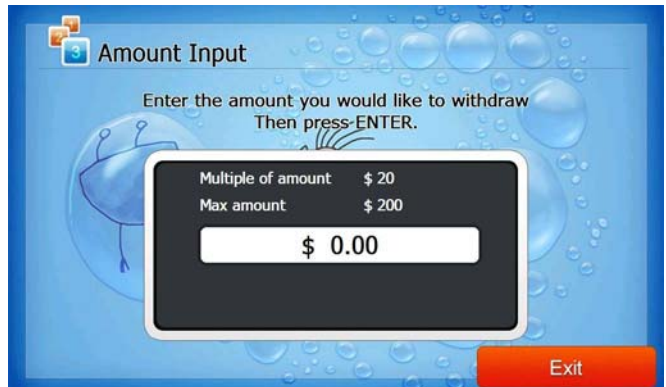


[Touch Type]

2) Amount Input (Other)



[Function Key Type]



[Touch Type]

7.3.1.4.5 WITHDRAWAL: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



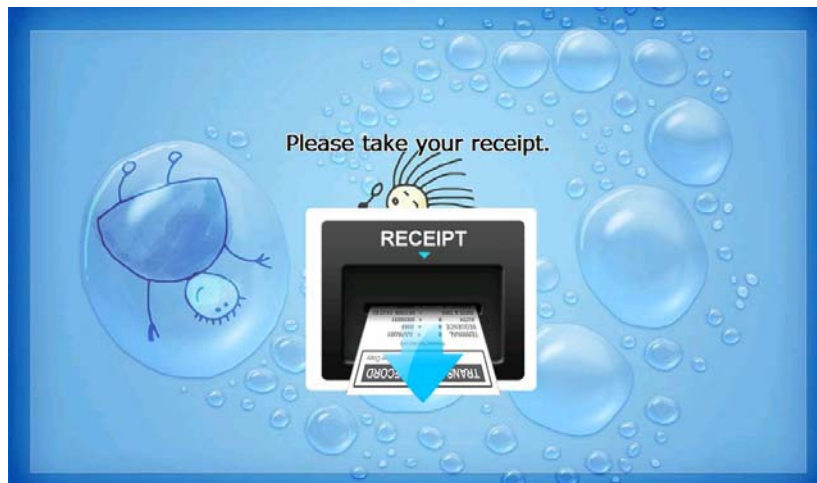
7.3.1.4.6 WITHDRAWAL: DISPENSING MONEY AND TAKE MONEY

This screen is to show the customer that his/her request amount is dispensing and to notify the customer to take his/her money.



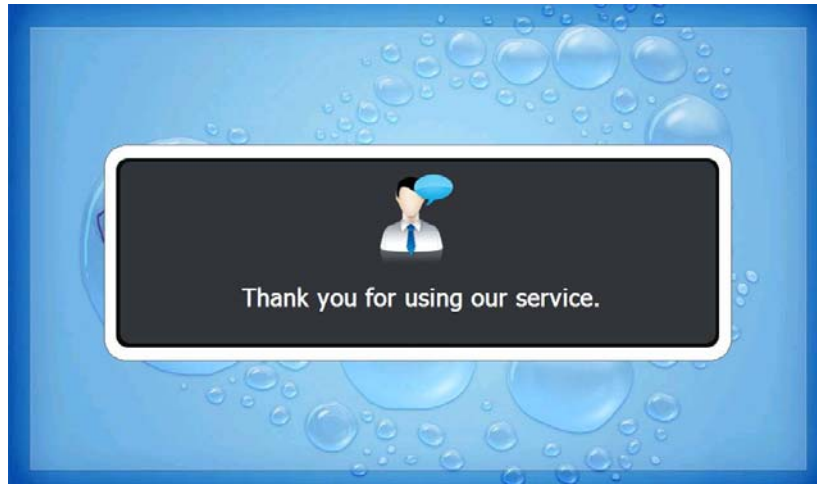
7.3.1.4.7 WITHDRAWAL: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.1.4.8 WITHDRAWAL: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.1.4.9 TRANSFER: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she gets the receipt or not.



[Function Key Type]



[Touch Type]

7.3.1.4.10 TRANSFER: SELECT ACCOUNT TO TRANSFER FROM

This screen is to ask a customer where he/she wants to transfer from; checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.1.4.11 TRANSFER: SELECT ACCOUNT TO TRANSFER TO

This screen is to ask a customer where he/she wants to transfer to; checking, saving, credit card



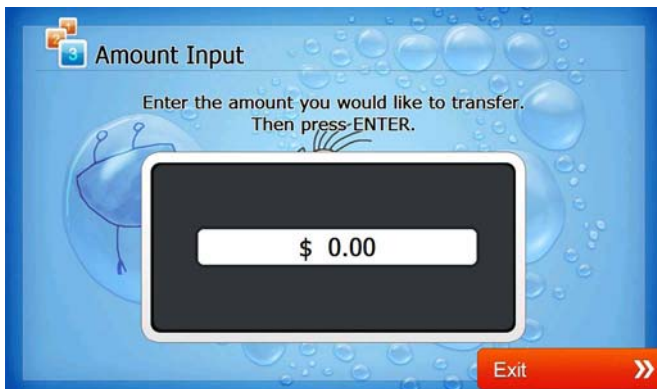
[Function Key Type]



[Touch Type]

7.3.1.4.12 TRANSFER: ENTER TRANSFER AMOUNT

This screen is to select the amount of transfer.



[Function Key Type]



[Touch Type]

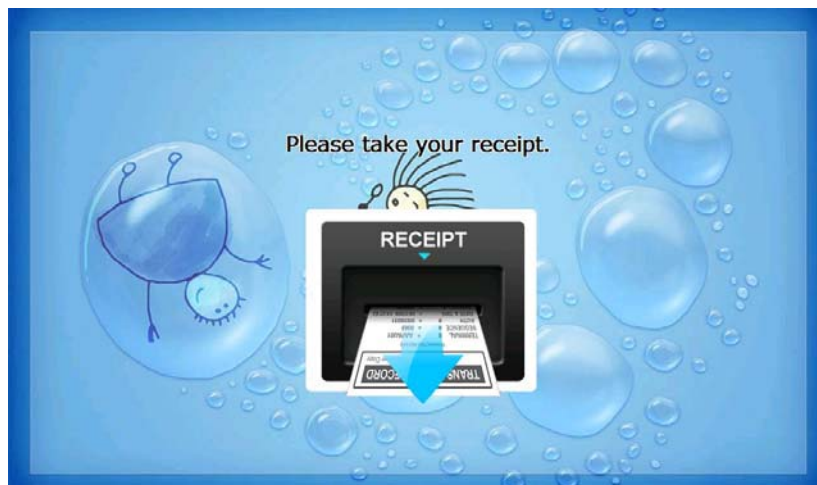
7.3.1.4.13 TRANSFER: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



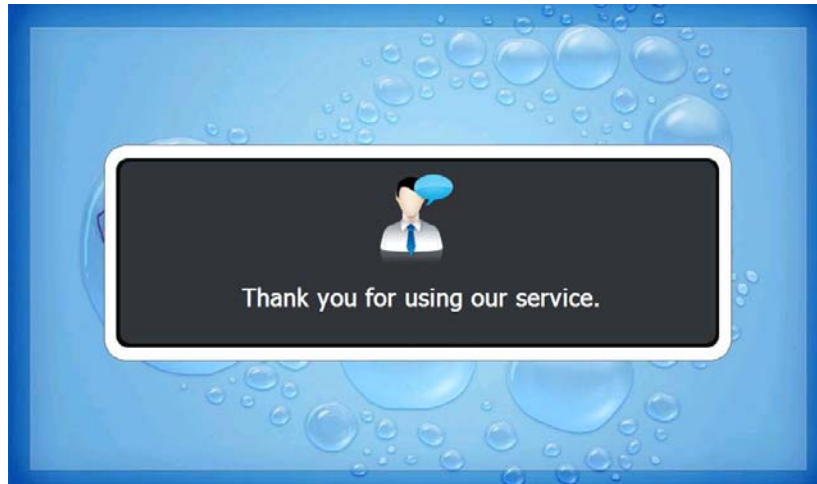
7.3.1.4.14 TRANSFER: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.1.4.15 TRANSFER: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.1.4.16 INQUIRY: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she wants to get the receipt or not.



[Function Key Type]



[Touch Type]

7.3.1.4.17 INQUIRY: SELECT ACCOUNT TO INQUIRE

This screen is to ask a customer which account he/she wants to inquire



[Function Key Type]



[Touch Type]

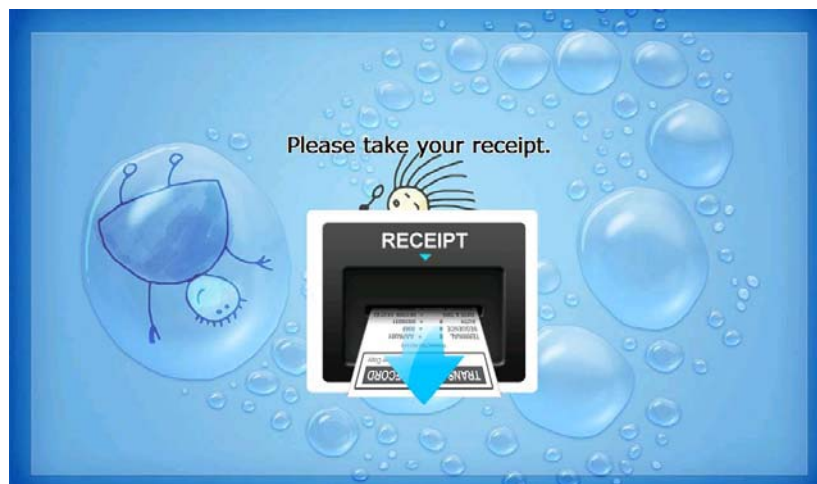
7.3.1.4.18 INQUIRY: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



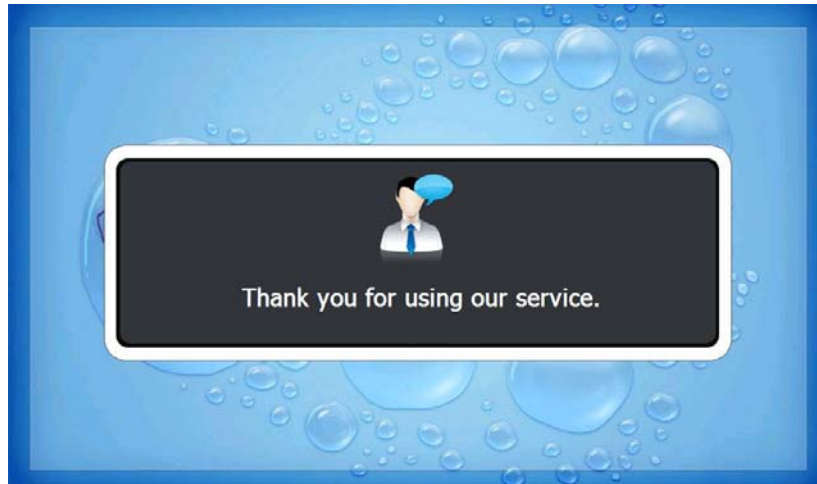
7.3.1.4.19 INQUIRY: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.1.4.20 INQUIRY: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.2 TRANSACTION PROCESS (SPANISH)

7.3.2.1 AP MAIN

This is a main AP screen and the customer can start to do transaction by inserting and quickly removing the card on card reader.



7.3.2.2 SELECT LANGUAGE

Language a customer would like to use in transaction can be selected in this screen.



[Function Key Type]



[Touch Type]

7.3.2.3 Enter PIN

This screen is to enter PIN of customer's card



7.3.2.4 SELECT TRANSACTION

This screen is to select transaction type the customer wants to transact such as withdrawal, balance inquiry and transfer is selected in this screen.



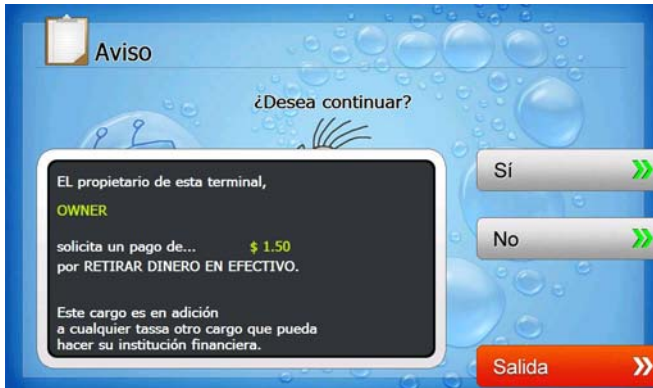
[Function Key Type]



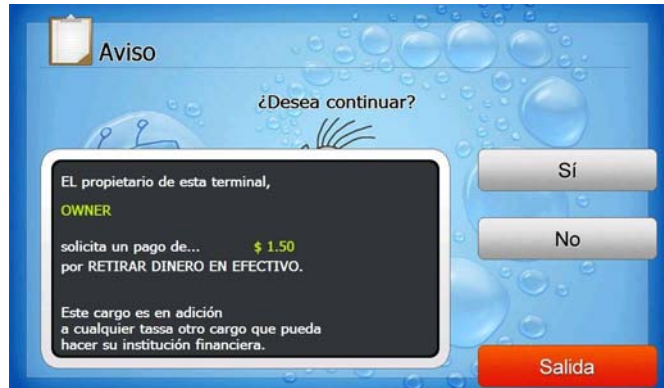
[Touch Type]

7.3.2.4.1 WITHDRAWAL: FEE NOTICE

This screen is to show a customer the information of surcharge.



[Function Key Type]



[Touch Type]

7.3.2.4.2 WITHDRAWAL: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she wants to get the receipt or not.



[Function Key Type]



[Touch Type]

7.3.2.4.3 WITHDRAWAL: SELECT ACCOUNT (Checking, Saving, Credit Card)

This screen is to ask a customer where he/she wants to withdraw in checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.2.4.4 WITHDRAWAL: SELECT THE AMOUNT OF WITHDRAWAL

This screen is to select the amount of withdrawal. If there is not any amount to withdraw, please select the "OTHER" key and can input the amount the customer would like to withdraw.

1) Amount Selection



[Function Key Type]



[Touch Type]

2) Amount Input (Other)



[Function Key Type]



[Touch Type]

7.3.2.4.5 WITHDRAWAL: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



7.3.2.4.6 WITHDRAWAL: DISPENSING MONEY AND TAKE MONEY

This screen is to show the customer that his/her request amount is dispensing and to notify the customer to take his/her money.



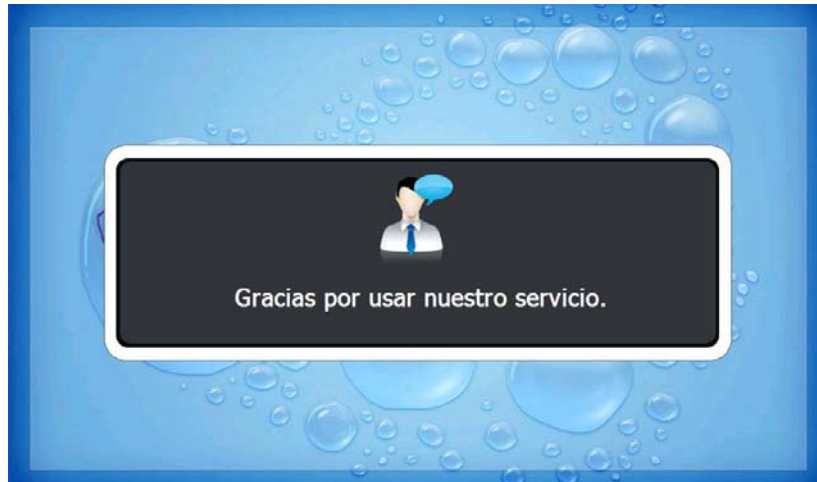
7.3.2.4.7 WITHDRAWAL: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.2.4.8 WITHDRAWAL: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.2.4.9 TRANSFER: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she gets the receipt or not.



[Function Key Type]



[Touch Type]

7.3.2.4.10 TRANSFER: SELECT ACCOUNT TO TRANSFER FROM

This screen is to ask a customer where he/she wants to transfer from; checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.2.4.11 TRANSFER: SELECT ACCOUNT TO TRANSFER TO

This screen is to ask a customer where he/she wants to transfer to; checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.2.4.12 TRANSFER: ENTER TRANSFER AMOUNT

This screen is to select the amount of transfer.



[Function Key Type]



[Touch Type]

7.3.2.4.13 TRANSFER: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



7.3.2.4.14 TRANSFER: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.2.4.15 TRANSFER: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.2.4.16 INQUIRY: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she wants to get the receipt or not.



[Function Key Type]



[Touch Type]

7.3.2.4.17 INQUIRY: SELECT ACCOUNT TO INQUIRE

This screen is to ask a customer which account he/she wants to inquire



[Function Key Type]



[Touch Type]

7.3.2.4.18 INQUIRY: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



7.3.2.4.19 INQUIRY: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.2.4.20 INQUIRY: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.3 TRANSACTION PROCESS (FRENCH)

7.3.3.1 AP MAIN

This is a main AP screen and the customer can start to do transaction by inserting and quickly removing the card on card reader.



7.3.3.2 SELECT LANGUAGE

Language a customer would like to use in transaction can be selected in this screen.



[Function Key Type]



[Touch Type]

7.3.3.3 Enter PIN

This screen is to enter PIN of customer's card



7.3.3.4 SELECT TRANSACTION

This screen is to select transaction type the customer wants to transact such as withdrawal, balance inquiry and transfer is selected in this screen.



[Function Key Type]



[Touch Type]

7.3.3.4.1 WITHDRAWAL: FEE NOTICE

This screen is to show a customer the information of surcharge.



[Function Key Type]



[Touch Type]

7.3.3.4.2 WITHDRAWAL: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she wants to get the receipt or not.



[Function Key Type]



[Touch Type]

7.3.3.4.3 WITHDRAWAL: SELECT ACCOUNT (Checking, Saving, Credit Card)

This screen is to ask a customer where he/she wants to withdraw in checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.3.4 WITHDRAWAL: SELECT THE AMOUNT OF WITHDRAWAL

This screen is to select the amount of withdrawal. If there is not any amount to withdraw, please select the "OTHER" key and can input the amount the customer would like to withdraw.

1) Amount Selection



[Function Key Type]



[Touch Type]

2) Amount Input (Other)



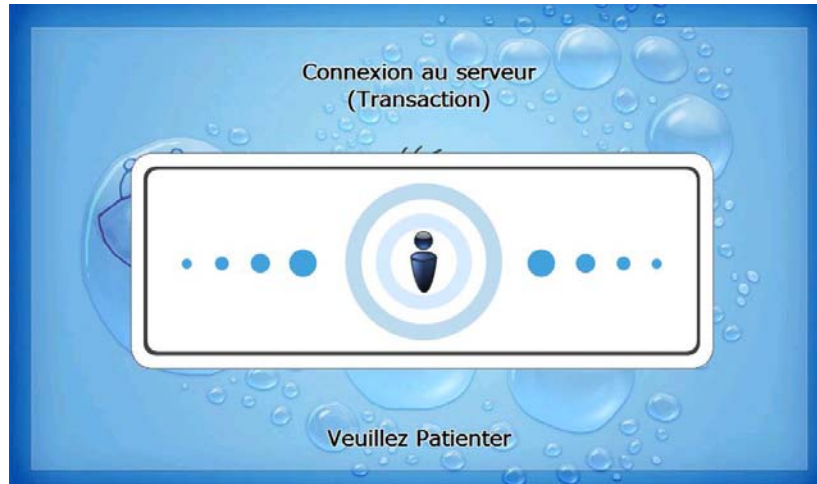
[Function Key Type]



[Touch Type]

7.3.3.4.5 WITHDRAWAL: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



7.3.3.4.6 WITHDRAWAL: DISPENSING MONEY AND TAKE MONEY

This screen is to show the customer that his/her request amount is dispensing and to notify the customer to take his/her money.



7.3.3.4.7 WITHDRAWAL: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.3.4.8 WITHDRAWAL: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.3.4.9 TRANSFER: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she gets the receipt or not.



[Function Key Type]



[Touch Type]

7.3.3.4.10 TRANSFER: SELECT ACCOUNT TO TRANSFER FROM

This screen is to ask a customer where he/she wants to transfer from; checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.3.4.11 TRANSFER: SELECT ACCOUNT TO TRANSFER TO

This screen is to ask a customer where he/she wants to transfer to; checking, saving, credit card



[Function Key Type]



[Touch Type]

7.3.3.4.12 TRANSFER: ENTER TRANSFER AMOUNT

This screen is to select the amount of transfer.



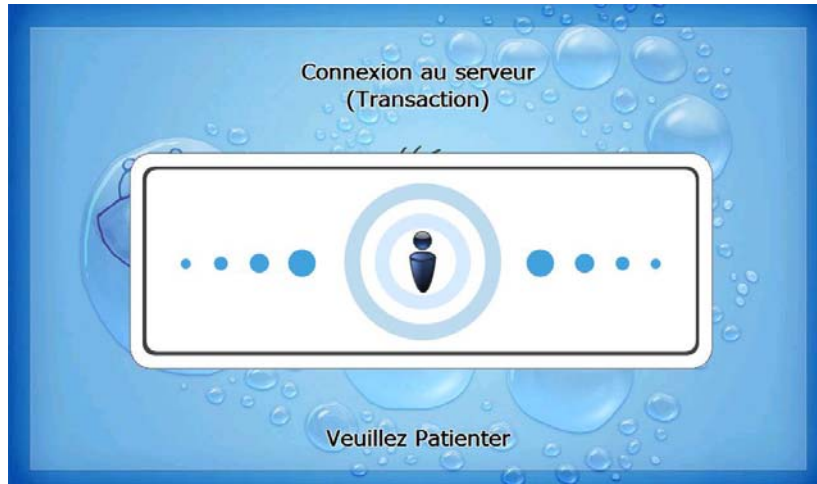
[Function Key Type]



[Touch Type]

7.3.3.4.13 TRANSFER: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



7.3.3.4.14 TRANSFER: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.3.4.15 TRANSFER: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.3.3.4.16 INQUIRY: SELECT RECEIPT PRINTING OR NOT

This screen is to ask a customer if he/she wants to get the receipt or not.



[Function Key Type]



[Touch Type]

7.3.3.4.17 INQUIRY: SELECT ACCOUNT TO INQUIRE

This screen is to ask a customer which account he/she wants to inquire



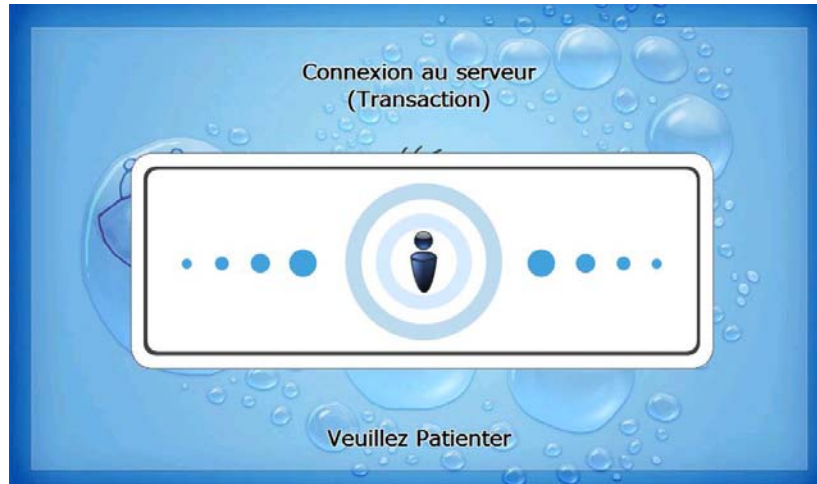
[Function Key Type]



[Touch Type]

7.3.3.4.18 INQUIRY: CONNECTING HOST

This screen is to show the customer that the transaction is in progress.



7.3.3.4.19 INQUIRY: PRINTING TRANSACTION AND TAKE RECEIPT

This screen is to show the customer that his/her transaction record is printing and to notify the customer to take his/her receipt.



7.3.3.4.20 INQUIRY: THANK YOU

This screen is to show the customer that the transaction has been successfully completed.



7.4 Supported USB Memory and HUB

7.4.1 USB Memory

7.4.1.1 Supported USB Memory

No.	Vendor	Modem Model	Memory	Remarks
1	Sony Corporation (VID:0x054C)	Storage Media (PID:0x0243)	512MB	
2	SMI Corportation (VID:0x090C)	USB Disk (PID:0x1000)	512MB	
3	Kingston (VID:0x0951)	Data Traveler (PID:0x1603)	512MB	
4	pq1 (VID:0x3538)	USB Mass Storage Device (PID:0x0042)	512MB	
5	LEXAR Media (VID:0x05DC)	JD FIREFLY (PID:0A560)	1GB	
6	LG (VID:0x090C)	USB Driver (PID:0x1000)	1GB	
7	Memorex (VID:0x12F7)	TD Classic 003B (PID:0x1A00)	1GB	

☞ VID : Vendor ID, PID : Product ID

7.4.1.2 Supported Memory Specifications

- 1) File System: FAT
- 2) Number of supported drivers: 1
- 3) Memory: 2GB or below

☞ Example : 1) SANDisk 512MB is not supported because it has 2 file systems.
(CDFS and FAT)

2) Sony Storage Media is supported because it is FAT, 1 driver and 512 MB size.

7.4.2 Supported USB HUB Types

No.	Vendor	Modem Model	VID(HUB CHIP Vendor)	PID
1	Macsense Connectivity	UH-Mini4i	0x05E3(Genesys Logics inc)	0x0606
2	INLAND	Inland USB2.0 HUB	0x0409(NEC Corporation)	0x005A
3	VAKO International Inc	USB 2.0 Aluminum HUB	0x05E3(Genesys Logics inc)	0x0606
4	PPA Int'l	I.Connector(PPA 4Port HUB)	0x05E3(Genesys Logics inc)	0x0606
5	ZIO	USB 2040 Mini	0x05E3(Genesys Logics inc)	0x0606
6	DSP Inc	E-Star QU24WR	0x05E3(Genesys Logics inc)	0x0606

7.5 Advertisement Image Update Guide

7.5.1 Preparation

Software Update function in Nautilus Hyosung's Windows CE Machine is applicable to update advertisement images.

7.5.1.1 Supported Image Format

The following table describe the supporting format of welcome advertisement image

Model	Image Size	DPI	Color	File Format	Max Size (one image)
NH-2700	1024 X 600	72	24bit color	JPEG	300KB

The following table describe the supporting format of transaction advertisement image

Model	Image Size	DPI	Color	File Format	Max Size (one image)
NH-2700	753 X 225	72	24bit color	JPEG	160KB

The following table describe the file name and path of advertisement images. The path in blow table indicates image size is 1024 X 600

Welcome Advertisement	File Name	Path
Screen #1	Adv_01.jpg	\\ATM\\Advertisement\\1024_600
Screen #2	Adv_02.jpg	\\ATM\\Advertisement\\1024_600
Screen #3	Adv_03.jpg	\\ATM\\Advertisement\\1024_600
Screen #4	Adv_04.jpg	\\ATM\\Advertisement\\1024_600
Screen #5	Adv_05.jpg	\\ATM\\Advertisement\\1024_600
Screen #6	Adv_06.jpg	\\ATM\\Advertisement\\1024_600

Transaction Advertisement	File Name	Path
Screen #1	TranAdv_01.jpg	\\ATM\\Advertisement\\1024_600
Screen #2	TranAdv_02.jpg	\\ATM\\Advertisement\\1024_600
Screen #3	TranAdv_03.jpg	\\ATM\\Advertisement\\1024_600
Screen #4	TranAdv_04.jpg	\\ATM\\Advertisement\\1024_600
Screen #5	TranAdv_05.jpg	\\ATM\\Advertisement\\1024_600
Screen #6	TranAdv_06.jpg	\\ATM\\Advertisement\\1024_600

7.5.1.2 Updating your own UpdateInfo.dat (Optional)

Advertisement images are updated using the software update program. While updating program proceeds, a line of message shows up in the main screen. If you want to change the message, just edit UpdateInfo.dat. The message length is up to 40 characters. A sample content is as follows. You can replace "A sample message.(V1.21)" to your own message.

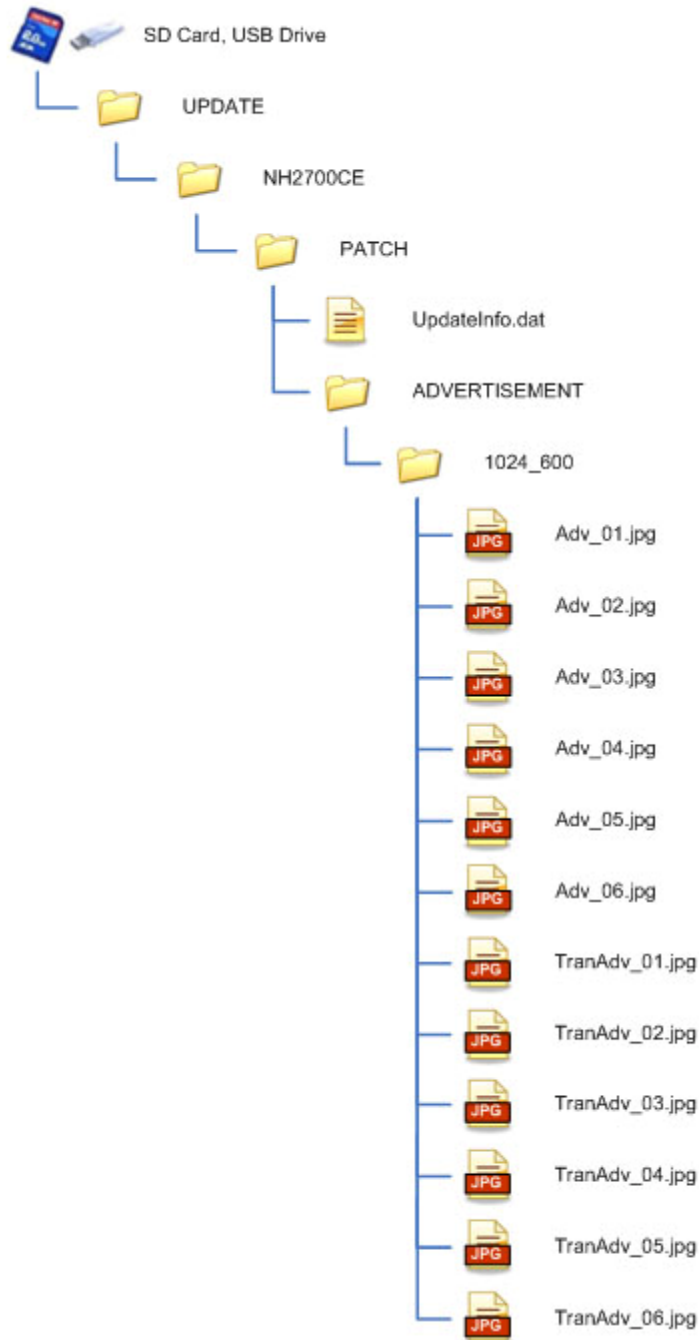
A sample message. (V1.21)

UpdateInfo.dat

7.5.1.3 Makeing SW Update media

- 1) Make "UPDATE" folder in the USB memory drive or the SD Card.
- 2) Make "NH2700CE" folder in the "UPDATE" folder.
- 3) Make "PATCH" folder in the "NH2700CE" folder.
- 4) Copy "UpdateInfo.dat" to under "PATCH" folder. (Optional)
- 5) Make "ADVERTISEMENT" folder in the "PATCH" folder.
- 6) Make "1024_600" folder in "ADVERTISEMENT" folder.
- 7) Copy all image files to under "1024_600" folder.(check the file name)

The following picture describes the layout of the USB Drive or SD Card.



(If you have the master media which get from Nautilus Hyosung, you can see the same layout except “Patch” folder. “Patch” folder is replaced “master” folder.)

7.5.2 Execute updating

7.5.2.1 Software Update

Advertisement images can be installed or updated by Software Update tool in supervisor menu.

You can update advertisement images by software downloading with MoinView server. Please refer to the MoinView manual for the detail downloading functionality.

1) Press SYSTEM SETUP button.



2) Press SYSTEM CONTROL button.



3) Plug the USB drive in USB slot and press left-top function key, "SOFTWARE UPDATE".



4) Press left function key, "YES".



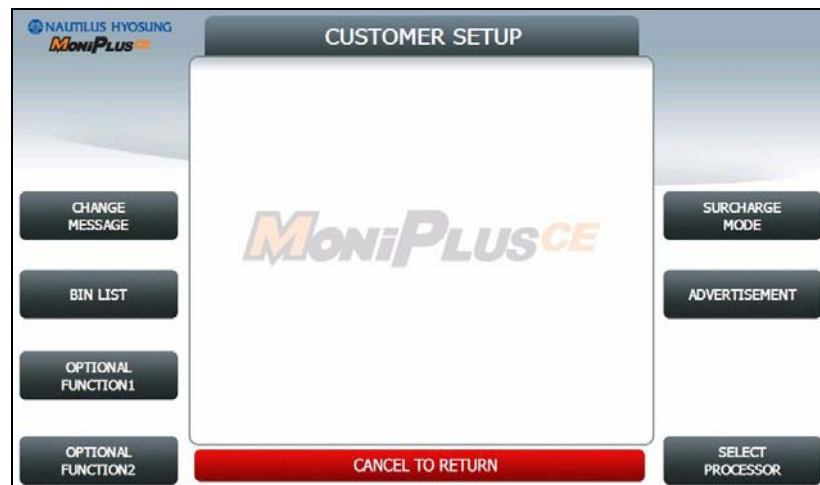
When "YES" button is selected, new software in USB drive is transferred to a dedicated directory(ATM) and ATM will start to reboot automatically.

7.5.2.2 Enable Welcome Advertisement

You can enable or disable Welcome Advertisement in the supervisor menu.



1) Press CUSTOMER SETUP button



2) Press "WELCOME ADVERTISEMENT" button



3) Press "WELCOME ADVERTISEMENT" button



4) You can enable or disable Advertisement images to view by pressing “SCREEN” Key.

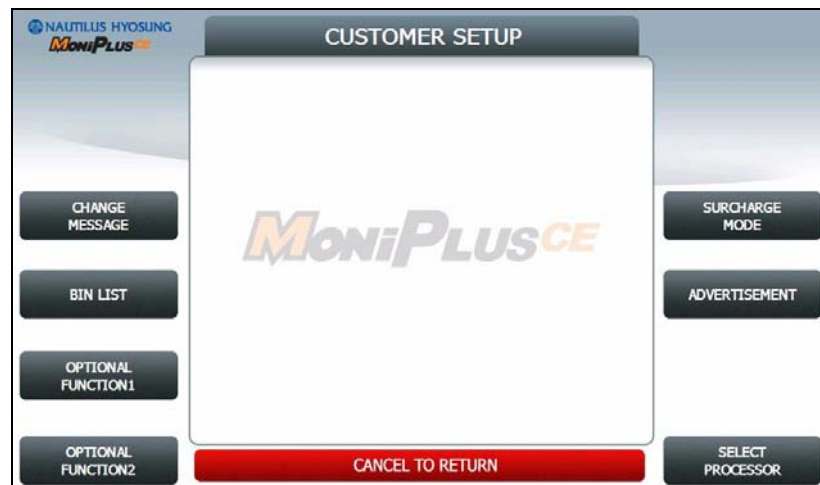


7.5.2.3 Enable Transaction Advertisement

You can enable or disable Transaction Advertisement in the supervisor menu.



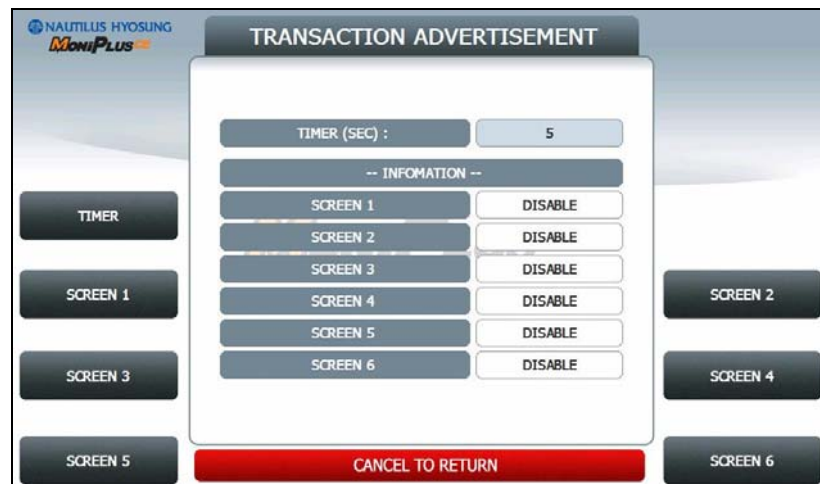
1) Press CUSTOMER SETUP button



2) Press "ADVERTISEMENT" button



3) Press "TRANSACTION ADVERTISEMENT" button



4) You can enable or disable welcome dvertisement images to view by pressing “SCREEN” Key.



5) You can enable or disable transaction dvertisement images to view by pressing “SCREEN” Key.



7.5.3 Making MoniView update media

All supported image format refer to “Supported Image Format”

- 1) Make “PATCH” folder.
- 2) Copy “UpdateInfo.dat” to under “PATCH” folder. (Optional)
- 3) Make “ADVERTISEMENT” folder in the “PATCH” folder.
- 4) Make “1024_600” folder in “ADVERTISEMENT” folder.
- 5) Copy all image files to under “1024_600” folder.(check the file name)
- 6) Make comperessed file like the below layout.

The following picture describe the layout of Zip file



And you can download the “Patch.zip” using MoniView.

7.6 Background Image Update Guide

7.6.1 Preparation

Software Update function in Nautilus Hyosung's Windows CE Machine is applicable to update advertisement images.

7.6.1.1 Supported Image Format

The following table describe the supporting format of change background image

Model	Image Size	DPI	Color	File Format	Max Size (one image)
NH-2700	1024 X 600	72	24bit color	JPEG	300KB

The following table describe the file name and path of advertisement images. The path in blow table indicates image size is 1024 X 600

Background	File Name	Path
Screen #1	Back_1.jpg	\ATM\Screen\Backs\1024_600\Function (F/K) \ATM\Screen\Backs\1024_600\Touch (Touch)
Screen #2	Back_2.jpg	\ATM\Screen\Backs\1024_600\Function (F/K) \ATM\Screen\Backs\1024_600\Touch (Touch)
Screen #3	Back_3.jpg	\ATM\Screen\Backs\1024_600\Function (F/K) \ATM\Screen\Backs\1024_600\Touch (Touch)
Screen #4	Back_4.jpg	\ATM\Screen\Backs\1024_600\Function (F/K) \ATM\Screen\Backs\1024_600\Touch (Touch)
Screen #5	Back_5.jpg	\ATM\Screen\Backs\1024_600\Function (F/K) \ATM\Screen\Backs\1024_600\Touch (Touch)
Screen #6	Back_6.jpg	\ATM\Screen\Backs\1024_600\Function (F/K) \ATM\Screen\Backs\1024_600\Touch (Touch)

7.6.1.2 Updating your own UpdateInfo.dat (Optional)

Background images are updated using the software update program. While updating program proceeds, a line of message shows up in the main screen. If you want to change the message, just edit UpdateInfo.dat. The message length is up to 40 characters. A sample content is as follows. You can replace “A sample message.(V1.21)” to your own message.

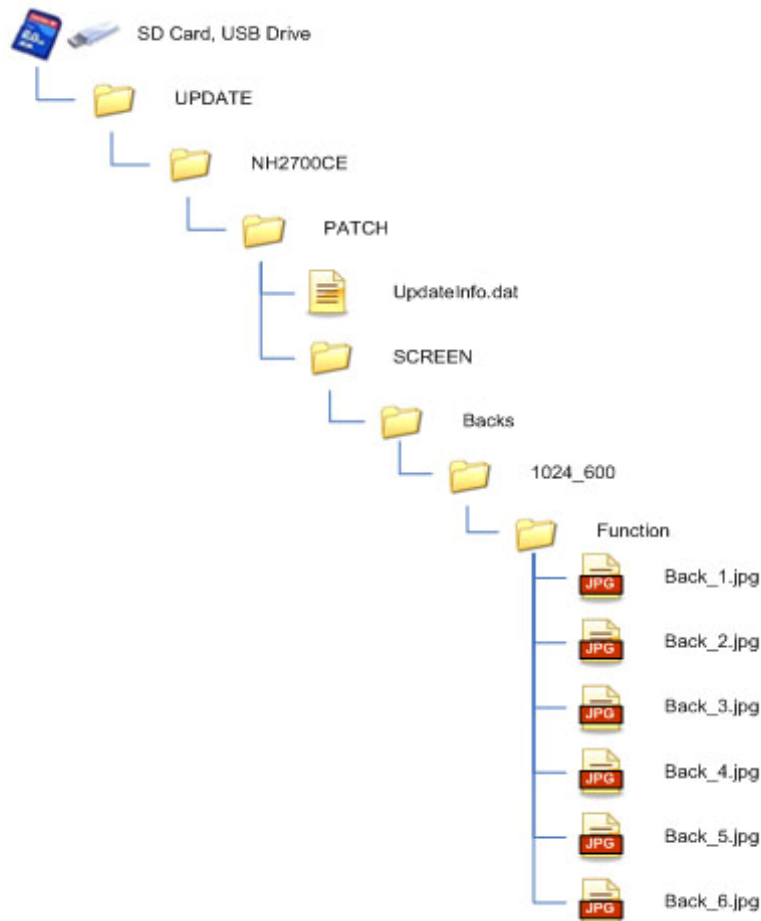
A sample message. (V1.21)

UpdateInfo.dat

7.6.1.3 Makeing SW Update media

- 1) Make "UPDATE" folder in the USB memory drive or the SD Card.
- 2) Make "NH2700CE" folder in the "UPDATE" folder.
- 3) Make "PATCH" folder in the "NH2700CE" folder.
- 4) Copy "UpdateInfo.dat" to under "PATCH" folder. (Optional)
- 5) Make "SCREEN" folder in the "PATCH" folder.
- 6) Make "Backs" folder in "SCREEN" folder.
- 7) Make "1024_600" folder in "Backs" folder.
- 8) If ATM is function type, make "Function" folder in "1024_600" folder
- 9) If ATM is touch type, make "Touch" folder in "1024_600" folder
- 10) Copy all image files to under "Function" or " Touch" folder.(check the file name)

The following picture describes the layout of the USB Drive or SD Card.



(If you have the master media which get from Nautilus Hyosung, you can see the same layout except "Patch" folder. "Patch" folder is replaced "master" folder.)

7.6.2 Execute updating

7.6.2.1 Software Update

Advertisement images can be installed or updated by Software Update tool in supervisor menu.

You can update advertisement images by software downloading with MoinView server. Please refer to the MoinView manual for the detail downloading functionality.

1) Press SYSTEM SETUP button.



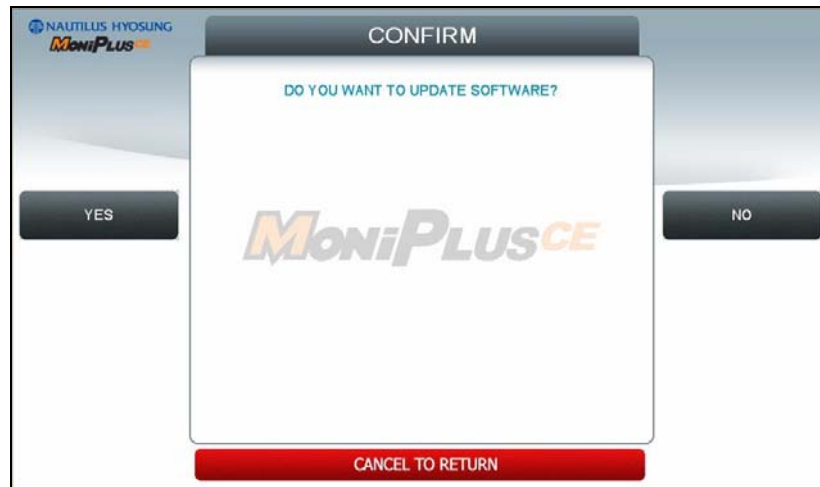
2) Press SYSTEM CONTROL button.



3) Plug the USB drive in USB slot and press left-top function key, "SOFTWARE UPDATE".



4) Press left function key, "YES".



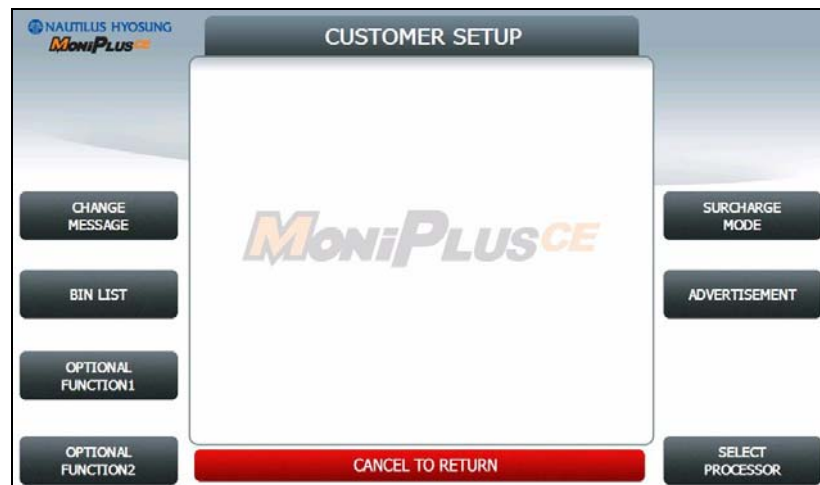
When "YES" button is selected, new software in USB drive is transferred to a dedicated directory(ATM) and ATM will start to reboot automatically.

7.6.2.2 Setup change background

You can set up change background option in the supervisor menu.



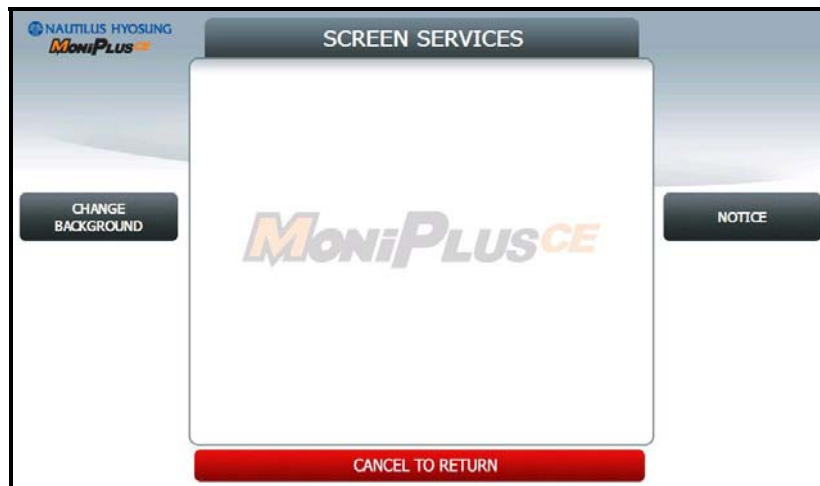
1) Press CUSTOMER SETUP button



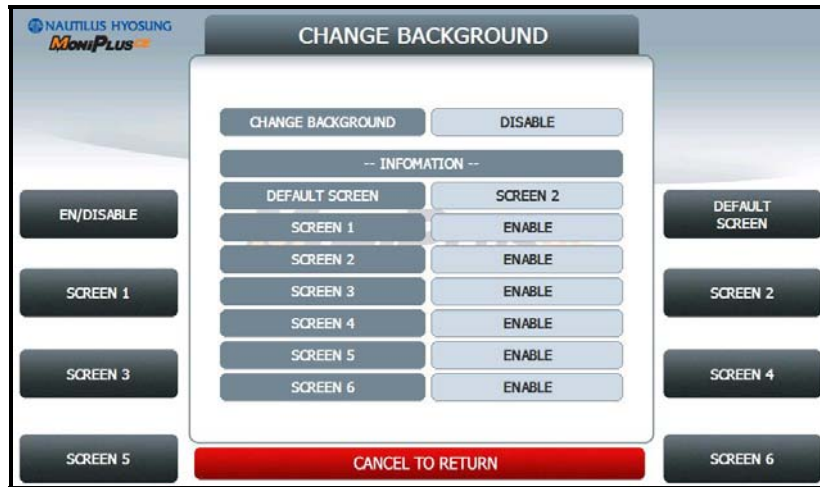
2) Press "OPTIONAL FUNCTION 2" button



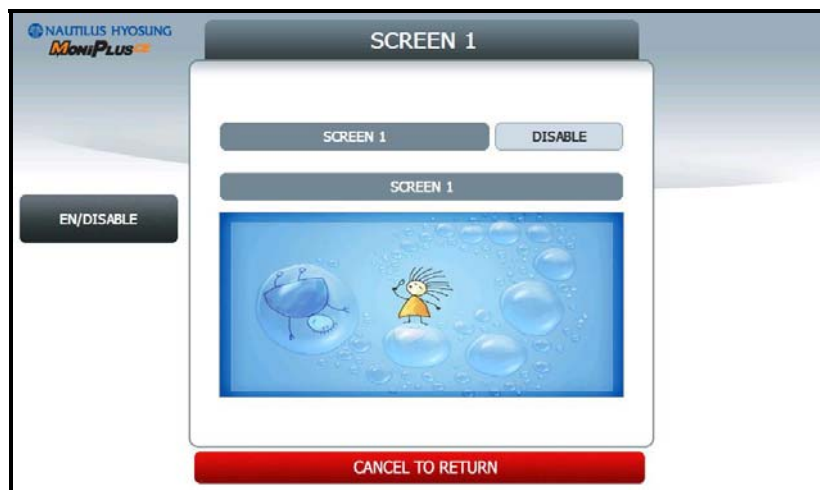
3) Press "SCREEN SERVICES" button



4) Press "CHANGE BACKGROUND" button



5) You can set up change background images to view by pressing "SCREEN" Key or "DEFAULT SCREEN".

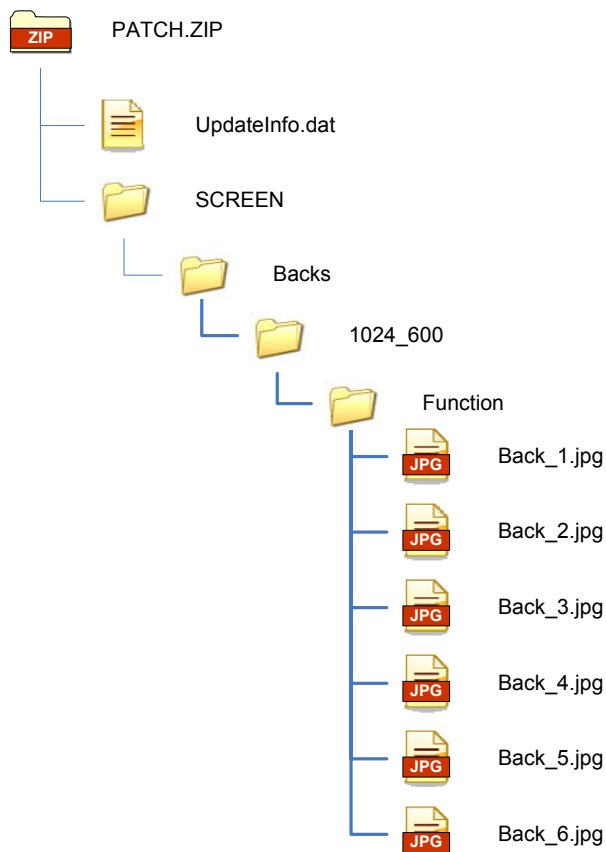


7.6.3 Making MoniView update media

All supported image format refer to “Supported Image Format”

- 1) Make “PATCH” folder.
- 2) Copy “UpdateInfo.dat” to under “PATCH” folder. (Optional)
- 3) Make “SCREEN” folder in the “PATCH” folder.
- 4) Make “Backs” folder in “SCREEN” folder.
- 5) Make “1024_600” folder in “Backs” folder.
- 6) If ATM is function type, make “Function” folder in “1024_600” folder
- 7) If ATM is touch type, make “Touch” folder in “1024_600” folder
- 8) Copy all image files to under “Function” or “ Touch” folder.(check the file name)
- 9) Make comperessed file like the below layout.

The following picture describe the layout of Zip file



And you can download the “Patch.zip” using MoniView.

7.7 Weather Service Guide

ATM from the idle screen, a feature that will display weather information.

Weather information set up and updated only by MoniView, ATM displaying weather information for today and tomorrow that gives

How to register and update detailed weather information, please see the manual of MoniView.

Ex) Weather Service Display Screen



7.8 Anti Skimming Service (Warning against illegal trials to card reader)

If your machine can support the Anti Skimming, it is possible to set the machine for detecting metallic stuff attached to card reader illegally. If this is set, once a offender attack the card reader, the screen would be changed into the one as like as below. This screen represents the current condition of the card reader under some kind of illegal attack.



If you want to make your ATM detect the illegal act, please refer to chapter '5.8.7.2' '5.8.7.2.1' ,page 108-109, in Operator Function Manual for details.