Dashen Bank S.C / E-Banking Services Dept.
An easy guide to
POS OPERATION

BANKING

Dashen
Bank

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An easy guide to
POS OPERATION

This manual is designed to be a handy tool to operate on Point of Sale Terminal to be used by Area Banks for cash disbursement and merchants for payment purposes. It covers the basic steps that must be followed to process an encashment and purchase transaction.

Contents

1 Terminal Type

Standalone Terminal/portable
These terminals can be used as standalone if the communication is either telephone line or TCP/IP. If the connectivity used is GPRS, it can be used as portable.

2 Terminal Parts

Thus, before proceeding to transaction, it would be important to understand the parts of the terminal. The functions of each parts shall be described as the transaction process flow is explained.
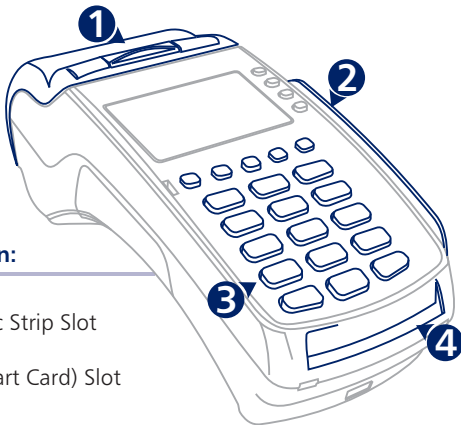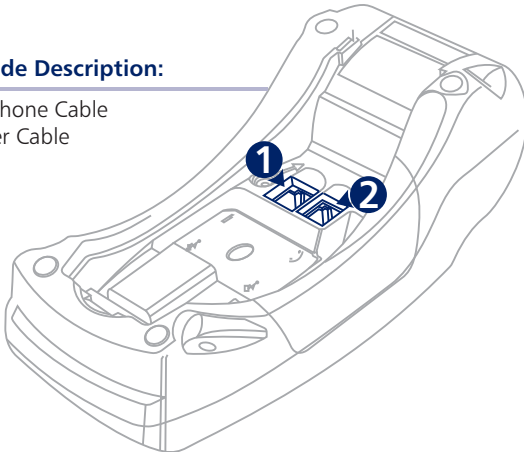

Description:

1. Printer
2. Magnetic Strip Slot
3. Key Pad
4. Chip(Smart Card) Slot

Back Side Description:

1. Telephone Cable
2. Power Cable

3 Performing POS Transaction
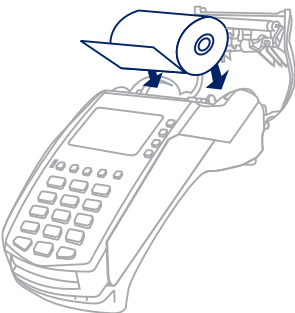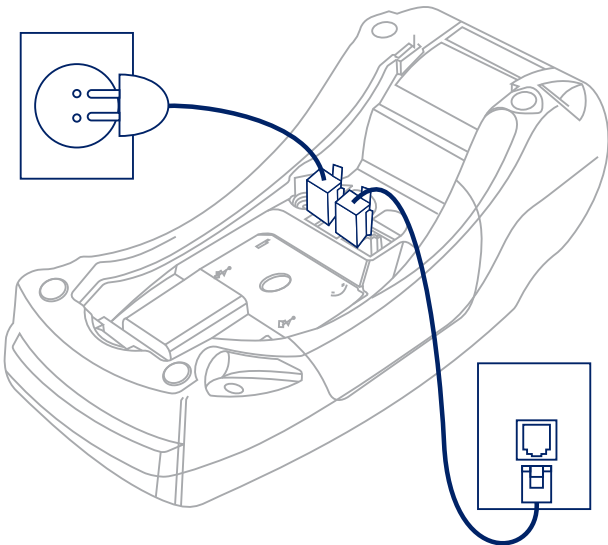
3.1. Transaction Pre-requisites

Before performing any card transaction on the terminal, there are some steps that you must follow in getting ready for transaction.

3.1.1. Supply Power To The Terminal
Plug in the power cable at the back of the terminal as indicated below.

3.1.2. Supply Communication Line
Plug in the telephone line at the back of the terminal on the modem.

3.1.3. Supply Receipt Paper
The terminal uses specially designed "Thermal paper" for receipt printing purposes. Check the printer for enough paper to proceed with the transaction. It's supplied exclusively by Dashen Bank. Make sure you have sufficient paper in stock if not please contact our office (Help Desk) for additional supply.

3.2. Transaction types
Terminals provided to you are configured to offer the following functions/services.

No	Function	Description
1	Purchase	You can use this function to provide service against card
2	Reversal	Use this function to cancel the last transaction performed using a card.
3	Reprint Receipts	You can use this function to print a receipt that you lost or improperly detached from the printer.
4	Report printing	At any time you can print report for the transactions you have done.
5	End of Day	A function to be used to send and clear the terminals memory to Dashen Bank's system.

From security point of view, Reversal and End of Day transactions are performed only by individuals provided with the supervisory privilege.

The terminals accept both chip cards (smart cards) and magnetic strip cards (Definitions of these two types of cards is available on Types of Card & Security features on this handout). Basically the whole transaction flow is the same except where the card will be used in the terminal. If it is smart card it is inserted in the chip slot whereas if it is magnetic strip card it will be swiped on the Magnetic -stripe slot (Refer to Page 2)

3.3. Transaction steps

3.3.1. Card Validation

STEP 1
Hold the card throughout the transaction.

STEP 2
Review basic card security features before performing transaction. Make sure wether the card is VISA, Union Pay and MasterCard branded since Dashen Bank currently accepts only these transactions (updates to receive other type of cards will be communicated formally by Dashen Bank). Please refer to the card physical feature check up guide.

3.3.2. Transaction processing

STEP 1

The first thing you will see when the terminal is powered up and ready to perform a transaction is the standby screen shown here.

```
      DASHEN BANK
     <CURRENT DATE>
   INSERT / SWIPE CARD/
    PRESS FUNCTION KEY
       ↓        ↓
```
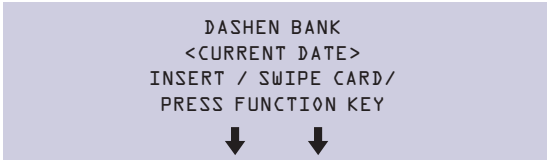
STEP 2

Validate Card using the terminal; this step differs depending on the type of card you have at hand (i.e. chip(smart) card or Magnetic strip card only)

If the card is Smart Card, Insert the card to the chip slot of the terminal. Now you will proceed to step 3.
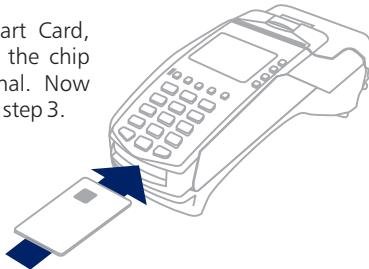
If the card is only magnetic strip card or if the chip is not readable, swipe the card at the Magnetic-strip reader slot.
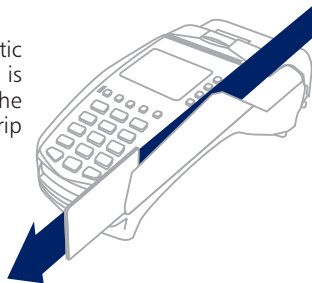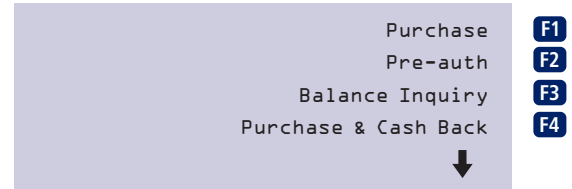

After the terminal captures the required information, it will prompt you with the following screen to type the last four digits on front of the card.

```
          INPUT

     Last 4 number on
     front of card (CCD)

                   ----
```
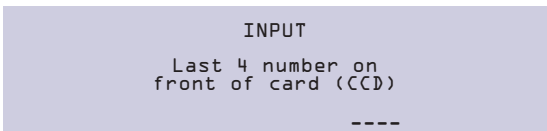
Input the requested numbers and press "ENT" key to proceed.

STEP 3

Select the type of transaction you want to perform by pressing the number next to transaction type.

```
        Purchase          F1
        Pre-auth          F2
    Balance Inquiry       F3
  Purchase & Cash Back    F4
            ↓
```

F1 Purchase

If you want to provide purchase service for customer against his/her card, select purchase by pressing number F1. This screen will be displayed, for entering the transaction amount.

```
        Sale Amount

          00.00
```
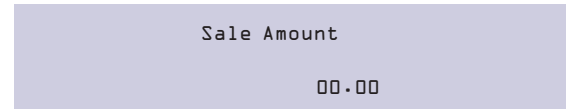
Remember that the transaction amount you will enter is always in Ethiopian Birr. Simply type the amount without considering the decimal place. The terminal will consider the last two digits as cents and places a dot before them. For example, if the transaction amount is ETB 40.00, all you have to type is 4000. The terminal will accept it as 40.00. Also note that the transaction amount to be entered depends on the type of transaction as given below.

F3 Reversal

To cancel the last transaction due to any reason, you can use F3. Type supervisor Name and PIN respectively. If the PIN is correct, the terminal will remember the amount of the last transaction and cancel it.

```
  Pre-auth completion    F1
         Reversal         F2
          Refund          F3
                          F4
            ↑
```
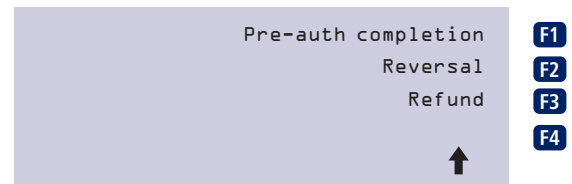
So far the card itself has been verified and the transaction amount is properly entered. It is now time to make sure that the customer is really the owner of the card. There are two ways of checking the cardholder:

Using PIN (Personal Identification Number)

The cardholder has a unique number known only to him/her. The terminal will request you to pass the terminal to the cardholder to enter his/her PIN. Give privacy to the cardholder. You will be prompted to the next screens. If the PIN he/she entered is correct, the terminal will proceed to the next step.

```
     Information              INPUT

   Pass Terminal          Amount 1.00
        to                 Enter PIN
   Card Holder                      ****
```

Using signature

Not all cards have PIN. If the terminal does not require for PIN, you should compare his/her signature at the back of the card with the one he/she signs on the receipt. It is safe to always obtain signature of the cardholder on our copy of the receipt, whether the transaction is PIN based or not.

STEP 4 After having the details of the cardholder and the transaction, the terminal will dial out to Dashen Bank main system to get authorization. Normally, it takes nearly 15 to 20 seconds to get authorization from the system depending on the quality of your telephone line. The following screens will be displayed during this time.

```
          COMMUNICATING

        D[1]T 0114167469
        Waiting to Connect
          <00> Seconds


          Authorization
           Please wait


        Waiting for ENQ
```

STEP 5 If the transaction is approved, two copies of receipt will be printed. One is Branch copy which should be kept signed, while the other is Customer's copy; see the following description for the key fields of the receipt. If the transaction is declined or failed, a response message will be printed.

Fig. 1.3 Merchant Copy

```
           /\
          /||\
         /_||_\
        (o)  (o)

   ** Merchant Receipt**
       MERCHANT NAME

  yyyy/MM/dd        HH:mm
  T:xxxxxxxx
  R:xxxxxxxxxxxx
  C:xxxxx
  N:9999            I:H
  AP:00000          B:001
  PAN:0000
  Purchase
  Amount:        __0.00
                 _____
  TOTAL  ETB    __0.00
                 _____
  -------------------
    Customer Signature
     I Agree To Pay
      This Amount.
  -------------------
  Transaction Processed
    By Dashen Bank
```

Fig. 1.2 Customer Copy

```
           /\
          /||\
         /_||_\
        (o)  (o)

   ** Customer Receipt**
       MERCHANT NAME

  yyyy/MM/dd        HH:mm
  T:xxxxxxxx
  R:xxxxxxxxxxxx
  C:xxxxx
  N:9999            I:H
  AP:00000          B:001
  PAN:0000
  Purchase
  Amount:        __0.00
                 _____
  TOTAL  ETB    __0.00
                 _____
  -------------------
    Customer Signature
     I Agree To Pay
      This Amount.
  -------------------
  Transaction Processed
    By Dashen Bank
```

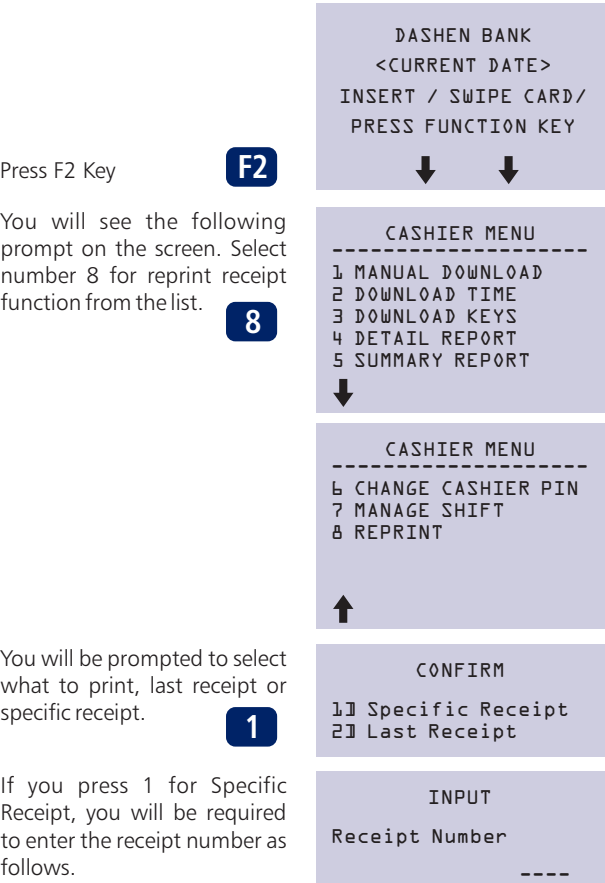| Field Value	Description
yyyy/MM/dd	date of transaction
HH:mm	time of transaction
T	8 digit Terminal ID
R	12 digit Retailer ID used to identify the merchant uniquely
N:9999	Receipt number
AP	6 digit approval code generated by the system, this number indicates that the transaction has been completed and approved.
PAN	Last 4 numbers on the Front of the card referred to as PAN Number
B	indicates batch number
Cash Advance	Transaction type, in this case Cash Advance is selected.
ETB	Shows currency of transaction. Every transaction processed only in Ethiopian Birr.
Total	Total amount for Purchase/reversal in Local Currency.

Make sure the cardholder signs on merchant receipt, verify the signature against the card and return the Card along with customer copy receipt to the cardholder.

4 Other POS terminal functions

In a normal day to day operation you might want to print reports of the transaction, clear the terminal or reprint receipts of a transaction. The POS terminal provides these functions as discussed below.
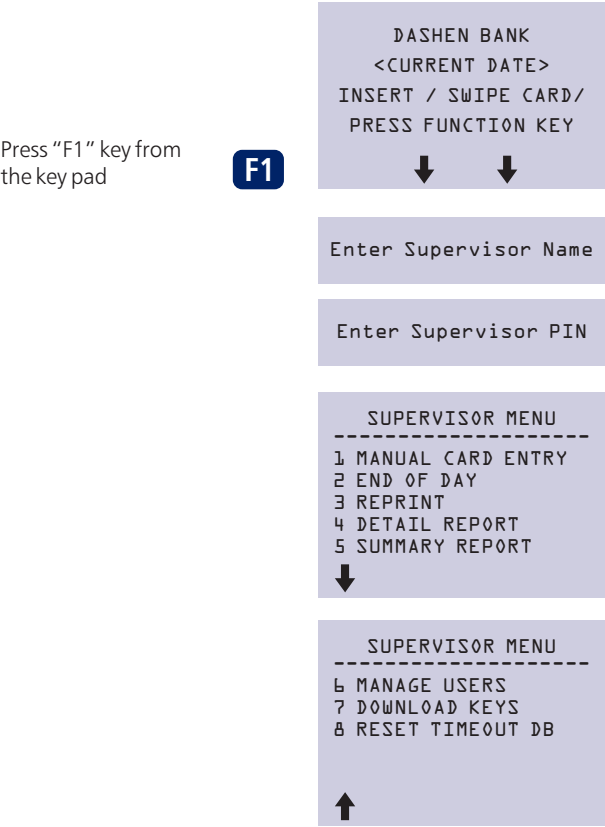
4.1. Reprint receipt

Always make sure that you have the two copies of the transaction receipts. Remember, it is always a good practice for you to have a signed copy of your receipt even if the card with which the transaction is made requires PIN. But sometimes you might need to reprint the receipt. This is how you print receipt.

```
      DASHEN BANK
     <CURRENT DATE>
   INSERT / SWIPE CARD/
    PRESS FUNCTION KEY

        ↓      ↓
```

Press F2 Key   **F2**

You will see the following prompt on the screen. Select number 8 for reprint receipt function from the list.   **8**

```
      CASHIER MENU
   --------------------
   1 MANUAL DOWNLOAD
   2 DOWNLOAD TIME
   3 DOWNLOAD KEYS
   4 DETAIL REPORT
   5 SUMMARY REPORT
   ↓
```

```
      CASHIER MENU
   --------------------
   6 CHANGE CASHIER PIN
   7 MANAGE SHIFT
   8 REPRINT

   ↑
```

You will be prompted to select what to print, last receipt or specific receipt.   **1**

```
        CONFIRM

   1] Specific Receipt
   2] Last Receipt
```

If you press 1 for Specific Receipt, you will be required to enter the receipt number as follows.

```
         INPUT

   Receipt Number

                ----
```

The receipt you require will be printed, explicitly indicating that it is a reprint

4.2. Printing Daily Report

At any time during the day you can get transaction reports from the terminal before running an end of day by entering Supervisory Pin. The terminal prints only two types of reports namely 'Detailed report' and 'Summary Report '. Detailed report is one that list all the details of each transaction performed during the day. These details include transaction type, time and date, amount, card number receipt number. While a Summary prints only the total of the transactions performed during the day, no details. A batch is the group transactions which are performed after the terminal is cleared last time. As a normal procedure you should print Batch total report at least once a day before an end of day. The 'Detailed report' will only be required at times when reconciliation becomes difficult or receipt is lost.

```
      DASHEN BANK
     <CURRENT DATE>
   INSERT / SWIPE CARD/
    PRESS FUNCTION KEY

        ↓      ↓
```

Press "F1" key from the key pad   **F1**

```
   Enter Supervisor Name
```

```
   Enter Supervisor PIN
```

```
     SUPERVISOR MENU
   --------------------
   1 MANUAL CARD ENTRY
   2 END OF DAY
   3 REPRINT
   4 DETAIL REPORT
   5 SUMMARY REPORT
   ↓
```

```
     SUPERVISOR MENU
   --------------------
   6 MANAGE USERS
   7 DOWNLOAD KEYS
   8 RESET TIMEOUT DB

   ↑
```

Select respective report type and the report will be printed to you automatically

4.3. Daily End of Day procedure

Finally, a supervisor must do an end of day on the terminal to clear the terminal memory and make it ready for next day transaction. An end of day is also necessary to send the daily transaction details to the Dashen Bank system for clearance. End of day can be done any time during the day, like between shifts or every end of business day.

Note: Reports and reprint receipts will not be available once an end of day is done. So make sure that you have printed reports and all receipts.

```
    DASHEN BANK
   <CURRENT DATE>
INSERT / SWIPE CARD/
  PRESS FUNCTION KEY
       ↓      ↓
```

Press "F1" key   **F1**

```
Enter Supervisor Name
```

```
Enter Supervisor PIN
```

Here press "2" from keypad to run the End of Day procedure.   **2**

```
  SUPERVISOR MENU
--------------------
1 MANUAL CARD ENTRY
2 END OF DAY
3 REPRINT
4 DETAIL REPORT
5 SUMMARY REPORT
       ↓
```

Now the terminal will dial out to the main system

```
    COMMUNICATING
 DEBIT 0114167469
 Waiting to Connect
```

```
    END OF DAY
    PLEASE WAIT
```

```
    END OF DAY
    SUCCESSFUL
```

If the terminal has successfully cleared and sent all the data available, the terminal will print an End Of Day report.

5 Error Reporting and Getting Help

It is sometimes possible that you may not succeed with your transaction and get an approval. A transaction might be declined by the bank or communication might fail. In any case, the terminal will display or print an error message or authorization message. Some of the common messages are discussed as follows.

5.1. Error messages

No	Error Message	Measure to be taken
1	Communication failure	Make sure there is no line break in the telephone line. Try another telephone.
2	ERROR Declined by SmartCard	This error happens when the time allocated for a certain transaction has timed out. Try to do the transaction again
3	INFORMATION Unable to Process Smart Card Please Swipe	Try to process the transaction by using the magnetic stripe
4	INFORMATION File Not Found	End of Day has already been processed. Remember to print report and receipt before doing an end of day.
5	INFORMATION Xtream Monitor	Press Menu Key ____ times Until You see LOAD PROGRAM Now press 'ENT' to see the following screen Select Program Dashen When You press enter, the default screen will appear.

6 Types of Card & Card Security Features

The type of card you will see these days are of two types in terms of the technology they use to store cardholder data. These are Magnetic Stripe Card and Chip based (smart) card. Magnetic stripe technology has been in the market for the last fifty years while chip technology is a recent phenomenon. A card can however have both chip and magnetic stripe with the priority being given to the first one during transaction processing. Brief explanations on each of them are given below.
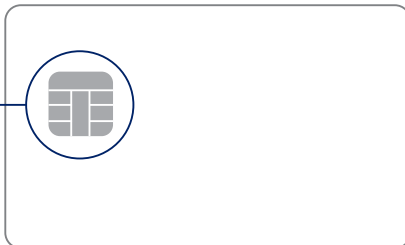
6.1. Type of Card

A. Magnetic Stripe (Mag-stripe) card – It is a plastic card having a thin stripe (tape) on the top that maintains cardholder data. When the tape is swiped in a POS terminal or ATM, the transaction will be initiated.
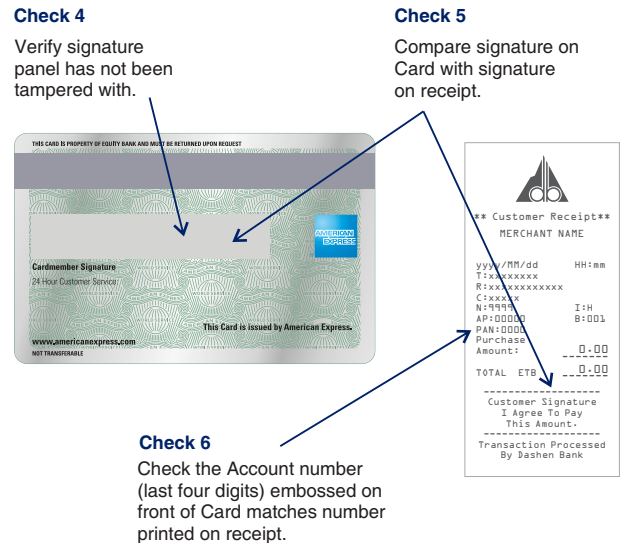

Magnetic Stripe

B. Chip Based (SMART) Card - It is also a plastic card that contains a computer chip on it to record a relatively more data than the mag-stripe tape. The chip is computer devised that can keep secrets of process data and interact with the accepting device. These kinds of cards are very much secured than mag-stripe cards.

Computer Chip

6.2 Card Security Features

Simple checks to avoid fraudulent cards:

Check 2
Ensure this number cannot be rubbed off.

Check 1
Ensure the Card is valid.

Check 3
This shows the year the Card member first joined American Express.
* Compare age of customer.

Check 4
Verify signature panel has not been tampered with.

Check 5
Compare signature on Card with signature on receipt.

Check 6
Check the Account number (last four digits) embossed on front of Card matches number printed on receipt.

Check 7
If suspicious, call customer service on +251. 114661643/+251 11 44672055

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