



**Standard**

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# SYSTEM 600

## Data Terminal Instructions

System 600-FST & System 600-EF

Part #8M00323 Rev. 5



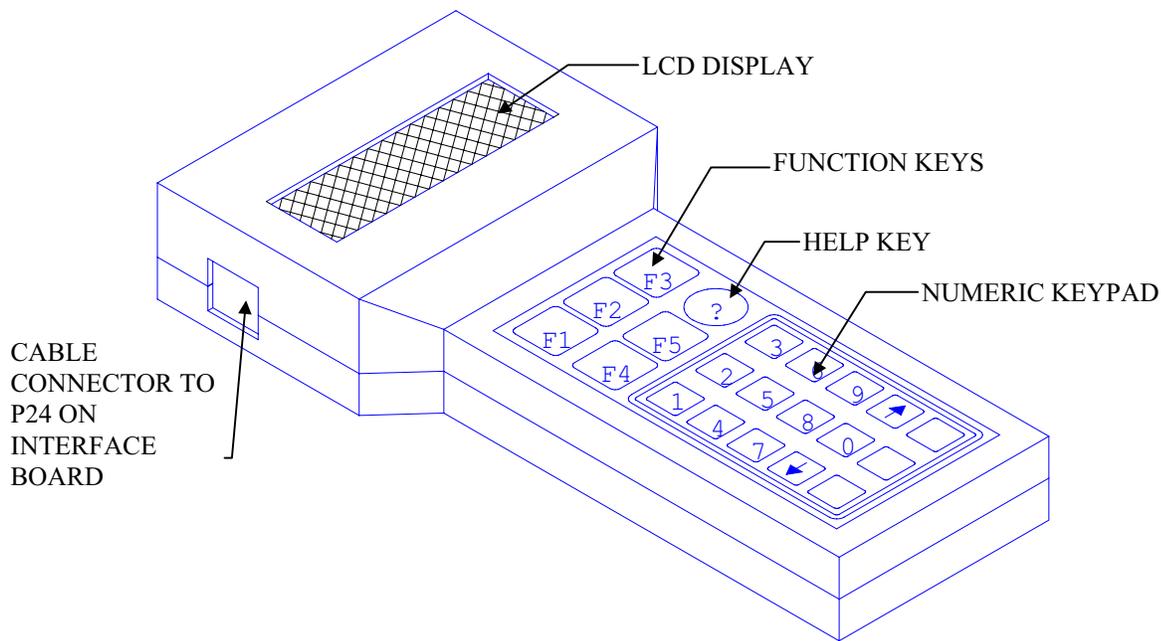
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## **DATA TERMINAL PROGRAMMING INSTRUCTIONS**

Use these instructions with Data Terminal software release 3.03 or later.

YOUR MACHINE IS EQUIPPED WITH A DATA TERMINAL.  
THIS TERMINAL ALLOWS YOU TO PROGRAM OR VIEW THE FUNCTIONS  
OF YOUR MACHINE

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## 1. GENERAL OPERATING INSTRUCTIONS

Your DATA TERMINAL is designed to allow you to change your machine programs, view an error log, display the note acceptors current software version, perform automatic system calibration and give you a complete audit of the machines transactions.

The top line on the display is called the "message line" and will give information or ask a question. The bottom line is called the "action line" and will display the key choices that are available to you for the question asked.

When you turn on your machine the Data Terminal will display the following:  
 Message line; "Main Menu"

Action Line; "F1 = Program"  
 "F2 = Diagnostics"  
 "F3 = Audit"  
 "F4 = Options"  
 "F5 = Reset"  
 " ? = Help"

By pressing the FUNCTION KEY specified you will access the desired MENU (Programming, Diagnostics, Audit, Reset). As an example, by pressing the F1 key you will access the Programming Menu.

Once in the desired Menu your Data Terminal will display a question or give you information.

## 2. MENU CHOICES

There are four MENUS available to you. Within each of the menus are SUB MENUS;

- PROGRAMMING (F1)
  - Bills Accepted / Security levels
  - Setting Hopper Values
  - Coin Dispense
  - Bill Dispense
  - Stacker Settings
  - Accumulate Settings
- DIAGNOSTICS (F2)
  - View Errors
  - Auto Calibration
  - Software Version
- AUDIT (F3)
  - View Audit
  - Last Bill In
  - Dump Hoppers
  - Clear Audit
- OPTIONS (F4)
  - Hopper Alarm
  - Setup
  - Time and Date
  - Personal Identification Number

## 3. PROGRAMMING MENU (Press F1)

YOU MAY STEP THROUGH EACH SUB MENU BY PRESSING F2. YOU MAY EXIT THIS MENU AT ANY TIME BY PUSHING THE F5 (MAIN MENU) KEY. Pressing the “?” will give help.

The programming menu allows you to select the bills you want to accept, the security level you want for each bill accepted, the value of the coins in each hopper, how you want the change dispensed, which hoppers you want the change dispensed from, and into which stacker compartment you want the bills placed. If your machine is equipped with a coin acceptor OR if you want to accumulate to a specific amount (e.g.; \$2.50) before dispensing a ticket or token you may want to modify the accumulate functions.

There are FIVE SUB-MENUS

### 3.1. BILL ACCEPTANCE / SECURITY LEVEL

Your Data Terminal will display the following to see if you want to be in this sub-menu.

**“Bills accepted?” F1=YES F2=NO F5=MAIN MENU.**

If your answer is “YES”

You will be asked by the Data Terminal which bill denominations you want to accept. As an example, the first bill on your screen will be the \$1. If you want to accept this bill press F1 for “YES” or F2 for “NO”.

This will be followed by a question on the Security Level you want for all \$1 bills. “0” is the lowest and “9” is the highest. Most machines are factory set at “5”. You may change the security level by entering the new security level that you prefer. Pressing F1 “ACCEPT” will set the new security level and bring up the next bill for your consideration.

### **3.2. HOPPER VALUES**

Your Data Terminal will display the following question to determine if you want to be in this sub-menu; **“Set Hop Values?” F1=YES F2=NO F5=MAIN MENU.** If your answer is YES then the following will apply.

Each hopper in your machine must be given a ‘value’ for the coin that will be dispensed. **If a value is not given to a hopper the machine will assume that the hopper is not in operation and will not allow it to dispense coins.** In most cases this value is .25 (25 cents). If you are using nickel, dime, or dollar hoppers, the appropriate values would be .05, .10 or 1.00. Tokens or tickets are usually given a value of .25.

Your Data Terminal will display a message asking you to place a value on each of your hoppers. This has already been done at the factory, but if you desire to change it press F2 “CLEAR”, change the value, then press F1 “ACCEPT”. **You will want to program only those hoppers that are physically in your machine.** If it is a two (2) hopper machine, program the value of hoppers A & B only. If it is a three (3) or four (4) hopper machine program the value for the C hopper and/or the D hopper.

### **3.3. DISPENSE AMOUNTS**

In this operation you are being asked to determine how many coins you want dispensed from each hopper for each denomination of coin and bill accepted. It is usually best, when all of your hoppers have the same value, to dispense coins evenly from each hopper. This reduces the wear and tear on any single hopper and speeds up the dispense cycle. As an example, for a one dollar dispense in a two hopper machine that contains all quarters you will want to program 2 quarters from hopper “A” and 2 quarters from hopper “B”.

**“Coin Disp?” F1=YES F2=NO F5=MAIN MENU**

If you do not have a coin acceptor on your machine press F2 “NO” for the question. If you do have a coin acceptor you will want to program acceptance of nickels, dimes, quarters and dollars.

**“Bill Disp?” F1=YES F2=NO F5=MAIN MENU**

You will be asked to determine how many coins you want dispensed from each hopper for the bill denominations you have selected to accept. If you are satisfied that the dispense amount is correct press F1 “ACCEPT”. If you want to change the dispense amount press F2 “CLEAR”, enter the new setting, then press F1 “ACCEPT”.

### **3.4. STACKER SETTINGS**

The Data Terminal will display “**Stacker settings?**” **F1=YES F2=NO F5=MAIN MENU**. If you want to enter this sub-menu press F1 “YES”.

After being accepted all bills are placed in a “stacker”. These are available in a one (1), two (2), or three (3) compartment configuration. If your machine has a one (1) compartment stacker, all of your bills will automatically be placed in it. If you have a two (2) or three (3) compartment stacker, you can program into which compartment you want the bills placed. To reduce wear and tear on your stacker motor, it is best to have the denomination that you accept the most of placed in the #1 compartment.

You will be asked into which compartment you want each bill denomination placed. If you are satisfied with the current program simply press F1 “ACCEPT” and it will be retained. If you want to change the current program press F2 “CLEAR”, enter your preference and press F1 “ACCEPT”.

### **3.5. ACCUMULATE SETTINGS**

The Data Terminal will display the following message to determine if you want to enter this sub-menu “**accum settings?**” **F1=YES F2=NO F5=MAIN MENU**.

This function is used only when your machine is equipped with a coin acceptor or when you require an accumulation to a specific amount before dispensing a token or ticket. You will be asked to specify the amount you want to accumulate before a coin, token or ticket is dispensed. If the amount showing is correct press F1 “ACCEPT”. If not, press F2 “CLEAR”, enter the necessary change and press F1 “ACCEPT”.

You will next be asked which hopper(s) to dispense from and how many tokens or tickets you want to dispense for the accumulated amount that you have specified.

## **4. DIAGNOSTIC MENU (Press F2)**

The DIAGNOSTIC MENU allows you to view the error log, display the note acceptor’s software version, display the Data Terminals software version and perform Automatic Calibration.

There are FOUR SUB-MENUS for this section;

### **4.1. VIEW ERRORS (F1)**

This sub-menu will allow you to view the ‘errors’ or ‘problems’ that your machine may have encountered. By pushing F3 “CONTINUE” you can scroll through each of the recorded messages in this manner. At the end of the messages you will have a total error count. Your Owners Manual will help you determine what each message indicates. (See Note 2)

### **4.2. AUTO CALIBRATION (F2)**

In order to perform an AUTOMATIC CALIBRATION a calibration card is necessary. PLEASE READ YOUR OWNERS MANUAL FOR INSTRUCTIONS.

### **4.3. SOFTWARE VERSION (F3)**

This sub-menu of your Data Terminal will display the software version that is in your machine (Press F1). You can also display the software version that is installed in your Data Terminal (Press F2). This information is important when describing a problem to our Service Center.

### **4.4. SERVICE MENU (F4)**

This only applies to the System 600 and only if that acceptor has a magnetic security sensor. Pressing F4 will display a live magnetic security sensor reading for adjustment and troubleshooting. You **MUST** cycle power to get out of this mode.

## **5. AUDIT MENU (Press F3)**

The Audit Menu allows you to access the data required for auditing purposes. It will provide you with a total for coins accepted by your coin acceptor, display how many bills by denomination the machine has accepted and how many coins have been dispensed by each hopper. It will also allow you to review the last bills accepted, dump all hoppers and clear the audit.

### **5.1. VIEW AUDIT (F1)**

By pressing F1 "VIEW AUDIT" you will be able to see the dollar amount of the coins your machine has accepted through the coin acceptor. Press F3 "CONTINUE" to view the total money accepted by the machine. Press F3 "CONTINUE" to view the dollars by denomination that your machine has accepted. Continually pressing F3 "CONTINUE" will step you through each denomination.

After reviewing the bill denomination audit the Data Terminal will start to display the coins dispensed from each hopper.

### **5.2. LAST BILL IN (F2)**

You can step through a listing of the last ten bills by first entering F2 "LAST BILLS IN" then pushing F3 to display bills individually. Number 1 shows the most recent bill accepted. (See Note 2)

### **5.3. DUMP HOPPERS (F3)**

You can, under certain conditions, allow your machine to dispense all remaining coins in the hoppers. Please review your Owners Manual for details.

### **5.4. CLEAR AUDIT (F4)**

By pressing F4 "CLEAR AUDIT" you can clear your current audit and start from "0". To insure that you DO WANT TO CLEAR YOUR AUDIT you are asked a question "ARE YOU SURE?". Answer accordingly.

## **6. OPTIONS MENU (Press F4)**

These items may require software and or hardware changes to your note acceptor to work correctly.

### **6.1. HOPPER ALARM (F1)**

This feature is only used by the KEEPTRAC system and allows users to set an alarm condition that activates when the hopper is nearing a soldout state. See KEEPTRAC manual for additional information.

### **6.2. SETUP (F2)**

#### **6.2.1. Multiple Country Support**

This option changes the country/language the Data Terminal is programming for. Example: If set to U.S. the programmable bills will be \$1, \$5, \$10, and \$20. If the set to Mexico the programmable bills will be 10peso, 20peso, 50peso, 100peso, 200peso, 500peso. THIS SETTING MUST MATCH COUNTRY OF THE NOTE ACCEPTOR SOFTWARE TO WORK CORRECTLY. Current country/language options are U.S./English, Canada/English, Canada/French, and Mexico/Spanish.

#### **6.2.2. Tamper Time**

This feature resets a tamper error after a set time has elapsed. Setting the time value to "0" will disable this feature. Maximum time limit is 99 minutes. Pressing RESET (F4) on the Data Terminal will also clear a tamper error if this feature is enabled. (See Note 1)

#### **6.2.3. Hopper Transfer**

On a soldout, lockup, or error, the active hopper will transfer to another hopper(s) of an equal or lesser value(s). It will then complete the original transaction via the new hopper(s) and continue to perform until the soldout, lockout or error condition in the out of service hopper is rectified. Should the second hopper or even a third hopper fail through one of the above conditions an automatic transfer will take place to the next available hopper(s). If the lowest valued hopper in the unit goes out of service for any of the above conditions the changer will go out of service.

#### **6.2.4. Kill Relay**

Additional jackpot protection is available through a Kill Relay option. This option cuts power to the hoppers when they are not in use. Thus preventing the possibility of a hopper turning on due to some external force (tampering, acts of god). This option should not be used with tower lights, ticket dispensers, or card dispensers as it will interfere with the proper operation of these devices.

#### **6.2.5. Hold Escrow**

During a coin accumulation through the coin acceptor (example: 2 dimes + 1 nickel = quarter payout) a customer may deposit three dimes. If a five-cent hopper is not available the nickel can now be (a) held in escrow for the next customer if set to YES or (b) simply retained by the machine and not held in the escrow if set to NO.

### 6.2.6. Accumulate Override

This feature allows a deposited bill, which is of a greater value than the preprogrammed accumulate value, to override a previous deposit that was less than the accumulate value.

Example: A token machine is set for the following accumulate value = \$1.00 accumulate payout = 4 tokens, \$5.00 bill payout = 22 tokens. A customer deposits a quarter and then deposits a \$5 bill: the payout could be (a) 22 tokens + quarter if accumulate override is set to NO, or (b) 4 tokens + 17 quarters if accumulate override is set to YES.

#### Power Reset

This feature allows errors to be cleared by cycling the power OFF then ON rather than clearing the error using the Data Terminal. This feature is useful when the machine is to be operated without a Data Terminal

### 6.2.7. Mag Sec Off

This feature allows the magnetic security sensor to be disabled. Warning – Turning this off will reduce the machine's ability to reject certain types of counterfeit bills. (System 600 only)

### 6.2.8. Tamper Sec

This feature allows you to shut off certain anti-stringing checks that may results in nuisance tamper errors.

***WARNING** – Setting this to Low will reduce the effectiveness of the anti-stringing security features. If this feature is used the Fast Vend Shut Off feature should be enabled.*

### 6.2.9. Fast Vend Shutoff

**Each:** This security feature when activated, will automatically disable the machine if a maximum number (owner programmable) of any denomination bill is accepted in a programmed time frame. The maximum setting for the number of bills accepted and the programmed time frame is 99. The settings for this feature should be based on the machines highest volume usage. The error displayed on the data terminal when a failure condition is detected, will be "FASTVEND". The error condition is cleared upon reset or can be cleared automatically by using the Tamper Time Out feature. Each bill can be set independent of each other.

Example: The machine is set to take a maximum of seven \$5.00 bills in five minutes. If eight \$5.00 bill's are accepted in less than five minutes the machine will automatically go out of service, retain the last bill inserted, finish the payout and display the "FASTVEND" message on the data terminal.

**Total:** Operates the same as each bill only all bills are counted in a preprogrammed time frame.

Setting the individual bills or the total bills to zero disables that individual bill or total bills monitoring. A total bill setting takes precedence over individual bills.

### **6.3. Time and Date (F3)**

This choice allows you to set the correct time and date for the real time clock in the changer. First you will be shown the current date. If the date is correct press F1 "YES" and then you will be shown the current time. If you answer F2 "NO" to either of these you will be prompted to enter the corresponding corrected time and/or date. Please adjust for daylight savings time. (See Note 1)

### **6.4. Personal Identification Number (PIN) (F4)**

The Personal Identification Number (PIN) is used to protect your machine from unauthorized access. The PIN prevents access to the programming menu, clearing the audit, clearing the last bill in log, and clearing error log. Only a user who knows the PIN# will be able to enter these areas.

To set a PIN# press F4 (Options) at the main menu. You will then be asked "Change PIN?". Press F1 for yes. You will then be asked to enter your four digit PIN. Press F1 to accept. Next you will be asked to re-enter your PIN, press F1 to accept, and confirm the number you entered. The PIN is set at that point and any attempt to change the programming or clear one of the audits will require the PIN number to be entered first.

Should you decide that a PIN is no longer necessary you may clear a PIN. Enter the Options Menu (F4). Select "Change PIN"(F1). Enter your old PIN then enter "0000" for the new PIN. Enter "0000" again when asked to confirm new PIN. This will allow you to use your Data Terminal without using a PIN to change the programming or clearing audit information.

If you forget your PIN you will need to return your Data Terminal to an authorized service center to have the PIN cleared.

**NOTE 1:** This setting requires that the note acceptor have the real time clock hardware installed to work correctly.

**NOTE 2:** If you have Data Terminal version 3.14 or later with a System 600 version 2.50 or later or a System 500 version 4.40 or later a date/time stamp is included for each entry in the list. When viewing the list, pressing "F2" once will display the time the entry was logged. Pressing "F2" again will display the date for the entry. Pressing "F2" a third time will display the entry again. Pressing "F3" at any time will go to the next entry. (See Note 1)



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