# Table of Contents

FCC .............................................................................................................................. iii
FCC Emission Interference ......................................................................................... iii
FCC Part 68 Statement ................................................................................................ iii

Introduction .................................................................................................................... 1
  Operating Tips ........................................................................................................... 1

Product specifications ................................................................................................. 3
  Dimension Diagrams .................................................................................................. 4

Features of the ADP 4000 .......................................................................................... 4
  Modular Design .......................................................................................................... 6

Installation ..................................................................................................................... 7
  Unpacking ................................................................................................................... 7

Location and Set-up ..................................................................................................... 8

Plugging into the ADP 4000 ........................................................................................ 9

Host Interface Specifications ....................................................................................... 10
  Hardware Interface ..................................................................................................... 10
  Data Structure ........................................................................................................... 10

ASCII Control Character List
  (some characters available with certain firmware versions only) ......................... 11

Front Panel ................................................................................................................... 11
  Keypad/Display Layout ............................................................................................... 11

Menus ............................................................................................................................. 13
  Activate the Service Menu ......................................................................................... 13

Basic Operation and Setup ......................................................................................... 17
  Initial Setup ............................................................................................................... 17
  Powering ON and OFF ............................................................................................... 18
  Loading Ticket Stock ................................................................................................. 19

Operating Under a CRS or Airline Host ................................................................... 21

Clearing Stock Jams ..................................................................................................... 22

Cleaning ......................................................................................................................... 24
  Periodic Inspection and Cleaning .............................................................................. 24
  External Surfaces Cleaning Procedure .................................................................. 25
  Internal Surfaces Cleaning Procedure ................................................................ 25
  Using a ADP 4000 Cleaning Card .......................................................................... 26

Troubleshooting ........................................................................................................... 27
  Basic Failure Analysis .............................................................................................. 27
  Replacing a Blown Fuse ......................................................................................... 28
  Alerts and LCD Messages ....................................................................................... 29

Stock Status Alert Messages ....................................................................................... 32

Floppy Media Status LCD Alert Messages ............................................................... 34

AEA Related LCD Alert Messages .......................................................................... 36

Issues not Associated with an LCD Alert Message .................................................. 37
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Quality</td>
<td>37</td>
</tr>
<tr>
<td>Firmware Update Using the Floppy Disk</td>
<td>38</td>
</tr>
<tr>
<td>Customer/Technical Support</td>
<td>39</td>
</tr>
<tr>
<td>Return Authorization/Customer Service</td>
<td>39</td>
</tr>
<tr>
<td>Technical Support</td>
<td>41</td>
</tr>
<tr>
<td>Unimark Products, LLC. Warranty Statement</td>
<td>42</td>
</tr>
<tr>
<td>Printer</td>
<td>42</td>
</tr>
<tr>
<td>Thermal Print Head / Platen Roller / Belts / Magnetic Read-Write Head</td>
<td>42</td>
</tr>
<tr>
<td>Warranty Service (Return) Procedures</td>
<td>42</td>
</tr>
<tr>
<td>General Warranty Provisions</td>
<td>43</td>
</tr>
<tr>
<td>Limitation of Liability</td>
<td>43</td>
</tr>
<tr>
<td>Appendix – Additional Menus</td>
<td>44</td>
</tr>
<tr>
<td>Top Level Menu</td>
<td>44</td>
</tr>
<tr>
<td>Adjustments Menu</td>
<td>45</td>
</tr>
<tr>
<td>Unit Information Menu</td>
<td>46</td>
</tr>
<tr>
<td>Service Menu</td>
<td>47</td>
</tr>
<tr>
<td>Communications Port Setup Menu</td>
<td>48</td>
</tr>
<tr>
<td>Magnetic Encoding Setup Menu</td>
<td>49</td>
</tr>
<tr>
<td>Stock Setup Menu</td>
<td>50</td>
</tr>
</tbody>
</table>
FCC

FCC Emission Interference

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by Unimark could void the operator’s authority to operate the equipment under these conditions and rules.

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 their own cost.

FCC Part 68 Statement

This equipment complies with Part 68 of the FCC rules. Located on the equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0.) To be certain of the number of devices that may be connected to the line, as determined by the total REN's, contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State Tariffs.
If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service. There are no user serviceable components in this equipment.

If trouble is experienced with this equipment, please contact the Galileo North American Help Desk at: 1-800 762-3490.

If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

This equipment uses the following USOC jacks: RJ11C

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damage to the equipment caused by local lightening strikes and other electrical surges.
The ADP 4000 is a state-of-the-art Airline Ticket and Boarding Pass (ATB) printer, hereafter referred to as the unit, and offers many features not found on typical ATB printers. Unimark wants you to be completely satisfied with your experience with the unit and encourages your questions and comments.

Contact the Galileo North American Help Desk at: 1-800 762-3490 with any inquiries.

The ADP 4000 is designed to set on a standard office desktop or counter. This makes the unit ideal for travel agency environments having little impact on office space configurations.

The ADP 4000 transport mechanism accepts full size ATB coupons (8 and 7-3/8 inch stock). The ADP 4000 has two stock inputs (Bins A and B), which are external and unsecured, but can be secured using the locked ticket box option. The printed/encoded coupons are automatically presented at the exit bin on the front of the unit.

The front control panel incorporates multi-function control push-buttons, indicator LEDs, and an alpha numeric character display. The display provides unit status and activity information as well as providing visible feedback when the operator or service provider is navigating through the menu system.

The ADP 4000 uses an auto-switching power supply which allows automatic operation in both 110 and 220VAC environments.

### Operating Tips

- Read and follow all warning instruction labels on the unit itself.
- Do not operate your ADP 4000 near water or spill liquid of any kind into it.
- Do not use a damaged power cord. Do not put anything on it or place it where it can be stepped on. If the power cord is damaged or frayed, replace it immediately.
- Do not insert anything into the ventilation slots or openings as this can result in damage.
- Only trained technicians should attempt to service the ADP 4000 if in need of repair.
Items Included (contents vary with customer configuration):

1. ADP 4000 unit
2. Keys
3. AC Power Cord
4. ADP 4000 Manual or Product CD
5. Optional items such as ticket catchers, locked stock box, and interface cables and adaptors/gender changers
6. Sample Test Stock
## Product specifications

<table>
<thead>
<tr>
<th>Printing System</th>
<th>Method:</th>
<th>Direct Thermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>Resolution</td>
<td>203 DPI</td>
</tr>
<tr>
<td>Speed:</td>
<td>Speed:</td>
<td>Up to 10 documents per minute</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Magnetic encoding:</th>
<th>Stock type:</th>
<th>ATB1 and ATB2 tickets with and without magnetic stripe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Encoding specification:</td>
<td>Conforms to IATA specifications 1722C, Attachment C</td>
</tr>
<tr>
<td></td>
<td>Encoding Format:</td>
<td>Four tracks Read/Write verification (210 bpi)</td>
</tr>
<tr>
<td></td>
<td>Pre-Encoding:</td>
<td>Standard pre-read of magnetically encoded SCN numbers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Document handling</th>
<th>Types:</th>
<th>ATB1 and ATB2, 8 and 7-3/8 inch stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source:</td>
<td>Two external (Bins A and B): 7-3/8 and 8 inch stock.</td>
</tr>
<tr>
<td></td>
<td>Exit:</td>
<td>One stock path exit point at the front.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interface</th>
<th>RS-232</th>
<th>Two Asynchronous Serial Communication ports (DB-25F DTE standard)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Control Panel:</th>
<th>Push-Buttons:</th>
<th>Four momentary push-button keys (see Front Panel Section for details).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LEDs:</td>
<td>Four indicator LEDS (see Front Panel Section for details).</td>
</tr>
<tr>
<td></td>
<td>Display:</td>
<td>2 row by 8 column (2x8) alpha numeric (see Front Panel Section for details).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical</th>
<th>Unit Dimensions:</th>
<th>9&quot; (229mm) wide, 15&quot; (381mm) high, 9&quot; (229mm) deep.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Weight:</td>
<td>17.5 lbs (8kg)</td>
</tr>
<tr>
<td></td>
<td>Shipping Box Dimensions:</td>
<td>14&quot; (366mm) wide, 14&quot; (366mm) high, 19&quot; (483mm) deep</td>
</tr>
<tr>
<td></td>
<td>Unit Shipping Weight:</td>
<td>22 lbs (10 kg)</td>
</tr>
</tbody>
</table>

| Environmental: | Operating Temperature: | 40 to 104°F (4 to 40°C) |
|                | Storage Temperature:   | -4 to 140°F (-20 to 60°C) |
|                | Relative Operating Humidity: | 10 to 95%, non-condensing, without degraded performance. |
|                | Relative Storage Humidity: | 10 to 95%, non-condensing, without damage to components. |

<table>
<thead>
<tr>
<th>Lockable Ticket Box</th>
<th>Capacity:</th>
<th>Holds two secured stacks of 500 coupons for each bin, or 1,000 secured for Bin A and 1,000 unsecured for Bin B.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Implementation:</td>
<td>Removable box, secured using integrated thumbscrews.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Functional:</th>
<th>Ticket Box Dimensions:</th>
<th>5.25&quot; (133mm) wide, 15&quot; (381mm) high, 13&quot; (330mm) deep.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ticked Box Weight:</td>
<td>6.85 lbs (3.1 kg).</td>
</tr>
<tr>
<td></td>
<td>Unit w/ Box Shipping Weight:</td>
<td>35 lbs (16 kg).</td>
</tr>
</tbody>
</table>
Dimension Diagrams

Features of the ADP 4000
Simple Operation

While the ADP 4000 has many advanced and sophisticated features, its user friendly design makes it easy to use. Most common setup and operating functions are performed through the Control Panel push-buttons and Liquid Crystal Display (LCD).

Magnetics Capability (Optional)

The ADP 4000 has the capability to record data on ATB tickets with magnetic stripes. The unit’s magnetic encoding conforms to International Air Transport Association (IATA) specification 1722c, Attachment C. The unit’s magnetic encoder is also capable of SCN pre-read (before print, encoded, burst operations) if required.

Ticket Stock

The ADP 4000 uses fan-folded, ATB direct thermal stock, user selectable 8-inch or 7 3/8-inch length. The 2 external stock input bins (A and B) are located on the rear panel of the unit and are directly accessible by the operator. Two standard 1,000 coupon ticket boxes can be placed behind the enclosure to feed the input bins.

Exit Bin

The exit bin holds approximately 50 coupons. The ADP 4000 will automatically stop printing documents when it senses a bin full condition. Removing the printed coupons from the exit bin will typically restart the print process automatically unless custom firmware requires operator intervention.
Modular Design

The ADP 4000 is divided into several functional modules. This enables you to quickly isolate a problem, minimizing downtime.

Basic Configuration

The ADP 4000 consists of five major modules; the transport mechanism, main controller PCB, the user interface module, communications daughter PCB and the enclosure. The transport mechanism contains all of the motors, sensors, and drive components necessary to burst, transport and print a coupon. The main controller PCB has all the circuitry for driving motors and solenoids, monitoring sensors and formatting print data. On the communications daughter board is where all of the circuitry for communication with the host resides. The user interface module is used to set up the ADP 4000 on initial installations and for displaying messages pertaining to its status. The enclosure contains an auto-sensing power supply (for 110/220 environments) and an IEC 320 A/C input module.

Options

- A lockable ticket box is available that can be configured for two secured stacks of 500 for each bin, or one secured stack of 1000 coupons for Bin A and one unsecured stack of 1000 coupons for Bin B.
- The ADP 4000 can be equipped with a lockable exit bin (integrated into the enclosure). You would typically use this in an STP environment to provide more security.
Installation

Unpacking

Inspect the shipping container for evidence of in-transit damage, such as being dropped, crushed, or punctured. If damage is evident, contact the carrier directly to specify the nature and extent of damage. If the container is free of damage, remove the your ADP 4000 by opening the top side and pulling it out (secured with packing foam pieces) from the container. Remove the unit from the foam and the plastic bag/cover. The keys are in the accessory kit.

Retain original shipping carton and foam for future use!

Accessory Kit

After the ADP 4000 is removed from the shipping container, locate the Accessory Kit. The Accessory Kit consists of the enclosure door keys, power cord, Installation and Operator's Manual or Product CD, Operator's disk(s), and some sample stock for testing. The exact contents of the kit are subject to change without notice and vary for each customer.
Location and Set-up

Choose a location that provides at least 1-inch of open space between surfaces adjacent to the ADP 4000 and its sides, front, and top to allow proper ventilation. At least 9 inches of space is required behind the unit for cabling, airflow, and one ticket box (Bin A or Bin B). If two ticket boxes are used (Bins A and B), at least 18 inches of space is required. The power cord supplied with the unit is 10 feet long.

You should position it so you have access to the door on the right side of the enclosure (when viewed from the back; as shown), which must have room to swing open 90° to perform routine maintenance.

• Do not install the ADP 4000 where it will be exposed to direct sunlight. Sunlight may affect the optical sensors resulting in stock loading difficulties.

• In particular do not allow the bin inputs to be exposed to direct sunlight because it will disable its ability to detect stock when inserted. You can use the Locked Ticket Box to shield the bin input sensors from light sources.

• Direct sunlight can also affect the readability of the front panel display.

• The ADP 4000 is intended for indoor use only. Place it on a firm solid surface. If placed on an unsteady surface, it may fall and become damaged.

• To protect it from overheating, do not block openings on the enclosure. Do not place the it on or near a heat source, such as a radiator or heat register.
Plugging into the ADP 4000

Place the ADP 4000 so that it is convenient to power and communications connections.

Unlock the enclosure door using the keys provided and install the Operator’s disk into the floppy drive.

Make sure the power switch is in the OFF (0) position and connect the power cord. Attach the communications cable to the UPPER DB25F connector (COMM 1).

The ADP 4000 has the following physical connections:

- **POWER**: An IEC 320 power connection accepting 110/220VAC (50/60Hz).

- **COMM 1 and COMM 2**: RS-232 interface connections. These connections are DB-25 female pin connectors and are configured as DTE. A null modem cable quickly interfaces the ADP 4000 to a standard connection on a typical PC-based host system.

The ADP 4000 uses a grounded 3-prong power cable as a safety feature, which will only connect to a grounded wall outlet. If the power cable cannot be plugged into the outlet, contact an electrician to have the outlet replaced.

*Do not use an adapter to defeat the grounding feature.*
Host Interface Specifications

Hardware Interface

The ADP 4000 has two RS-232 Asynchronous Serial Communications ports to interface to the Host system. The physical connection uses two DB-25 female pin connectors marked COMM 1 and COMM 2. The ports are configured as DTE connections and can be used to connect to an associated DTE host using a null modem cable. The pin-out below provides the basic cabling requirements to connect the ADP 4000 to a PC-type host system (table shown assumes the host system uses a DTE DB-9 connector).

<table>
<thead>
<tr>
<th>Host (DTE) PC/AT or equivalent</th>
<th>Signal Flow</th>
<th>XP (COMM 1 and 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin #, DB-9</td>
<td>Signal Name</td>
<td>Signal Name</td>
</tr>
<tr>
<td>1</td>
<td>CD</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>RxD</td>
<td>⇐</td>
</tr>
<tr>
<td>3</td>
<td>TxD</td>
<td>⇒</td>
</tr>
<tr>
<td>4</td>
<td>DTR</td>
<td>⇒</td>
</tr>
<tr>
<td>5</td>
<td>Signal GND</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>DSR</td>
<td>⇐</td>
</tr>
<tr>
<td>7</td>
<td>RTS</td>
<td>⇒</td>
</tr>
<tr>
<td>8</td>
<td>CTS</td>
<td>⇐</td>
</tr>
<tr>
<td>9</td>
<td>RING</td>
<td>⇒</td>
</tr>
</tbody>
</table>

The connection from pin 11 to RTS enables the ADP 4000 to function with your existing cables. This connection can be removed if necessary.

The ADP 4000 may also have optional hardware interfaces including Ethernet, USB, and Modem. Custom firmware interfaces can be written for these and the existing serial interface.

Data Structure

The ADP 4000 uses an asynchronous serial data transmission method. Data is sent based on any combination of the following:

<table>
<thead>
<tr>
<th>Baud</th>
<th>Data Length</th>
<th>Parity</th>
<th>Stop Bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 - 19,200</td>
<td>7, 8</td>
<td>None, Even, Odd</td>
<td>1, 2</td>
</tr>
</tbody>
</table>
ASCII Control Character List
(some characters available with certain firmware versions only)

<table>
<thead>
<tr>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACK</td>
<td>Acknowledge character (06&lt;sub&gt;HEX&lt;/sub&gt;). Used to indicate that the message was received correctly.</td>
</tr>
<tr>
<td>CR</td>
<td>Carriage Return character (0D&lt;sub&gt;HEX&lt;/sub&gt;).</td>
</tr>
<tr>
<td>DC1</td>
<td>XON character (11&lt;sub&gt;HEX&lt;/sub&gt;). Used to indicate that the serial port is ready.</td>
</tr>
<tr>
<td>DC3</td>
<td>XOFF character (13&lt;sub&gt;HEX&lt;/sub&gt;). Used to indicate that the serial port is NOT ready.</td>
</tr>
<tr>
<td>ETX</td>
<td>End Of Text character (03&lt;sub&gt;HEX&lt;/sub&gt;). Used to suffix commands and data to and from the unit.</td>
</tr>
<tr>
<td>LF</td>
<td>Line Feed character (0A&lt;sub&gt;HEX&lt;/sub&gt;).</td>
</tr>
<tr>
<td>NAK</td>
<td>Negative Acknowledge character (15&lt;sub&gt;HEX&lt;/sub&gt;). Used to indicate that the message was NOT received correctly.</td>
</tr>
<tr>
<td>NUL</td>
<td>NULL pad character (00&lt;sub&gt;HEX&lt;/sub&gt;).</td>
</tr>
<tr>
<td>SOH</td>
<td>Start Of Header character (01&lt;sub&gt;HEX&lt;/sub&gt;). Sometimes used to prefix special commands or messages.</td>
</tr>
<tr>
<td>STX</td>
<td>Start Of Text character (02&lt;sub&gt;HEX&lt;/sub&gt;). Used to prefix commands and data to and from the unit.</td>
</tr>
</tbody>
</table>

Front Panel

Keypad/Display Layout
Use the front control panel to monitor and control the ADP 4000 during setup and operation. The diagram below shows the ADP 4000 control panel, consisting of four multi-function control push-buttons, four LED indicators, and a Liquid Crystal Display (LCD) capable of displaying up to two lines of eight characters. The LCD is used to display the current status of the unit. When it is ready to receive data, it will display ONLINE READY as shown above.

A variety of functions are available when the unit is Offline. The multi-function control push-buttons are used to select different menus, make changes to software settings, and perform various maintenance tasks.

**LED Indicator Functions**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>LED Color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>Green</td>
<td>Illuminated when the ADP 4000 power switch is ON. When not illuminated, power is OFF.</td>
</tr>
<tr>
<td>ONLINE</td>
<td>Green</td>
<td>When illuminated, the ADP 4000 is Online and ready to receive data from the CRS. When not illuminated, the ADP 4000 is Offline and cannot receive data, or an alert state exists (error occurred or ADP 4000 is out of stock). When flashing, ADP 4000 is receiving data.</td>
</tr>
<tr>
<td>STOCK</td>
<td>Amber</td>
<td>Illuminates when the selected input bin (A or B) is out of stock.</td>
</tr>
<tr>
<td>ERROR</td>
<td>Red</td>
<td>Illuminates when the ADP 4000 diagnostic program detects an alert condition, such as a ticket stock jam</td>
</tr>
</tbody>
</table>

**PUSH-BUTTON Functions**

<table>
<thead>
<tr>
<th>Push-button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONLINE ENTER</td>
<td>Toggles the ADP 4000 between Online and Offline. When Offline, it is used to accept an Offline menu selection or to accept a field entry option.</td>
</tr>
<tr>
<td>↑ MENU</td>
<td>Initiates menu operations when ADP 4000 is Offline. Cycles up through menu selections for the ADP 4000 configuration and setup.</td>
</tr>
<tr>
<td>↓ MENU</td>
<td>Initiates menu operations when ADP 4000 is Offline. Cycles down through menu selections for the ADP 4000 configuration and setup.</td>
</tr>
<tr>
<td>RESET EXIT</td>
<td>Resets the ADP 4000 following an error indication when unit is Online. When Offline, it is used to exit the menu level.</td>
</tr>
</tbody>
</table>
Menus

The following menus are described in the next few pages. Additional menus are described in the Appendix.

- Basic Operator Level Menu
- Adjustments Menu
- Information Menu

Activate the Service Menu

You will need to activate the service menu to make certain changes such as Baud Rate or Parity. In order to make these changes, a password is required.

To access this menu, press the menu button which prompts you for a password.

Follow these instructions to get into the various menu settings

To activate the service menu, follow these steps:

1. Enter the menu and find service
2. Press online/enter
   
   Display will show: ████ N
3. Press up arrow, then online/enter
4. Press up arrow, then online/enter
5. Press up arrow, then online/enter
   
   display will show: 0 0 0 N
6. Press online/enter again and cursor will be on the N
7. Press up arrow, then online/enter
   
   Now you should be in the service menu.
Basic Operator Level Menu

1. Choosing this menu selection causes an action in the ADP 4000. There are no other sub-menus below this.
2. Menu tree requires entry of the service password to access.
3. Choosing this option from the menu will force the ADP 4000 to reset all current settings to the factory defaults.
Adjustments Menu

BIN A
- Top Margin: Enter Value; Select "Y" to print test coupon
- Left Margin: Enter Value; Select "Y" to print test coupon
- Contrast: Enter Value; Select "Y" to print test coupon
- Burster: Enter Value; Select "Y" to print test coupon

BIN B
- Top Margin: Enter Value; Select "Y" to print test coupon
- Left Margin: Enter Value; Select "Y" to print test coupon
- Contrast: Enter Value; Select "Y" to print test coupon
- Burster: Enter Value; Select "Y" to print test coupon

Alarm
- Quite (1 beep)
- Loud (3 beeps)

TMPL
- Top Margin: Enter Value; Select "Y" to print test coupon
- Left Margin: Enter Value; Select "Y" to print test coupon
Information Menu

Menu structure may change depending on the specific customer firmware version.

- Stock Counts
  - BIN A (# of Coupons)
  - BIN B (# of Coupons)
  - Total Coupon Count
- Print head Count (# of Coupons)
- Info
  - Read SCN (only available if SCN is enabled)
  - Serial Number (Transport serial #, not the serial # on the enclosure)
  - Prom Version
Basic Operation and Setup

This section describes ADP 4000 power-on and off, initialization, ticket stock setup and loading, and explains operation of the control panel push-buttons, Light Emitting Diode (LED) indicators, and Liquid Crystal Display (LCD). Information is also provided on where to find instructions for operating the Offline Menu and printing sample ATB coupons.

Initial Setup

The ADP 4000 has been configured at the factory to meet your specific requirements. Use the following procedures to power it on, load ticket stock, and operate the unit's controls. If you experience any difficulties, please refer to the Troubleshooting Section for help.

CAUTION

To prevent damage, immediately toggle the power switch to the 0 (OFF) position if the ADP 4000 does not indicate that initialization is in progress within 5 seconds after power is applied. Initialization is indicated when the control panel LCD displays text immediately after the power switch is toggled to the I (ON) position.

If power-on was aborted, wait 10 seconds before toggling the power switch back to the | (ON) position.

If the LCD still does not display text within 5 seconds, immediately toggle the switch to the 0 (OFF) position (refer to Troubleshooting Section) for help.
Powering ON and OFF

1. To power-up the ADP 4000, locate the black power switch on the back panel, next to the fuse holder and line input connector, and toggle it to the I (ON) position.

2. As soon as it is powered on, it will begin performing an initialization procedure that lasts approximately 30 seconds. During initialization, the ADP 4000 does a complete diagnostics check on all of its features. These checks include ROM, RAM, and FLOPPY tests, along with reading needed files from the floppy diskette. If it finds problems during any of its checks, it will halt the process and place an alert message on the LCD describing the problem. The last test that is performed is to check the paper path for any coupons. If found, these coupons will be voided and placed in the exit bin.

   When it successfully completes initialization, the following message is displayed to indicate the unit is Online and ready to print:

   ![Online Ready]

   If it does not initialize properly, an LCD alert message will be displayed instead of Online, the red alert LED will flash, and a buzzer will sound. Refer to Troubleshooting Section for information about alert conditions and how to clear them.

3. To power-off the ADP 4000, toggle the power switch to the 0 (OFF) position.
Loading Ticket Stock

Use the following procedures to load ticket stock into the ADP 4000. If any problems are encountered while loading ticket stock, refer to the Troubleshooting Section for help.

1. Verify the power switch is in the I (ON) position and the unit has completed initialization.

2. Position the ticket stock box(es) behind the unit in line with the ticket inputs for Bin A and B. Refer to the figure for orientation information.

3. Insert the ticket stock into Bin A face down, staple stub first. As the stock enters the bin, the motor will begin to run. Release the stock when the bin motor begins to pull the stock into the unit. The stock will be automatically positioned for use. Repeat the above procedure for Bin B. Check the LCD display; if the unit is Offline, place it Online by pressing the ONLINE/ENTER push-button.

4. If the optional Locked Ticket Box was purchased, attach the bin to the rear of the ADP 4000 printer using the two thumbscrews already installed in the bin. The Locked Ticket Box can be set up in two different configurations.
   - First, with the shelf installed in its normal position, the bins can be loaded with two stacks of 500 coupons each, both of which are secured when the door is closed and locked.
The second option is with the shelf removed (it can be stored upside down on the bottom of the box with the lip up and to the rear). In this configuration, there is room for a box of one-thousand for Bin A internally secured. A second, non-secured stock type can be inserted from the top of the bin by sliding the latch forward (toward the unit) and opening the flap. Refer to the figure above for routing of the stock for this configuration.
Operating Under a CRS or Airline Host

Before attempting to go Online with the host, the ADP 4000 should be powered on, set up, and aligned using the previous procedures. Then continue with the following procedure:

1. Observe the control panel LCD. The LCD must display “Online Ready”.

2. If the ADP 4000 is not Online, press the ONLINE/ENTER push-button.

3. Send test ticketing data to the unit.

4. Observe the control panel for an indication that the ADP 4000 is receiving data. The ONLINE LED indicator will flash when data from the host is being received by the unit.

5. Verify that a test ticket is printed after the host data transmission is complete and that the test ticket is printed correctly. If the ticket is correct, the ADP 4000 is Online and ready to use.

If no ticket was printed or the ticket was not printed correctly, make sure the host data communications cable is secure and is connected to COMM 1 (DB25F Serial I/O Port).

Refer to the Installation Section for location information.

If there is still a problem, refer to Troubleshooting Section for help.
Clearing Stock Jams

To remove a ticket stock jam, use the following procedure:

1. Note the location of the jam indicated on the LCD and refer to the figure below to locate the corresponding area where the jam occurred.

2. Press the **RESET/EXIT** push-button to try to clear the jam.

3. If the Document Path Jam message is cleared, press the **ONLINE/ENTER** push-button to continue operation.

4. If the jam condition persists, complete the following procedure:
   
   **WARNING:** To prevent personal injury, remove power before clearing ticket stock jams.

   a. Toggle the power switch to 0 (OFF) and disconnect the power cord from the rear of the unit.

   **CAUTION:** To prevent damage, do not force door open beyond 90°. The cabinet has door locks to limit door opening to 95°.

   b. Unlock and open the door on the left side of cabinet to a maximum of 90°.

   **WARNING:** To prevent personal injury, do not touch motors when clearing ticket stock jams. *After extended use, motors will be hot to the touch.*

   **CAUTION:** To prevent damage, do not hit or scratch the print head and encoder assemblies when clearing ticket stock jams. Contact with hard objects can easily damage the print head and encoder assemblies.
c. Remove the ticket stock causing the jam through the opening in the middle of the transport module.

d. Make sure that all the pieces of the ticket stock are removed from the transport module before continuing.

e. Plug the power cord back into the unit, toggle the power switch to I (ON), and reload the ticket stock as described in the Installation Section.
Cleaning

This section describes the preventive maintenance procedures for the ADP 4000. Although it will perform dependably right out of the box, you should perform periodic inspections and cleanings to keep it in good working order. With proper care of the enclosure, print head, magnetic encoder (when so equipped), transport assembly, and other components, the ADP 4000 can be expected to continue to provide good service for many years. The following inspection and cleaning procedures are presented separately for clarity, but may be performed at the same time.

Cleaning card kits are available from Unimark:

- 700-5014-205K (Qty 5)
- 700-5014-225K (Qty 25).

Periodic Inspection and Cleaning

Like any piece of office equipment, the ADP 4000 will need periodic maintenance. Every three months or 12,000 coupons, the unit should be cleaned and visually inspected. This process should take no more than ten minutes.

1. Carefully inspect the outer surfaces of the unit’s enclosure for signs of excessive internal heat buildup. Visual evidence of excessive internal heat buildup may be confirmed by observation of discoloration or warping of the covers surrounding the electronic components.

2. Examine the unit’s external and internal surfaces, ventilation slots, transport mechanism, and exposed components for dust buildup. All dust should be removed at least every three months to maintain performance.

3. If cleaning is required, complete the recommended cleaning procedures listed in the following sections.

CAUTION: To prevent damage, use only mild commercial cleaning solutions or a mild solution of soap and water to clean the external surfaces of the ADP 4000 enclosure. The enclosure can be damaged by solvents.
External Surfaces Cleaning Procedure

Examine the enclosure's external and internal surfaces, ventilation slots, transport assembly, and internal components for dust buildup. All dust should be removed at least every three months to maintain performance.

1. Vacuum dust accumulation from the ventilation slots and other external surfaces of the ADP 4000.
2. Dampen a soft cloth or paper towel with a mild solution of soap and water or a mild commercial cleaner and wipe the surface.
3. Dry the cleaned area with a clean, dry cloth or paper towel.

Internal Surfaces Cleaning Procedure

Dust is primarily produced by ticket stock passing through the transport assembly inside the ADP 4000 enclosure. Clean the internal surfaces of the enclosure as follows:

1. Toggle the POWER switch to 0 (OFF).
2. Unplug power cord from back of the enclosure.
   **CAUTION:** To prevent damage, do not force door open beyond 90°. The enclosure has door locks to limit door opening to 95°.
3. Unlock door on left side of enclosure and open to a maximum of 90°.
4. Remove all card stock from enclosure by rotating the knobs along transport path as required.
5. Vacuum as much dust as possible from inside enclosure.
6. Use compressed air to blow dust from ticket stock path grooves in transport assembly.
Using a ADP 4000 Cleaning Card

A cleaning card is available for the ADP 4000 which will clean the print head and the paper path via a menu selection. To use the cleaning card (Part no: 700-5014-200) follow these instructions:

Note: Follow the instructions on the cleaning card envelope. Do not open the envelope until you are ready to insert the cleaning card into the unit.

1. Press ONLINE/ENTER push-button to take the unit to Offline/Menu.
2. Press the up or down arrow push-buttons to access MENU PRINT. Press ONLINE/ENTER push-button.
3. Press the up or down arrow push-buttons to access PRINT CLEAN. Press ONLINE/ENTER push-button.
4. The display will scroll to alert the operator to REMOVE ALL STOCK FROM INPUT AND EXIT BINS.
5. Once the stock has been removed, the display will scroll INSERT CLEANING CARD IN EITHER BIN.
6. Upon inserting the pre-saturated cleaning card, the coupon will move back and forth three times over the print head and the magnetic read/write heads while the display scrolls CLEANING IN PROGRESS. The operator will hear the drive rollers inside the unit spin dry for about 10 seconds after each pass.
7. The cleaning card will appear at the front exit bin when the cleaning cycle is complete. Properly dispose of the used cleaning card.
8. Press RESET/EXIT three times to return to Offline/Menu, then press ONLINE/ENTER to return to Online.
Troubleshooting

Basic Failure Analysis

The ADP 4000 continually monitors its operation. The table below describes typical problems that may occur, possible causes, and corrective actions. When it detects a problem, an audible tone is sounded to attract your attention, and an accompanying message is displayed on the LCD to indicate the potential problem. See the following LCD message tables for lists of LCD alert messages and explanations.

For assistance with troubleshooting please contact the Galileo North American Help Desk at 1-800 762-3490.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not operating</td>
<td>No power to unit</td>
<td>Switch in OFF position</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Power cord not plugged in completely</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faulty power source</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blown fuse – Refer to Troubleshooting Section</td>
</tr>
<tr>
<td>Bin A or B will not load stock</td>
<td>Bin A and B are directly exposed to sunlight</td>
<td>Reposition the unit so that Bins A and B are not directly exposed to sunlight</td>
</tr>
<tr>
<td>Offline</td>
<td><strong>ONLINE/ENTER</strong> button pressed while ADP 4000 was Online</td>
<td>Press <strong>ONLINE/ENTER</strong> button to return Online</td>
</tr>
<tr>
<td></td>
<td>Alert condition forced unit offline</td>
<td>Clear alert condition and press <strong>RESET/EXIT</strong> button followed by <strong>ONLINE/ENTER</strong></td>
</tr>
<tr>
<td>Unit delivers blank coupons</td>
<td>Stock loaded incorrectly</td>
<td>Remove stock and reload with face side down and staple stub first</td>
</tr>
<tr>
<td></td>
<td>Wrong stock type</td>
<td>Load direct thermal stock</td>
</tr>
<tr>
<td></td>
<td>Contrast adjusted too low for current stock being used</td>
<td>Adjust darkness using the Adjust Contrast option in the menu 1-Lightest; 5-Darkest</td>
</tr>
<tr>
<td>Print too dark and blurred</td>
<td>Contrast adjusted too high for current stock being used</td>
<td>Adjust darkness using the Adjust Contrast option in the menu 1-Lightest; 5-Darkest</td>
</tr>
<tr>
<td>Stock Light flashing</td>
<td>Stock supply depleted</td>
<td>Reload stock in depleted bin</td>
</tr>
<tr>
<td></td>
<td>Stock not loaded correctly</td>
<td>Remove and reload stock</td>
</tr>
<tr>
<td>Print not aligned correctly</td>
<td>Print misalignment</td>
<td>Adjust Top and/or Left Margin using the corresponding adjust menu option</td>
</tr>
<tr>
<td>Unit Jamming</td>
<td>Stock left in transport</td>
<td>Check transport for small piece of stock left in unit</td>
</tr>
<tr>
<td></td>
<td>Drive wheels slipping</td>
<td>Use cleaning card – Refer to Cleaning Section</td>
</tr>
<tr>
<td>Burst Failure</td>
<td>Stock damaged and did not burst</td>
<td>Remove damaged stock from unit and press <strong>RESET/EXIT</strong></td>
</tr>
<tr>
<td></td>
<td>Burst position incorrect</td>
<td>Adjust Burst Position using the Burst Adjust option in the menu</td>
</tr>
</tbody>
</table>
Replacing a Blown Fuse

Use the following procedure and the figure below to replace the fuse in the ADP 4000.

1. Toggle the POWER switch to O (OFF).
2. Remove the ticket stock and, if installed, remove the optional lockable ticket box to improve access to the fuse holder.
3. Disconnect the power cord, remove the fuse holder, and check the fuse.
4. If the fuse is bad, replace it with a fuse of the same rating (see below).

⚠️ CAUTION: To prevent the risk of fire, replace only with the same type and rating of fuse.

- Fuse specifications:
  110 to 120 VAC 2 Amps or 210 to 250 VAC 2 Amps

5. Re-install the fuse holder, power cord, and optional lockable ticket box (if applicable).
6. Toggle the POWER switch to I (ON) and re-install the ticket stock. Refer to Loading Ticket Stock Section for details.

![Fuse Diagram]
Alerts and LCD Messages

An alert occurs when the ADP 4000 detects a condition requiring user intervention such as an empty stock bin, etc. Alerts are indicated by a buzzer sounding and an illuminated LED indicator. A corresponding message is displayed on the control panel LCD. The amber stock LED may also light if the alert condition was caused by the unit running out of stock.

An alert can be either soft or hard. Soft alerts require only that the condition (such as out of stock) be corrected to clear the alert. Hard alerts require that the **RESET(EXIT)** push-button be pressed after the condition (such as a stock jam) is corrected.

Basic LCD Alert Messages

Refer to following table for a list of the messages displayed, their description, and the appropriate corrective action:

<table>
<thead>
<tr>
<th>LCD Messages</th>
<th>Description</th>
<th>Corrective Action (ALERT CLEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online Comm Err</strong></td>
<td>Communications error (primarily related to serial communications with the host).</td>
<td>Typical message sequence when the unit detects that the incoming data does not match its communication parameters such as baud rate, parity, or data/stop bit size.</td>
</tr>
<tr>
<td><strong>Floppy Failed</strong></td>
<td>No floppy diskette detected in disk drive.</td>
<td>Insert Unimark Application System Software floppy diskette in disk drive. Ensure diskette is fully inserted in disk drive.</td>
</tr>
<tr>
<td><strong>No Fonts Found</strong></td>
<td>Font files unreadable, missing, or corrupted.</td>
<td>Insert backup floppy diskette in disk drive. Ensure diskette is fully inserted in disk drive.</td>
</tr>
<tr>
<td><strong>No App Found</strong></td>
<td>Application flash unreadable or corrupted.</td>
<td>Controller board is most likely unusable. Contact Unimark Service.</td>
</tr>
<tr>
<td><strong>No Setup Found</strong></td>
<td>Setup files unreadable, missing, or corrupted.</td>
<td>Insert backup floppy diskette in disk drive. Ensure diskette is fully inserted in disk drive. Setup files could be replaced on floppy, or unit may automatically recreate them if possible.</td>
</tr>
<tr>
<td><strong>Load Stock</strong></td>
<td>Alternating message.</td>
<td></td>
</tr>
<tr>
<td>LCD Messages</td>
<td>Description</td>
<td>Corrective Action (ALERT CLEAR)</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Load Stock</td>
<td>Alternating message.</td>
<td></td>
</tr>
<tr>
<td>Jam Burster</td>
<td>Burster failure(^1).</td>
<td>Remove damaged stock from burster area and press \textbf{RESET/EXIT} push-button to clear hard alert.</td>
</tr>
<tr>
<td>Clear – Reset</td>
<td>Alternating message.</td>
<td></td>
</tr>
<tr>
<td>Jam Exit</td>
<td>Document jam at exit(^1).</td>
<td>Clear jam, load stock correctly, and press \textbf{RESET/EXIT} push-button to clear hard alert.</td>
</tr>
<tr>
<td>Clear – Reset</td>
<td>Alternating message.</td>
<td></td>
</tr>
<tr>
<td>JAM Bin A</td>
<td>Document jam at Bin A(^1).</td>
<td>Clear jam, load stock correctly, and press \textbf{RESET/EXIT} push-button to clear hard alert.</td>
</tr>
<tr>
<td>Clear – Reset</td>
<td>Alternating message.</td>
<td></td>
</tr>
<tr>
<td>Jam Bin B</td>
<td>Document jam at Bin B(^1).</td>
<td>Clear jam, load stock correctly, and press \textbf{RESET/EXIT} push-button to clear hard alert.</td>
</tr>
<tr>
<td>Clear – Reset</td>
<td>Alternating message.</td>
<td></td>
</tr>
<tr>
<td>Jam Encoder</td>
<td>Document jam at Encoder(^1).</td>
<td>Clear jam, load stock correctly, and press \textbf{RESET/EXIT} push-button to clear hard alert.</td>
</tr>
<tr>
<td>Clear – Reset</td>
<td>Alternating message.</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Indicates that the two messages will be alternately displayed as long as the alert exits.
LCD Alert Messages Displayed During Initialization

The following LCD alert messages may be displayed during initialization:

<table>
<thead>
<tr>
<th>LCD Messages</th>
<th>Description</th>
<th>Corrective Action (ALERT CLEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floppy Failed</td>
<td>Missing or defective floppy disk¹.</td>
<td>Power off the unit, install a backup diskette, then attempt to power on.</td>
</tr>
<tr>
<td></td>
<td>Alternating message.</td>
<td>If problems persist, call for service.</td>
</tr>
<tr>
<td>No Fonts Found</td>
<td>Unit could not locate the required font files on the floppy disk¹.</td>
<td>Power off the unit, install a backup diskette, then attempt to power on.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If problems persist, call for service.</td>
</tr>
<tr>
<td>Setup File not found using default file.</td>
<td>Application setup (INI) file could not be found on the floppy disk².</td>
<td>Press ONLINE/ENTER push-button and the unit will attempt to reload Default settings into a new setup file (APP.INI) and finish booting to the Online state.</td>
</tr>
<tr>
<td></td>
<td>Scrolling message . . . .</td>
<td></td>
</tr>
<tr>
<td>Press Enter Key to continue</td>
<td>Second Scrolling message . . . .</td>
<td>After loading defaults, the unit may have different communication parameters than what had previously been set. Other user specified settings, such as print margins, contrast, etc., may have changed as well.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If the unit fails to operate Online with the host or has other problems after loading default settings, call for assistance.</td>
</tr>
<tr>
<td>Loading Defaults</td>
<td>Application setup (INI) and the default (DFL) file could not be found on the floppy disk².</td>
<td>Power off the unit, install a backup diskette, then attempt to power on. If problems persist, call for service.</td>
</tr>
<tr>
<td></td>
<td>Scrolling message . . . .</td>
<td></td>
</tr>
<tr>
<td>Default File not found...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact service</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Indicates that the two messages will be alternately displayed as long as the alert exits.
2 Indicates a scrolling message.
Stock Status Alert Messages

The following LCD alert messages may be displayed to indicate operator action needed to add or remove stock during normal unit operation:

Load Error at Bin A¹:

Stock is detected at Bin A, but the unit was unable to pull stock into the transport mechanism.

Removing stock completely from Bin A and reinserting should clear the condition. Pressing the ONLINE/ENTER push-button should place the unit back in operation. Messages may vary slightly depending on the sequence of events.

1 Indicates that the messages alternately display as long as the alert exists.

Load Error at Bin B¹

Stock is detected at Bin B, but the unit was unable to pull stock into the transport mechanism.

Removing stock completely from Bin B and reinserting should clear the condition. Pressing the ONLINE/ENTER push-button should place the unit back in operation. Messages may vary slightly depending on the sequence of events.

1 Indicates that the messages alternately display as long as the alert exists.
Bin A Empty¹ (While processing Tickets)

Stock ran out in Bin A while processing tickets.

Manually load more stock into Bin A and press the **ONLINE/ENTER** push-button to place the unit back in operation.

1 Indicates that the messages alternately display as long as the alert exists.

Bin B Empty¹ (While processing Tickets)

Stock ran out in Bin B while processing tickets.

Manually load more stock into Bin B and press the **ONLINE/ENTER** push-button to place the unit back in operation.

1 Indicates that the messages alternately display as long as the alert exists.

Bin A Empty¹ (Stock manually removed typically)

Stock removed from Bin A. Manually load more stock into Bin A; unit already in the Online state and ready for operation.

1 Indicates that the messages alternately display as long as the alert exists.

Bin B Empty¹ (Stock manually removed typically)

Stock removed from Bin B. Manually load more stock into Bin B; unit already in the Online state and ready for operation.

1 Indicates that the messages alternately display as long as the alert exists.
Bin A & B Empty¹ (Stock manually removed typically)

Stock removed from Bins A & B. Manually load more stock into Bins A & B; unit already in the Online state and ready for operation.

Exit Bin Full³

Exit bin has filled and tripped the stock level sensor.

Manually remove coupons to restart print process; press ONLINE/ENTER push-button if necessary.

Floppy Media Status LCD Alert Messages

The following LCD alert messages may be displayed to indicate operator action needed to resolve issues with the floppy disk media.

Missing Floppy¹ (at Power Up)

1 Indicates that the two messages are alternately displayed as long as the alert exits.
Floppy Disk Write Protected

If the floppy disk is write protected the unit will be unable to access memory for storing PECTABs, LOGOs, TEMPLATEs, etc.

- Press the ONLINE/ENTER push-button twice to manually clear the message; or message will be cleared upon receiving any valid AEA command.

1 Indicates that the messages alternately display as long as the alert exists.

Floppy Disk Removed / Data Save Attempted

If the floppy disk is removed after a successful boot and data (such as a PECTAB) is sent to the unit, a floppy controller error will occur.

- Install floppy disk and power cycle unit.

Once floppy disk is removed, we recommend you power cycle the unit to return it to its defaulted operating state. Removing the floppy disk with the unit powered on can cause abnormal and unpredictable behavior.

1 Indicates that the messages alternately display as long as the alert exists.

Floppy Disk Removed / Memory Access Attempted for Ticket Printing

If the floppy disk is removed after a successful boot and the operator attempts to change a setting such as the communication port baud rate, a floppy controller error will occur.

- Install floppy disk and power cycle unit.

Once floppy disk is removed, we recommend you power cycle the unit to return it to its defaulted operating state. Removing the floppy disk with the unit powered on can cause abnormal and unpredictable behavior.
## AEA Related LCD Alert Messages

Refer to following table for a list of the messages displayed, their description, and the appropriate corrective action:

<table>
<thead>
<tr>
<th>LCD Messages</th>
<th>Description</th>
<th>Corrective Action (ALERT CLEAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online ERR 2 cc</td>
<td>Illogical command. Where cc = the unrecognized command</td>
<td>Unit received an illogical command, or a non-AEA (non-supported) command. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERR 8 ee</td>
<td>Error in ticket print message. Where cc = the element where the error was detected</td>
<td>Unit detected an error in the ticket print message. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERR 5</td>
<td>Print/Encode error.</td>
<td>Unit has detected an error during the print and/or encode process. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERR 6 #</td>
<td>Missing PECTAB. Where # = the PECTAB name being referenced by the ticket print message</td>
<td>Ticket print message is referencing a PECTAB not currently in memory. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERR 7</td>
<td>Check-In or Revalidation in progress.</td>
<td>Unit could not process command because it is in a Check-In or Revalidation state. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERR 8 ee</td>
<td>Error in PECTAB load. Where ee = the element where the error was detected</td>
<td>Unit detected a format error in the PECTAB load. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERR 9</td>
<td>Memory access error during object load.</td>
<td>There is not enough memory available load objects such as a PECTABs or Logos. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
<tr>
<td>Online ERRS s</td>
<td>Incorrect stock type selected. Where s = the stock type number in the ticket print message</td>
<td>Ticket print message is requesting a stock type not currently configured for the selected Bin. Press ONLINE/ENTER push-button twice to clear the message; or message will be cleared upon receiving any valid AEA command.</td>
</tr>
</tbody>
</table>
Issues not Associated with an LCD Alert Message

Online LED Doesn't Blink When Host Is Sending Data

The cabling may not be properly connected on the rear of the unit. Verify that the host communications cable is connected to the upper port on the rear of the unit.

Online LED Blinks, but Unit does not Print

Each host interface is unique and, as such, may have special communications requirements. A Baud Rate, Parity, Word Length or Stop Bit parameter mismatch between the unit and the host system would cause a Comm Error alert. However, a Start Of Text, End Of Text, or Protocol mismatch would not cause a Comm Error alert. Print out a configuration coupon set and verify that all of the settings match the requirements of your host, and make changes as needed.

Print Quality

When the ADP 4000 print quality is not acceptable, it may be necessary to clean the print head assembly and print head platen roller. Refer to Cleaning Section for instructions on cleaning the print head and platen.

If the print is not in the correct position on the ticket, or the print is not dark enough, adjustment may be necessary. The left margin and top margin may be adjusted to correct the print position. The print darkness may also be adjusted to improve readability. Each of these adjustments is available separately for Bin A and Bin B. However, these adjustments are only available when the unit is Offline and the Adjustments menu is selected.

Because of the wide variance in stock quality, some print issues can be resolved by changing stocks. Keep in mind that print quality can fluctuate widely based on stock selected.
Firmware Update Using the Floppy Disk

The ADP 4000’s application firmware can be updated easily by using what is referred to as an Update Disk or Application Update Disk. This floppy disk contains a binary update file that the Unit searches for every time it is powered up. When the unit detects the existence of the binary file it compares the file version against the version currently loaded into flash memory and prompts the operator to update the firmware if the two do not match.

The following describes the process:

1. Power the Unit off.
2. Remove the Operator’s disk and install the Update disk.
3. Power the unit on.
4. The unit will detect an Update Diskette and check the file version against the application flash memory.
5. If the versions are different, the LCD will display “Program Update Disk” as a scrolling message, and prompt the operator (waiting for the operator to select update or bypass. (where x.xx.xx is the version) N will be flashing.

6. To continue with the update, press MENU to change the N to a Y. Then press ONLINE/ENTER and follow the instructions on the display.
7. If you do not wish to update the program, turn it off, remove the update diskette and install the operator’s disk, then restore power.

![Program Update Disk](X.XX.xx Prgrm? N)
Customer/Technical Support

Return Authorization/Customer Service

To return a product to Unimark for repair or other assistance, please be prepared with the following information before calling our Customer Service department at 800-255-6356 (US only) or 913-649-2424:

- Customer name and telephone number
- Product model number or description
- Product serial number
- Description of failure
- Billing address
- Customer ship to address and method of shipping
- Repair option selection (Warranty, Flat Rate, Time and Materials or Refurbishment)

Unimark Customer Service Specialist will enter the information into our system during your call to ensure quick and accurate handling of your return. You will then be given a return authorization number.

The original shipping container and packing material in which the ADP 4000 was shipped to you provides optimal protection for reshipment. If you retained the original shipping material and it is still in good condition, we recommend that you re-use it. Otherwise, contact Unimark for a packing kit. The figure on the next page shows an exploded view of typical packing for shipping the ADP 4000.

Please heed the following reminders regarding shipping:

- *Do not* ship keys with the printer. Service will have what they need to access the unit.
- *Do not* ship with the floppy disk installed. The drive heads move around during shipping and can get damaged or damage the floppy disk.
  
  **Note:** We recommend you store the disks with the keys.
- *Do not* ship with the locked ticket stock box attached to the unit.
- Reuse Unimark packaging material when shipping the unit.
Use this figure and the following procedures to pack the ADP 4000 for shipping.

1. Prepare item for return to Unimark - Do NOT include accessories, power cable or ancillary items unless directed otherwise by Customer Service.

   **DO NOT SHIP WITH TICKET STOCK INSTALLED!**

2. Position the shipping container with the "UP" arrows pointing up and the open end of the box on top as shown.

3. Place the top and bottom pieces of foam padding on the ADP 4000.

4. Position the ADP 4000 above the shipping container so the door faces up and lower it into the open container.

5. If you are asked to send any accessory items back with the unit, place them in a plastic bag and position it into the box next to the back panel.

6. Close the shipping container flaps, short flaps first, and seal with packing and sealing tape.

7. Be certain the Return Authorization (RA) number assigned by Unimark Customer Service is on the packing slip and on the outside of the shipping container.
Technical Support

Galileo®

Please contact the Galileo North American Help Desk at: 1-800 762-3490.

Unimark

The ADP 4000 printer is a Unimark product. Unimark may also provides technical support for their products.

As a purchaser or Unimark authorized third party maintainer of Unimark products, you have the added benefit of technical assistance in the installation, diagnosis and use of Unimark products.

Just call our toll free number 800-255-6356 (US only) or 913-649-2424 and allow the auto-attendant to guide you to our technical support line. A technical support analyst will assist you.

To better serve you, please have the product in question on-line and ready to test prior to calling technical support. In addition, have the following information available:

- Model Number/description
- Serial Number
- Failure message/code/description

Unimark operates two service support centers. Select the office closest to you from the Unimark Contacts web page (www.unimark.com). The customer support telephone number and e-mail address are listed for your convenience.
Unimark Products, LLC. Warranty Statement

Printer

Unimark Products, LLC. warrants to Purchaser that under normal use and service, the products (with the exception of the thermal print head, platen roller, and belts) purchased hereunder shall be free from defects in material and workmanship for a period of one year (365 days) from the date of shipment by Unimark.

Expendable and/or consumable items or parts such as lamps, fuses, labels, and ribbons are not covered under this warranty. This warranty does not cover equipment or parts which have been misused, altered, neglected, handled carelessly, or used for purposes other than those for which they were manufactured. This warranty also does not cover loss, damages resulting from accident, or damages resulting from unauthorized service.

Thermal Print Head / Platen Roller / Belts / Magnetic Read-Write Head

This warranty is limited to a period of one year, (365 days) or 1,000,000 linear inches of use, whichever comes first, for the thermal print head, platen roller, belts, and magnetic head. This warranty does not cover print heads, platen roller, belts, and magnetic head components which have been misused, altered, neglected, handled carelessly, or damaged due to improper cleaning or unauthorized repairs.

Warranty Service (Return) Procedures

If a defect should occur during the warranty period, return the defective unit, freight and insurance prepaid, in the original shipping containers to Unimark Products, LLC. A Return Authorization (RA) number must be issued before the product can be returned. To open an RA, please call the Unimark Customer Service Department at (800) 255-6356 or 913-649-2424. Please print your RA number on the outside of the box and on the shipping document. Include a contact name, action desired, a detailed description of the problem(s), and examples when possible with the defective unit. Unimark shall not be responsible for any loss or damages incurred in shipping. Any warranty work to be performed by Unimark shall be subject to Unimark’s confirmation that such product meets Unimark warranty. In the event of a defect covered by its warranty, Unimark will return via ground transportation, the repaired or replaced product to the Purchaser at Unimark’s cost.

With respect to a defect in hardware covered by the warranty, the warranty shall continue in effect until the end of the original warranty period, or for ninety (90) days after the repair or replacement, whichever is later.
General Warranty Provisions

Unimark makes no warranty as to the design, capability, capacity or suitability of any of its hardware, supplies, or software.

Software is licensed on an “as is” basis without warranty. Except and to the extent expressly provided in this warranty and in lieu of all other warranties, there are no warranties, expressed or implied, including, but not limited to, any warranties of merchantability or fitness for a particular purpose.

Purchaser shall be solely responsible for the selection, use, efficiency and suitability of Unimark’s products.

Limitation of Liability

In no event shall Unimark be liable to the purchaser for any indirect, special or consequential damages or lost profits arising out of or relating to Unimark’s products, or the performance or a breach thereof, even if Unimark has been advised of the possibility thereof. Unimark’s liability, if any, to the purchaser or to the customer of the purchaser hereunder shall in no event exceed the total amounts paid to Unimark hereunder by the purchaser for a defective product.

In no event shall Unimark be liable to the purchaser for any damages resulting from or related to any failure or delay of Unimark in the delivery or installation of the computer hardware, supplies or software or in the performance of any services.

Some states do not permit the exclusion of incidental or consequential damages, and in those states the foregoing limitations may not apply. The warranties herein give you specific legal rights, and you may have other legal rights which vary from state to state.
Appendix – Additional Menus

Top Level Menu

1. Choosing this menu selection causes an action in the Sprite. There are no other sub-menus below this.
2. Menu tree requires entry of the service password to access.
3. An asterisk (*) appears next to the currently selected parameter.
4. Customer settings will be erased and default settings copied over them from the default INI file.
5. Default bin used if the ticketing/boarding pass datastream does not specify a stock type, otherwise the bin with the selected stock type is used.
6. Long stock is 8.00 inches (20.32 cm). If set to "N", stock length is defined as 7-3/8 inches (18.73 cm).
7. Menu option only available if hardware option is installed.
8. Value entered in decimal.
9. Only one character change possible at a time through the menu. Character entry valid until first 000dec value is entered.

ADP 4000 Printer, Installation and Operator’s Manual, January 2007
Adjustments Menu

**BIN A**
- Top Margin
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Left Margin
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Contrast
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Burster
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon

**BIN B**
- Top Margin
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Left Margin
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Contrast
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Burster
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon

**Alarm**
- Quite (1 beep)
- Loud (3 beeps)

**TMPL**
- Top Margin
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
- Left Margin
  - Enter Value; Select "Y"
  - Select "Y" to print test coupon
Unit Information Menu

1. Choosing this menu selection causes an action in the Sprite. There are no other sub-menus below this.
2. Menu tree requires entry of the service password to access.
3. An asterisk (*) appears next to the currently selected parameter.
4. Customer settings will be erased and default settings copied over them from the default INI file.
5. Default bin used if the ticketing/boarding pass datastream does not specify a stock type, otherwise the bin with the selected stock type is used.
6. Long stock is 8.00 inches (20.32cm). If set to "N", stock length is defined as 7-3/8 inches (18.73cm).
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1. Choosing this menu selection causes an action in the Sprite. There are no other sub-menus below this.

2. Menu tree requires entry of the service password to access.

3. An asterisk (*) appears next to the currently selected parameter.

4. Customer settings will be erased and default settings copied over them from the default INI file.

5. Default bin used if the ticketing/boarding pass datastream does not specify a stock type, otherwise the bin with the selected stock type is used.

6. Long stock is 8.00 inches (20.32cm). If set to "N", stock length is defined as 7-3/8 inches (18.73cm).

7. Menu option only available if hardware option is installed.

8. Value entered in decimal.

9. Only one character change possible at a time through the menu. Character entry valid until first 000dec value is entered.
Communications Port Setup Menu

Comm Port Setup

- **Baud Rate**
  - 19200
  - 9600
  - 4800
  - 2400
  - 1200

- **Parity**
  - NONE
  - EVEN
  - ODD

- **Data Bits**
  - 8
  - 7

- **Stop Bits**
  - 1
  - 2

- **Printer Busy**
  - RTS/CTS
  - DSR/DTR
  - XON/XOFF
  - NONE

- **Printer Busy**
  - RTS/CTS
  - DSR/DTR
  - XON/XOFF
  - NONE

- **Printer Busy**
  - RTS/CTS
  - DSR/DTR
  - XON/XOFF
  - NONE

- **Printer Busy**
  - RTS/CTS
  - DSR/DTR
  - XON/XOFF
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7. Menu option only available if hardware option is installed.

8. Value entered in decimal.

9. Only one character change possible at a time through the menu. Character entry valid until first 000dec value is entered.
Stock Setup Menu

0 = Reserved
1 = ATB
2 = Multi-Purpose Document (MPD)
3 = Boarding Pass (BP)
4 = Blank
5 = BSP
6 = Reserved
7 = Reserved
8 = Reserved
9 = Reserved

0 = Reserved
1 = ATB
2 = Multi-Purpose Document (MPD)
3 = Boarding Pass (BP)
4 = Blank
5 = BSP
6 = Reserved
7 = Reserved
8 = Reserved
9 = Reserved

Stock Setup

BIN A

ATB2
MPD
B Pass
Blank
Reserved 1-5
None

BIN B

ATB2
MPD
B Pass
Blank
Reserved 1-5
None

Default BIN (5)
Select BIN A/B

Test BIN
Select BIN A/B

Long Stock (6)
Select Y (Long) or N (Short)

Reval B
Select Y/N
HOST SETUP MENU

Communication Protocol
- Receive STX (8)(9) Enter Decimal # Sequence
- Receive ETX (8)(9) Enter Decimal # Sequence
- Transmit STX (8)(9) Enter Decimal # Sequence
- Transmit ETX (8)(9) Enter Decimal # Sequence
- Delay % Enter Two Digit Value
- Delay Enter Three Digit Value
- Timeout Enter Three Digit Value

Host Setup
- Operating Mode
  - Modeless
  - Check-In
  - Ticketing

AEA Options
- Extended PECTAB ID Select Y/N
- VSR Status Enable Select Y/N
- Rotate Logo Download Select Y/N
- Printer LIFO Enable Select Y/N
- AEA 95 BT Cmd Enable Select Y/N
MAINTENANCE MENU

- Calibrate Sensors
  - BIN A
  - BIN B
  - Encode
  - Print
  - AutoCal

- Motor Tests
  - Test BIN A Motor
  - Test BIN B Motor
  - Test Encode Motor
  - Test Print Motor
  - Test Burst Motor

- Print Head
  - Stock Sensor: A(T/F) B(T/F) E(T/F) P(T/F)
  - Exit Full Switch
  - Burster Switch

- Display Sensors
  - Enter Resistance: 1000ohms; Select "Y" to clear print head count

- Change Print Head
  - Density Coupon
  - WEB Coupon
  - Diagonal Line Coupon
  - Checkered Box Coupon

- Clear Stock Counters