Automatic Ticket Dispenser

Set Up and Operation Manual

Dispenser Serial Number _________________________

Technik

1005 17th Street
Columbus, NE  68601
Service Dept. 800-795-8251
serv@technikmfg.com
www.technikmfg.com

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Set Up and Operation Manual

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SAFETY

This dispenser was designed using industry accepted safety standards. The power required to operate the dispenser is 110 VAC. *This voltage can be lethal if misused.* The 110 VAC goes to the control panel and power supply and is stepped down to 5 VDC and 12 VDC to operate the computer and dispenser. The dispenser is to be serviced only by trained personnel.

Mounting

The dispenser needs to be mounted securely to a counter top or wall. If neither is an option, a base plate option is available. Without proper mounting the dispenser may be unstable when the door is open since the weight of the door causes the dispenser to tip forward.

This dispenser should be securely mounted to a wall using the appropriate hardware for the type of wall you are mounting it to. See drawing below for mounting hole locations.

3 MOUNTING HOLES SHOULD BE USED TO MOUNT DIRECTLY TO A STUD

*NOTE - BE SURE TO USE ALL MOUNTING HOLES.*

POWER

The dispenser operates on standard 110 VAC 60 HZ. It must be plugged into a fused and grounded outlet.
OPERATING MODES

The dispenser has two operating modes which are selected by a pushbutton on the back of the display inside the cabinet. See the following sections for details on using each of these modes.

Vend mode
This is the normal operating mode. In this mode the dispenser accepts payments by cash and dispenses tickets based on the value of the bill inserted into the bill acceptor.

Setup mode
Setup mode allows the operator to set ticket prices, set display messages, view reports and set all other features of the dispenser. All setup functions are performed using the touchscreen on the front door of the dispenser.

INITIAL POWER-UP

Once the dispenser is installed and plugged into a fused and grounded outlet it’s ready to be turned on. Open the front door of the dispenser and set the power switch on the control panel to the ON position.

A splash screen will show briefly on the display followed by the normal vending mode screen:

Jefferson County Fair
Centerville 4-H Club

Tickets are $1.00 ea.

Buy Your Tickets Here!
Prizes Every Hour!

Sample Vending Screen

At this point the dispenser may be setup using the procedure below.
DISPENSER SETUP

To activate the setup screen, press the SERVICE button on the back of the display inside the cabinet door.

The Service menu will appear on the screen and all further setup functions may be performed on the touchscreen. Pressing one of the seven buttons will go to a screen that handles that particular function.

All values on the following setup screens are saved as soon as they are entered so there is no need for a “Save” button on each screen. The only exception is the Set Clock screen which includes a “SET” button to make it easy to exactly synchronize the clock if desired.

When all setup operations are complete press the “Exit Service Mode” button to return to normal vending mode.

It is recommended that the dispenser only be turned off when in Vend mode. This is just to ensure that all service settings have been saved before turning off the power.
Load Tickets

Follow the instructions shown on the screen to place the new tickets under the feed roller of the ticket dispenser. DO NOT EXTEND TICKETS BEYOND THE FRONT SLOT ON THE DISPENSER DOOR. Press the “Load Tickets” button and the tickets will advance until they’re properly placed in the dispenser. If done properly no tickets should extend outside the dispenser slot and all tickets loaded will be accounted for properly.

The “Reset Tickets” button can be used to set the “Remaining Tickets” count back to the “Full Ticket Count” level set in the Ticket Options screen (see below).

Loading Fanfold Tickets:

Place fanfold tickets into the hopper as shown.
Loading Rolled Tickets:

NOTE: Largest roll size = 8.5” diameter. Smallest core size = 0.75” diameter.

The rolled ticket mounting kit consists of the parts shown above. Install the screw into the threaded hole in the side of the hopper.

Slip the plastic roller over the screw. Hang the ticket roll over the plastic roller and place the plastic guard over the threaded end of the screw.

Install the spring, washer and nut on the screw to hold the plastic guard in place. **DO NOT OVER-TIGHTEN THE NUT!**

The spring must NOT be fully compressed or the ticket roll may bind or the plastic guard may break.
Reports

Reports of cash received and tickets sold can be displayed on the Show Reports screen. The green box displays lifetime cash (credits) received, tickets sold and the start date of the reporting period. These totals are non-resettable and will be stored permanently in the memory of the dispenser. The red box displays the same information but is resettable when desired.

<table>
<thead>
<tr>
<th></th>
<th>Lifetime</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits</td>
<td>15974.00</td>
<td>1629.00</td>
</tr>
<tr>
<td>Credit Erased</td>
<td>53.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Tickets Sold</td>
<td>15974</td>
<td>1629</td>
</tr>
<tr>
<td>Available</td>
<td>9428</td>
<td></td>
</tr>
<tr>
<td>Start Date</td>
<td>08/21/19</td>
<td>09/10/19</td>
</tr>
</tbody>
</table>

**Credits**
- Credits received by the bill acceptor (in U.S. dollars).

**Credit Erased**
- Credits representing money which has been inserted in the bill acceptor but for which less than the full number of tickets were dispensed. This may happen if the dispenser runs out of tickets or a misfeed occurs during a dispense.

**Tickets Sold**
- The total number of tickets sold for the period.

**Available**
- The number of tickets still remaining in the dispenser. This is a calculated value based on subtracting the number of tickets sold from the “Full Ticket Count” value (*Ticket Options* screen). For this value to be correct the “Remaining Tickets” must be reset when new tickets are reloaded. The dispenser has no mechanical means of counting the actual tickets remaining in the dispenser hopper.

**Start Date**
- The date the period began. The Lifetime start date will not change. The Period start date will reset to the most recent date the period was reset.

The Period reports can be reset by pressing the “Reset Period” button.
Ticket Options

Press on any of the blue fields to edit values in those fields.

**Location Name:** Provide a brief description of the dispenser’s location. This value is displayed on the *Reports* screen.

**Full Ticket Count:** The number of tickets which are loaded each time the dispenser is reloaded. This value is used to calculate the Available tickets value on the *Reports* screen. This value must be set BEFORE resetting the remaining Tickets on the *Load Tickets* screen. This value will usually only need to be set once unless the number of tickets in a new package of tickets changes.

**Low Ticket Count:** When the dispenser calculates that the remaining tickets are approaching this level it will display a discreet “low ticket” warning in the lower right corner the main vend screen. If the available number of tickets is below this level after a sale completes the dispenser will display an *Out of Order* message and wait to be reloaded.

Three checkboxes are also available to set advanced options.

**CAUTION:** USE THESE OPTIONS WITH CARE as data loss may result if used incorrectly. We recommend you become completely familiar with the dispenser’s operation before activating these options.

- **On Service button go to Load Tickets directly:** If checked the dispenser will go directly to the *Load Tickets* screen when the SERVICE button is pressed. This is handy since loading tickets is the most-used function of the SERVICE button.

- **On Load Tickets reset available tickets counter:** When checked the dispenser will automatically reset the “Remaining Tickets” count whenever the *Load Tickets* screen appears, saving the need to manually reset the Remaining Tickets after each reload. The “Remaining Tickets” count is displayed on the *Load Tickets* screen and is used to calculate the number of tickets remaining after each sale.

- **On Load Tickets reset period counts:** This option will reset the Period count values whenever the *Load Tickets* screen appears, saving the need to switch to the *Reports* screen and resetting the period count after each reload.
Message Options

Vend Screen Messages

<table>
<thead>
<tr>
<th>Line 1:</th>
<th>Jefferson County Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 2:</td>
<td>Centerville 4-H Club</td>
</tr>
<tr>
<td></td>
<td><strong>Tickets are $X.00 each</strong></td>
</tr>
<tr>
<td>Line 3:</td>
<td>Buy Your Tickets Here!</td>
</tr>
<tr>
<td>Line 4:</td>
<td>Prizes Every Hour!</td>
</tr>
</tbody>
</table>

< Back

Messages Options Screen

This screen allows setting the messages which are displayed on the normal vending screen. Up to four lines of text may be entered that display above and below the ticket price as previewed on this screen and any lines that are not needed can be left blank. Pressing on one of the blue text boxes will bring up a keyboard screen that allows entering new text for that message.
Set Prices

<table>
<thead>
<tr>
<th>Set Ticket Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1 = 1 tickets</td>
</tr>
<tr>
<td>$5 = 5 tickets</td>
</tr>
<tr>
<td>$10 = 10 tickets</td>
</tr>
<tr>
<td>$20 = 20 tickets</td>
</tr>
<tr>
<td>$50 = 50 tickets</td>
</tr>
<tr>
<td>$100 = 100 tickets</td>
</tr>
</tbody>
</table>

Set Prices Screen

Tickets Per Bill Denomination:
The number of tickets dispensed for each bill inserted may be set for each denomination accepted.

Note: You only need to set this for the bills that your Bill Validator accepts. The base unit does not accept $50 or $100 bills. There is an optional upgrade for a bill validator that accepts these denominations.

Press on the blue field beside a dollar amount to bring up a keypad screen that allows entering the number of tickets to dispense for that denomination:

Keypad Screen

Any value may be entered from 1 to 999. Press OK to accept the new value or Cancel to leave the original value unchanged.
Set Clock

The dispenser contains an internal battery backed-up clock which may need to be reset if the battery is removed or if the dispenser is serviced. The clock is used to keep track of the reporting period dates.

Set the date and time (24-hour format) by using the up and down arrow buttons to set the correct values and then pressing the “SET” button.
Some basic dispenser functions may be tested using the Test screen.

**Bill Acceptor testing:**
The bill acceptor may be tested to see if it’s communicating properly with the dispenser controller. Pressing the “Enable B.A.” button should cause the bill acceptor to go online and its blue lights should begin to flash. Once enabled, bills may be inserted and a running total of cash inserted will display in the green box above the “Enable/Disable B.A.” button. These credit values will NOT be recorded in the internal reports.

**Ticket Dispenser testing:**
Pressing the “Ticket Out” button will run the dispenser for as long as the button is held down. As ticket notches pass by the notch sensor in the dispenser the “Ticket: Present/Absent” message in the yellow box will change briefly. Ticket notches will also cause the red light on the side of the dispenser to flash as they pass. Tickets dispensed in Test mode will NOT be recorded in the internal reports.
VENDING

When the power is turned on or the “Exit Service Mode” button is pressed on the Service screen the dispenser will enter Vend mode. When the dispenser is operating normally the following screen will be displayed:

Jefferson County Fair
Centerville 4-H Club

Tickets are $1.00 ea.

Buy Your Tickets Here!
Prizes Every Hour!

Idle Screen in Vend Mode

At this point the bill acceptor will be enabled (blue lights on) and customers may insert cash to make their purchase. The dispenser operates on a one bill = one transaction basis for speed and convenience. As soon as enough cash is inserted to purchase at least one ticket the ticket(s) is(are) dispensed and the transaction concludes with the dispenser ready to accept another bill.

When cash is inserted into the bill acceptor the display shows the credit screen and displays the amount of money accepted and the number of tickets being dispensed.

Dispensing Tickets

Credit: $0.00
Tickets: 0

Vending Screen

The “Tickets:" amount will count up as tickets are dispensed. During the dispense cycle the bill acceptor is disabled and will not accept any more money while tickets are dispensing. After the dispense cycle completes the screen will switch back to the idle message and the bill acceptor will be re-enabled.
Out of Order

If the dispenser detects a problem while dispensing tickets (such as a jam) or if the remaining ticket level drops below the “Low Ticket Count” value on the Ticket Options screen (see above) it will display the Out of Order screen:

A number will be displayed in the lower-right corner of the screen indicating the particular error that occurred. At this point the dispenser will no longer accept money or dispense tickets and must be put into Service mode to clear the problem.

One of the following error codes may be displayed:

1 - Dispenser is empty (remaining tickets are less than the “Low Ticket Count” value)
2 - General dispenser error (usually a ticket jam or feed problem)
3 - Error reading bill pulses from bill acceptor (contact TMI Service Dept.)
4 - Error in the dispenser’s permanent memory (contact TMI Service Dept.)
TROUBLESHOOTING

Fuse Blown
If the dispenser shuts down and nothing works check the fuse on the control panel next to the power switch. The dispenser uses a 6¼-amp AGC fuse.

Self-Testing Components
The bill acceptor and ticket dispenser mechanism may be tested using the Test screen from the Service menu. See p. 13 above.

CALLING A SERVICE TECHNICIAN
When calling for service PLEASE HAVE YOUR DISPENSER’S SERIAL NUMBER READY.

Call
402-564-3191 or 800-795-8251
for the TMI service department.

Serial Number Locations
The serial number is located on the front of this manual and on the inside of the main cabinet door below the door lock.
PYRAMID BILL ACCEPTOR

Acceptor Diagnostics

Use the Diagnostic Pushbutton on the side of the acceptor (toward the rear) as shown.
Front Bezel Lighting Flash Codes
The flash codes shown correspond to the Apex bill acceptor error. The acceptor will flash the error code then wait 3 seconds and flash it again.

<table>
<thead>
<tr>
<th>Flashing Code</th>
<th>Meaning of Flashing Code</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDs always OFF</td>
<td>The acceptor has no power.</td>
<td>Check that power has been applied.</td>
</tr>
<tr>
<td>LEDs always ON</td>
<td>No error exists - acceptor is OK.</td>
<td>None.</td>
</tr>
<tr>
<td>1 Flash</td>
<td>Something is in the bill path</td>
<td>Remove the cassette and Lower Sensor Plate to inspect for foreign objects. Clean if necessary.</td>
</tr>
<tr>
<td>2 Flashes</td>
<td>Something is obstructing the stacker.</td>
<td>Remove the cassette and Lower Sensor Plate to inspect for foreign objects. Clean if necessary.</td>
</tr>
<tr>
<td>3 Flashes</td>
<td>The cassette is full of currency.</td>
<td>Remove the cassette and empty it.</td>
</tr>
<tr>
<td>4 Flashes</td>
<td>The cassette has been removed</td>
<td>Replace the cassette.</td>
</tr>
<tr>
<td>5 Flashes</td>
<td>The acceptor is defective</td>
<td>Replace the acceptor.</td>
</tr>
<tr>
<td>6 Flashes</td>
<td>The acceptor is not enabled</td>
<td>Verify that the host has enabled the acceptor.</td>
</tr>
<tr>
<td>10 Flashes</td>
<td>Configuration Mode has been entered.</td>
<td>Configuration Card must be inserted into the acceptor or cycle power to the acceptor to exit this mode. See Configuration Section for details.</td>
</tr>
</tbody>
</table>
Removing the Cashbox
To remove the stacker, push back the Cashbox Latch toward the front of the acceptor. Then pull the Cashbox upward, and then pull back to remove.

Installing the Cashbox

Note: When installing the cashbox make sure the tabs are pushed forward into the slots on the main housing. Then push down, making sure they click into place. If the cashbox is not properly installed the bill acceptor will not function.
Removal of the Lower Sensor Plate

Removal of the Lower Sensor Plate is done by pressing the locking tab in and pulling the plate back. NOTE: Before removing the Lower Sensor Plate, make sure you unplug the 18-pin connector from the other side of the bill acceptor. It is not shown in the picture.
MARS Bill Acceptor

Optional alternative to the standard Pyramid unit supplied in this machine

SWITCH DESCRIPTION

1,2 .. Combination of these two switches selects number of enabled bill directions.

3 ..... Position allows either acceptance or security to be maximized.

4,5 ... Individual switches enable or disable corresponding bill denomination.

6 ..... Position allows for either Always Enable, acceptance at all times or Harness Enable, acceptance by way of controller.

7 ..... Position allows for either one (1) or four (4) pulses per dollar

One pulse = 50ms on/50ms off

8 ..... Position allows either Gaming Interfaces (amusement) or Vending Interfaces.
INSTALLATION INSTRUCTIONS

1. Set Bill Acceptor option switches.
   Note: When you receive the product, all switches are off.
   This will automatically enable the options as follows:
   • Accept $1, $2, $5, $10, $20, $50, and $100 dollar bills.
   • Four way accept.
   • High Security accept.
   • 50ms on/50ms off pulse (short pulse).
   • One pulse per dollar.
   • Harness enable.

   Important note: Placing any switch ON will override the above options, and the Bill Acceptor will operate according to the switch settings label! (See Figure 2)
   NOTE: The unit may be configured with the included coupon rather than using the option switches.

2. Remove power from the entire machine.

3. Install the AE2800 onto the Bill Acceptor mounting studs and through the mounting hole of the machine. Secure using the appropriate hardware.

4. Connect the AE2800 to the appropriate interface harness.
   Do not force the harness into bill acceptor!! Will cause damage to the pins!

5. Apply power to the machine.

Observe that the LED status indicator on the back of the AE2800 is ON and NOT flashing. This condition indicates that the unit is ready to accept bills.

   • If the light is OFF, check to ensure that power has been applied.
   • If the light is flashing, refer to the label located on the back of the magazine for a description of diagnostic codes.

6. Check operation
   • Insert a $1 bill and observe that it is accepted and stacked.
   • Repeat for other enabled bills.
   • Ensure that proper credit was given

7. Remove bills and check status
   • Instructions for bill removal are located on a label at the back of magazine.
   • Verify that the LED status indicator remains steady ON.
Portable Printer Option

An optional portable printer is offered from Technik. With a portable printer you are able to print the accounting information from the machine.

1. Use the SERVICE Button on the back of the control board to enter service mode.
2. Press the power button on the portable printer.
3. While in service mode, use the USB cable included with the printer to connect the printer to the control panel USB port.
4. Once connected the report will print automatically

If the printer doesn’t print automatically
- Check that the USB cable is securely inserted at both ends
- Make sure the printer is powered on (ERR light should be green)
- Make sure there is paper in the printer
- Make sure that the machine is in service mode (see page 5)