

# AMERICAN CHANGER & HOFFMAN MINT

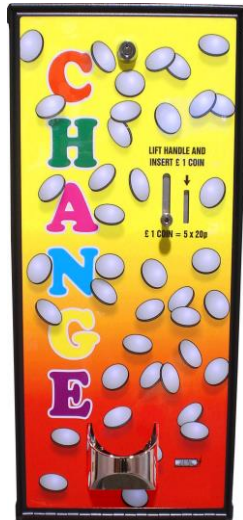
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AC401



AC401-COIN

**BATTERY POWERED CHANGER**

**OPERATIONS MANUAL  
MODELS AC401/AC401-COIN**

**ARL Listed STD: UL 756**

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Revised January 2016

**Model Number:**

\_\_\_\_\_

**Serial Number:**

\_\_\_\_\_

**Tested By:**

\_\_\_\_\_

**Date:**

\_\_\_\_\_

## **Specifications**

Operating voltage	12VDC
Battery type	Sealed Lead-Acid
Power consumption	Operating maximum – 20W Standby – 20mW
Battery life	8-12 weeks on full charge
Hopper dispense rate	Approximately 3 coins/second
Operating temperature	0-140 degrees Fahrenheit
Hopper coin capacity	100 coins minimum to 1,600 coins maximum

## **Warranty Information**

**A Return Material Authorization number (RMA #) must be obtained before returning a unit for repair. A copy of invoices must accompany any and all warranty work.**

***It is the end users' responsibility to follow cleaning and maintenance procedures as outlined in the validator manual.  
Any unit returned for repair requiring only a cleaning will be charged a flat rate plus shipping and handling.***

### **Validators**

Validators (AC401) are warranted for two years from date of purchase.

### **Coin Acceptor**

The Coin Acceptor (AC401-COIN) is covered by a one-year warranty from date of purchase.

### **Battery**

The Battery is covered by a one-year Limited Warranty.

### **Hopper**

The Hopper is covered by a five-year Limited Warranty from date of purchase.

### **COVERED**

- Manufacturers' defects in workmanship or materials

### **NOT COVERED**

- Damage caused by shipping or physical abuse
- Misapplication
- Vandalism
- End users' attempt, on their own, to repair components
- Cleaning and maintenance
- Power surges and lightning strikes

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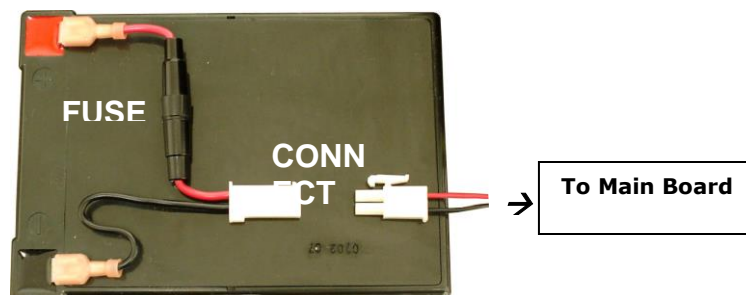
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## SECTION A SETUP & INSTALLATION

### Setup

1. Fully unpack all of the boxes that accompany this changer. This should include the box containing the changer and this manual, the box containing the battery, and any extra boxes that may contain the Bill Box, Battery Charger, or additional spare batteries, etc.
2. Open the door to the changer. *For the Cam Lock*, use the keys that are enclosed in the manila envelope accompanying this manual. Insert the key, and then rotate it clockwise  $\frac{1}{4}$  turn to unlock the door. *For the T-handle*, the lock is not installed yet (refer to step 9 for lock installation). Turn the handle counter-clockwise, up to 10 times or more, until the screw disengages from the lock bracket.
3. Visually inspect the changer's interior for any obvious damage that may have occurred during shipping, including dislodged components or detached connectors. *NOTE: The white two-position battery connector will be detached, as the battery is shipped in a separate box.*
4. If no damage is found, install the battery in the cabinet. The battery should be placed on top of the metal platform located in the top left corner of the cabinet, above the Hopper.
5. Before permanent installation of your AC401 changer, perform a functional test to further verify that there is no hidden shipping damage. To ready the changer for use, coins must first be added to the hopper. You will need at least enough coins to cover the two metal plates at the bottom of the Coin Bin, or approximately 100-150 coins. The Hopper must also be powered-up. Connect the white two-position battery connector, which is secured to the left side of the cabinet, to the mating white connector attached to the top of the battery (refer to Figure 1 below). When this connection is made, the hopper's red LED should light up for approximately two seconds. When the LED turns off, the changer is ready for testing.
6. *AC401*: Insert the Bill Box inside the changer. It should slide in to the right of the hopper, with its bottom resting on the two studs protruding from the right interior wall. The part on the top of the Bill Box that sticks out toward the left should be covering the hopper's Coin Bin to block accepted bills from falling into it.  
*AC401-COIN*: Insert the Coin Box inside the changer. It should fit into the space on the bottom of the cabinet to the right of the hopper, underneath the coin acceptor. When the changer's front door is closed, all accepted coins should fall down directly into the Coin Box.
7. Close the front door, and insert a few bills or coins to ensure the machine pays out correctly. To change the payout, refer to the "Payout Selection" section of this manual.
8. Once the changer has been tested and is working properly, please completely charge the battery before installing the changer in its permanent location.
9. *Installing the T-handle lock*: The lock and keys can be found inside the manila envelope accompanying this manual. To install the lock, insert the cylinder into the round hole in the middle of the T-handle, pushing it all the way in until it stops. Rotate the cylinder until you hear it 'snap' into place. Turn the key counterclockwise  $\frac{1}{4}$  turn, and remove the keys.



**Figure 1 – Battery (top view)**

## **Charging the Battery**

When your AC401 arrives from the factory, the 12V Sealed Lead Acid (SLA) battery supplied with the unit may not be fully charged. In order to get the most use out of your changer, charge the battery fully before using the AC401 for the first time. You can use either the Standard Battery Charger, the Optional Battery Charger, or another of your choice, as long as it complies with the charging specifications detailed in the "Battery Specifications" section of this manual.

Refer to the following procedure to charge the battery if using the supplied Standard or Optional Battery Chargers. If a different charger is used, read the directions written for removing and reinstalling the battery, and consult your charger's manual for specific charging instructions.

1. Disconnect the battery from the Main Harness at the white two-position connector located on top of the battery.
2. Lift the battery up from the platform above the Hopper, and slide it sideways, toward the right. Once it is free of the platform and the lock bracket assembly, remove it from the cabinet.

NOTE: The battery should be charged in a well-ventilated area. Do not charge the battery in an enclosed space.

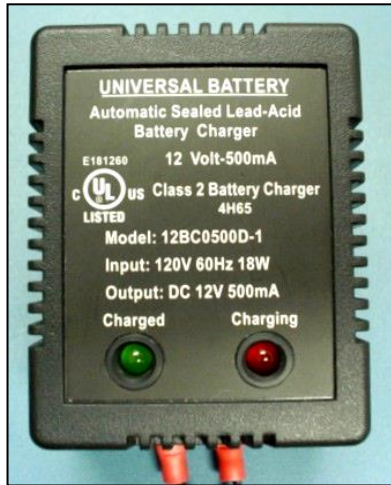
3. With the battery charger unplugged, connect its white connector to the white two-position connector that is attached to the battery terminals. *NOTE: If your charger has alligator clips, attach the black one to the negative (-) battery terminal and the red one to the positive (+) terminal. In order for current to flow, the clips must make contact with the battery's metal terminals; so, loosen – but do not remove – the connectors, if necessary.*
4. Once the charger is properly connected to the battery, plug it into an AC outlet to begin charging. *NOTE: The Standard Charger can only accept 120V ( $\pm 15V$ ), but the Optional Charger can accept any AC voltage in the range 90V–264V. For the Standard Charger, the RED "Charging" LED will be ON solid during charging. Continue charging until the GREEN "Charged" LED turns ON solid, at which time charging is complete (refer to Figure 2). There is only one indicator LED on the Optional Charger, but it operates the same way – RED means "Charging," and GREEN means "Charged" (refer to Figure 3). Charging times depend on the extent that the battery has been discharged and may take up to 24 hours or more for a 100% discharged battery.*

Both the Standard and Optional Battery Chargers may remain plugged in while connected to the battery for any length of time without harming the battery. Once charging is complete, the chargers enter a "Float" charging mode in order to maintain the battery in a completely charged state, but without overcharging it.

5. When charging is complete, unplug the charger from the wall, and detach its white connector from the battery.
6. Carefully lift the battery up, and slide it back into place on the platform in the top left corner of the cabinet.
7. Reconnect the battery to the Main Harness at the white two-position connector located on top of the battery.

***To prolong the service life and obtain maximum performance from the battery, please follow these guidelines:***

- Recharge the battery after it has been in use for 8-12 weeks. If the changer is installed in a colder and/or busier location, recharge it closer to the 8<sup>th</sup> week; if it is installed in a warmer and/or slower location, charging can wait until closer to the 12<sup>th</sup> week. *NOTE: It is recommended that the battery be recharged, or swapped with a fresh one, whenever the machine is refilled or serviced.*
- Never store a discharged battery for any length of time; always fully recharge it immediately after use.
- Batteries not in use should be recharged after a maximum of 9 months of storage and should always be recharged fully before being put into service.



**Figure 2 – Standard Battery Charger (120V only)**



**Figure 3 – Optional Battery Charger w/Universal Input**

## **Battery Specifications**

***NOTE: Both of the chargers supplied by American Changer fully conform to these specifications. They are both two-step, constant voltage chargers that automatically switch to a "float" voltage when the battery reaches a full charge.***

- Operating Temperature Range: 0° F (-18° C) to 140° F (60° C)
- Charging Temperature Range: 0° F (-18° C) to 122° F (50° C)
- Cycle Charging: Limit current to 2.4A. Charge until battery voltage (under charge) reaches 14.4–15.0V at 68° F (20° C). Hold at 14.4–15.0V until the current drops to under 120mA. Battery is fully charged under these conditions, and charger should either be disconnected or switched to "float" voltage.
- "Float" or "Stand-By" Charging: Hold battery across constant voltage source of 13.5–13.8V continuously. When held at this voltage, the battery will seek its own current level and maintain itself indefinitely in a fully-charged condition.

## **Filling the Hopper**

The AC401 will not operate if the hopper is empty. There must be at least enough coins in the hopper to cover the two gold-colored metal plates at the bottom of the Coin Bin for the changer to function (refer to Figure 4). The hopper can be filled while it is inside the changer, but filling may be easier by removing the hopper from the cabinet first.

## **Hopper Coin/Token Sizes**

The hopper will accommodate coins ranging in size from 21–30 mm in diameter, and from 1.25–3.3 mm in thickness. There are options available to dispense larger coins, up to 31.5 mm, and smaller coins, down to 16.25 mm, in diameter. For more information, please contact American Changer's Service Department toll free at 1-888-741-9840.

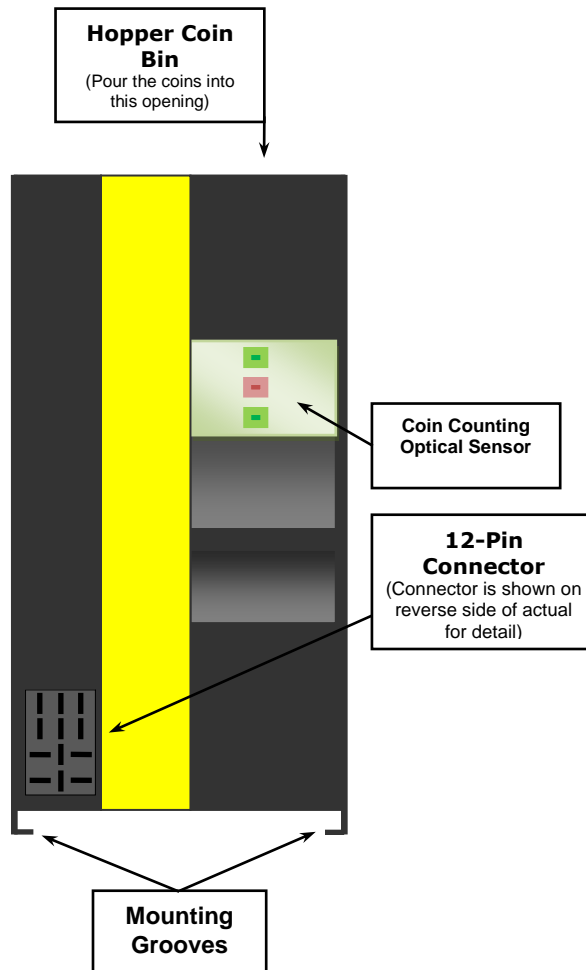
**A dime is approximately 18 mm; a nickel is approximately 21 mm; a quarter is approximately 25 mm; and a dollar coin is approximately 28 mm in diameter.**

## **Hopper Removal, Filling, and Replacement**

1. Before removing the hopper from the cabinet, turn off the power by disconnecting the white two-position connector located on top of the battery (refer to Figure 1).
2. Remove the hopper from the cabinet by sliding it forward slowly, while applying gentle upward pressure, until it releases.
3. Fill the hopper with coins; it can be filled all the way to the top. The hopper capacity in quarters is 1,600 coins ( $\pm 10\%$  due to the random way the coins settle inside the bin).

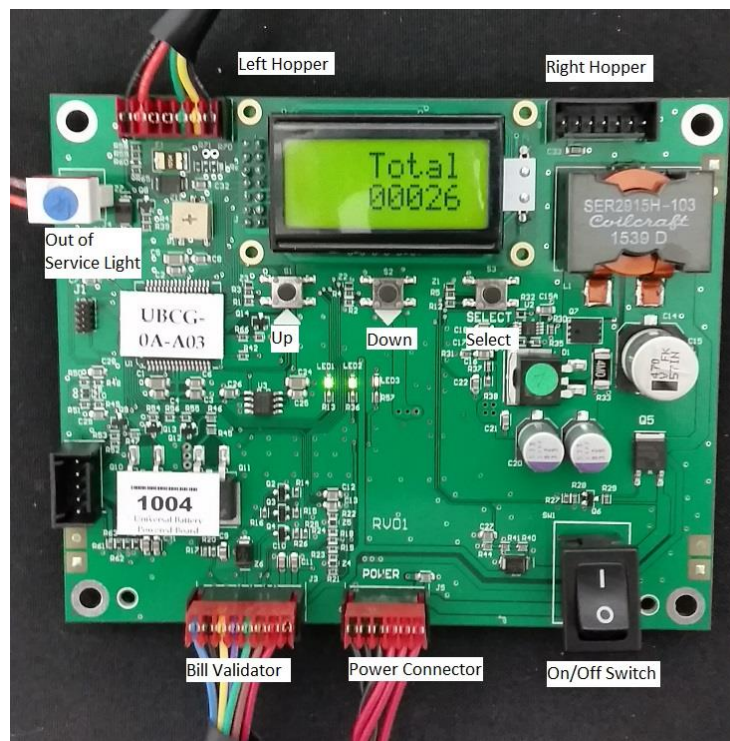
*NOTE: When filling the hopper, do not allow any bent coins or foreign objects to enter the Coin Bin. These may cause the hopper to jam, rendering the changer inoperable.*

4. Next, reinstall the hopper. NOTE: The hopper will be quite heavy when it is full, so take additional care when placing it back inside the AC401 cabinet. The hopper has mounting grooves on its underside that match up with the keyed pattern cut along the sides of the green hopper plate. Position the hopper on top of the plate, and maneuver it until it drops down. Slide it backwards until it stops, and the hopper plate's connector inserts into the hopper's 12-pin connector.
5. Finally, reconnect the main harness' white two-position connector to the mating connector located on top of the battery. The changer will power up and be ready to use.



**Figure 4 – Hopper**





**Figure 5 Logic board**

## **ACCESSING THE PROGRAM MENUS**

Your changer comes preset with default operational settings that are easily reprogrammed to meet your desired application. Programming is done using the three buttons and LCD display located on the Main Logic Board as an interface. (See Figure 5.)

When the unit is in the Standby mode, press any button and hold it down for two seconds. This wakes up the main logic board. Then press the select button to enter the setup mode. The UP and Down buttons are used to move the cursor and to increase or decrease user-set values. Many of the menus contain submenus, which may be accessed by pressing the Select button when the appropriate menu item is displayed or highlighted. Choosing 'Exit' in any menu will take the program out of Setup back to Standby mode.

The following sections describe the various options available in the software and should be used as a reference during initial setup and configuration.

## **PAYOUT**

Enter the denomination of coins in the hopper(s). This value can be set to anywhere between 1¢ and \$20. Use the Up button to increase the value and the Down button to decrease it, and push the Select button to save.

**Example: Set Change = \$0.25 to pay out 4 quarters per dollar.**

## **HOPPER SETUP**

*ccTalk:* Select this option if using one or more hoppers with a ccTalk serial interface to the Main Logic Board (MLB). Once selected, enter the number of ccTalk hoppers – one or two – to be used in the changer. *Note: Each Logic Board has the capacity to control two ccTalk hoppers, left and right; but, if only one is used, it must be plugged into the left-side connector (see Figure 5 for the ccTalk device connections on the MLB).*

## **VALIDATOR SETUP**

*The changer will arrive from the factory with this information already programmed, so this menu will only be needed if changes are to be made. Setup of the validator is done using the third submenu, 'Validat,' inside the menu. The selections are either Trilogy or MEI.*

## **USING THE HOPPER DUMP FEATURE**

### **DUMP**

#### **Using the DUMP Feature:**

1. Open the changer door to give access to the MLB and the hopper(s).
2. Place a suitable container in front of the hopper to catch the dispensed coins. On rear load models, the coins may have to be scooped out of the coin cup as they are being ejected.
3. On the Main Logic Board, press and hold a button for 2 seconds. The screen will display the total count. Press the Select button, then press the down button until Dump is displayed. Press the Select button again, the screen will display ccTalk with yes beneath it. Press the select button again to start dumping the hopper(s).
4. Once the hopper(s) are emptying, they will continue to run until manually stopped by pressing the Select (SEL) button on the MLB. They may be stopped at any time or allowed to run until empty.
5. A count of the number of coins being dispensed by each is displayed on the LCD display. If the hoppers are completely emptied, this count will show how many coins were in each before dumping commenced. Press the select button again to stop the hopper(s) from running and to exit the menu.

## **Functional Description**

There are four primary parts inside of the AC401 changer. These are the Bill Validator or Coin Acceptor, the Hopper, the Main Logic Board and the Battery. The battery is a 12V Sealed Lead-Acid (SLA) type, and it powers the changer's complete operation. The Hopper holds the coins and dispenses them during a transaction. The Main Logic Board controls the entire machine. The Bill Validator scans the incoming bills to determine if they are authentic and to identify their denominations. It can accept \$1, \$5, \$10, and \$20 bills, but it will only accept \$1s and \$5s by default; the rest are "disabled." Please refer to the "Bill Validator Configuration" section in this manual to change the bill acceptance. The Coin Acceptor works the same way by examining the incoming coins for both authenticity and value. To change the coins that are accepted, please refer to the "Coin Acceptor Configuration" section in this manual.

*AC401:* A typical changing operation begins with a bill being inserted into the Bill Validator. As the bill enters the validator's front bezel, a sensor detects it, and the system is powered up. Approximately one second later, after the validator has finished its internal powering-up procedure, the bill will be drawn into the acceptor to be examined for authenticity. The power-up procedure is fast enough that a bill should be able to enter the front bezel, trigger the sensor, and continue uninterrupted straight into the validator for processing.

Once the bill has been "validated," or deemed genuine, the validator sends the proper number of electronic pulses for the denomination accepted to the Main Logic Board. The Main Logic Board reads the pulses, increments the Total Bill Count, and then sends secure data to the hopper to dispense coins. As they exit, the coins pass an optical sensor and are counted. When the correct number of coins have been dispensed from the hopper according to the current payout selection, the motor is turned off. Shortly afterward, if the sensor in the validator's front bezel has detected no further bills, the validator and main logic board will be powered down in order to prolong battery life.

## **ERROR CODES ON BOARD DISPLAY**

**Validator Errors:** When a validator error occurs, the validator's EEPROM shuts down the validator and sends an error code to the Logic Board's LCD display. The Out-of-Service light on the front of the machine will illuminate for a validator error.

1. **Validat. Motor** – Motor failure. Either the Stacker or Transport motor has failed; replace the unit.
2. **Validat. Sensor** – One of the sensors inside the validator has failed. Check for a jammed bill; if that is not the cause, repair or replace the validator.
3. **Validat. Checksum** – Checksum failure. The validator's Logic Board programming has been corrupted; repair or replace the validator.
4. **CashBox** – The Bill Stacker has been removed from the validator and should be replaced.
5. **Validat. NoComm** – There is a communication failure between the changer's Main Logic Board (MLB) and the validator. This may be a temporary condition while one of them is completing some task, or the cable harness may be loose or unplugged, or the validator may need to be repaired or replaced.
6. **Validat. Disabled** – The MLB cannot enable the validator due to an internal error inside of the validator. This may be a communication issue and may be temporary.
7. **Validat. String** – The changer's Anti-Stringing Protection has shut down the machine's operation. Basically, more money has been paid out in less time than allowed by the system's settings (see Anti-Stringing Protection section in this manual). Wait the allotted time, or reset the MLB to resume operation.
8. **Validat. Pulse** – The pulse validator being used has been disabled. Check the unit and repair or replace as necessary.
9. **Busy** – This message is displayed whenever the validator is in the process of validating (accepting) or stacking a bill.

**Hopper Errors:** Hopper errors occur for a variety of reasons, but the most common in any coin machine is always low coins. Any of the hopper Errors will cause the Out-of-Service light on the front of the machine to illuminate. For the following, if two hoppers are installed in the machine, X = L (left) or R (right).

1. **HopperX NoComm** – The changer's Main Logic Board is unable to communicate with the hopper. This may be a temporary condition, or the cable harness may be loose or unplugged, or the hopper may need to be repaired or replaced. *Note: If using only one hopper, it must be plugged into the left-side connector (see Figure 1).*
2. **HopperX NoPay** – This code signifies that a payout signal was sent to the hopper, but the hopper did not dispense any coins/tokens. Check the hopper for a possible coin jam, exit blockage, or other mechanical error. If nothing can be found, have the unit repaired or replaced. *Note: If using two hoppers and one of them fails to pay out, the other hopper will make up the difference, if it can.*
3. **HopperX OptoBlkd** – An optical sensor near the exit window is being blocked. The exit path may be obstructed, or the Optic Board may be bad. Repair or replace.
4. **HopperX Current** – The maximum current level for the hopper is being exceeded. Inspect for a jammed coin preventing the coin Elevator Track from moving, or a stalled or shorted motor. Repair or replace the hopper.
5. **HopperX Fraud** – The changer may be being defrauded. Inspect for a jammed coin or other obstruction near exit window; repair or replace the hopper.
6. **HopperX TimeOut** – The coins/tokens were not dispensed from the hopper in the specified time. Check the hopper for any coin jams or mechanical obstructions preventing coins from exiting. Have the unit repaired or replaced.
7. **HopperX Low** – This is the most common error; it signals Low Coins in the hopper. Refill the hopper with coins or tokens. If you have enough coins in the hopper to cover the gold low-level sensing plates and you are still getting this message, try the following:
  - a) Ensure the coins have not bridged in the extension on top of the hopper, preventing them from falling down into the hopper.
  - b) Clean the bottom gold plates of the hopper with EMERY cloth or fine sandpaper. Refill the hopper and try again.
  - c) Using an ohmmeter, check the continuity of the hopper harness from the 12-pin connector back to the logic board. You should get 0 ohms for each line.If none of this works, the unit may need repair or replacement.

## **Bill Validator Configuration**

Detailed instructions for configuring the Bill Validator can be found in the Bill Validator's Operation Manual, which is enclosed in the manila envelope accompanying this manual. An Operation Manual may also be downloaded and printed from the Pyramid Technologies, Inc. website at [www.pyramidacceptors.com/support.html](http://www.pyramidacceptors.com/support.html). Please read the Validator's Operation Manual carefully before attempting to reconfigure the validator. Presented here are only instructions for filling out the Configuration Card as well as instructions for what must be done to the hopper before performing the procedure.

### **Before Performing the Configuration Procedure**

In order to keep the Bill Validator's power on during the entire configuration procedure, please perform the following:

1. Partially insert the filled-out Configuration Card, a dollar bill, or any other piece of paper into the Bill Validator. Insert it only enough so that the sensor in the front bezel detects it and turns the power on, but not enough that it gets drawn into the validator.
2. Verify that the validator power is on, as indicated by the flashing green lights on the front, and then remove the paper.
3. Press the hopper's Pushbutton, located in the top right corner of the front side, once. The hopper's red Indicator LED should begin blinking at a rate of once per second.

Once this is done, the configuration procedure can be completed. NOTE: The hopper will remain in the "Power ON" state for only 1 minute, so perform the configuration immediately after entering this mode. If the validator power turns off in the middle of configuration, it will be unsuccessful and must be reconfigured from the beginning. To take the hopper out of the "Power ON" state before the minute is up, press the Pushbutton once again.

### **Configuration Card Settings**

Both the Trilogy and APEX/XLC cards are laid out the same, so make the following selections when filling out either:

Section 1 - "Pulse" (Trilogy) or "Pulse/Serial" (APEX/XLC)

Section 2 - "1"

Section 3 - "Fast" and "Flashing"

Section 4 - Fill in the ovals for only the bills you want to be enabled; the rest will be disabled (Bill/Note 1 = \$1.00; Bill/Note 2 = \$5.00; Bill/Note 3 = \$10.00; and Bill/Note 4 = \$20.00).

Section 5 - "Low" and "All 4 Ways"

## **Bill Validator Maintenance**

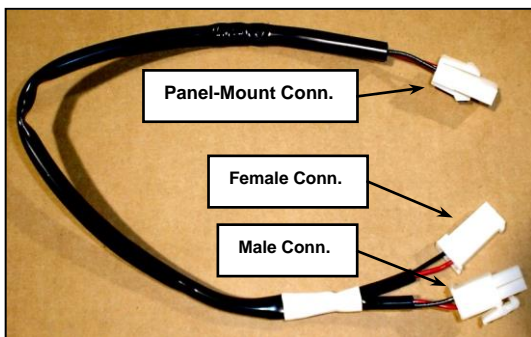
Both the Trilogy and APEX/XLC Bill Validators are designed to be maintenance free. To keep the validator in its best possible working order, though, it will require an occasional cleaning. Detailed instructions for cleaning the Bill Validator can be found in the Bill Validator's Operation Manual, which is enclosed in the manila envelope accompanying this manual. An Operation Manual may also be downloaded and printed from the Pyramid Technologies, Inc. website at [www.pyramidacceptors.com/support.html](http://www.pyramidacceptors.com/support.html). Please read the validator's Operation Manual carefully before attempting to clean the validator.

**Under NO circumstances should any solvent or foam-type cleaner be used!**

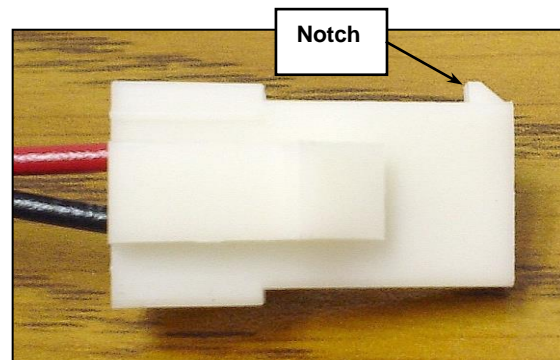
## **AC Power Harness Installation**

If an "AC Power Harness" was ordered with your AC401 changer, it will be located inside the manila envelope shipped inside the cabinet, along with the keys and this manual. This harness, American Changer Part Number AC400.16-H, allows the AC401 to be plugged into an AC electrical outlet, using the supplied Battery Charger (Standard or Optional), for maintaining the battery at a full charge at all times. **NOTE: DO NOT remove the battery from the changer! The AC401 cannot be powered using the charger alone.** Please use the following instructions to properly install the harness in the changer.

1. Unlock and open the front door of your AC401 or AC401-COIN battery-powered changer.
2. Disconnect the battery from the Main Harness at the white two-position connector located on top of the battery. The Main Harness runs up the left side of the cabinet to the battery at the top.
3. Remove the hopper from the cabinet by sliding it forward slowly, while applying gentle upward pressure, until it releases.
4. Take the battery down from the bracket in the top left corner, and relocate it in the open area to the right of the hopper. Install it on the bottom of the cabinet, and push it all the way to the back.
5. Locate the AC Power Harness. Insert the Panel-Mount connector (refer to Figures 7 & 8) into the hole in the rear of the cabinet from the inside. Make sure that the connector's Notch is facing upward as it is inserted through the hole. Gently push it until it 'snaps' into place, with its two barbs "grabbing" the outside rear of the panel. Wiggle it a little bit to ensure that it is locked in place.



**Figure 7 – AC400.16-H  
AC Power Harness**



**Figure 8 – Panel-Mount Conn.**

6. Reroute the Main Harness' white, 2-position battery connector (disconnected in step 2) underneath the green metal plate upon which the hopper sits, toward the battery on the right.
7. Connect this battery connector to the Female connector of the AC Power Harness (refer to Figure 7).
8. Next, reinstall the hopper. The hopper has mounting grooves on its underside that match up with the keyed pattern cut along the sides of the green hopper plate. Position the hopper on top of the plate, and maneuver it until it drops down. Slide it backwards until it stops and the hopper plate's connector inserts into the hopper's 12-pin connector.
9. Finally, connect the Male connector of the AC Power Harness (refer to Figure 7) to the white two-position connector located on top of the battery. This will power-up the system.

## **NOTES**

- After performing this procedure, either of the supplied battery chargers can be plugged directly into the rear of the changer (refer to Figure 9) to maintain the battery while the machine is operating normally.
- DO NOT connect a discharged battery this way in order to recharge it while inside the cabinet. Always fully recharge a discharged battery BEFORE installing it inside the AC401.



**Figure 9 – Applying AC Power**

## **SECTION B PARTS LIST**

### **PARTS LIST FOR THE AC401/AC401-COIN CHANGERS**

#### **Main Parts**

- AC1047-SUZO - Hopper
- AC1047.3 - Main Logic Board
- AC400.3 - 12V 12 amp Battery for AC401
- AC9024 - Trilogy Bill Validator, Stackerless
- AC9024-STKR - XLC Bill Validator, Stacker, \$1 & \$5 only
- AC400.4 - Std. Battery Charger, 120V Only
- AC401-OPTCH - Optional Battery Charger, Universal Input

#### **Cabinet Parts**

- AC4082 - Lexan Front Door Decal
- AC1013-P - Coin Cup
- AC5080-QS - Screw-In T-Handle
- AC1093 - Lock & Keys (for T-Handle)
- AC1000-LB - Lock Bracket Assy
- CALL - Coin Box, Bill Box, & Other Cabinet Parts

#### **Harnesses**

- AC1047-SUZO-HUS- Hopper Harness
- AC401.2-VH - Validator Harness
- AC401.1-PH - Power Harness for Main Board
- AC401.11-H - AC401 Battery Terminal Harness with Fuse
- AC401.9-H - AC401 Std. Battery Charger Harness

#### **AC401-Coin Parts & Harnesses**

- AC401-CPH - Hopper rev. 1 Condor Premier Harness
- AC401.3-H - AC401 Coin Door Sensor with Harness
- AC2066.4 - Condor Premier Coin Acceptor, Std
- AC2066.4-GB - Condor Premier Coin Acceptor, GB/Euro