

ACCESSORIES

Coin Cup (<i>Mounts to Coin Reject Exit</i>)	1 piece
Coin Bag Attachment (<i>Mounts to Coin Reject Exit</i>)	1 piece
Fuse (<i>Packed inside Fuse Holder on rear of machine</i>)	1 piece
AC Power Cord	1 piece
Replacement Small Drive Belt (<i>Black</i>)	1 piece
Replacement Large Drive Belt (<i>Red</i>)	1 piece
Replacement Feed Belt	1 piece
Hopper Braces	2 pieces
Numerical Diameter Label (<i>mm</i>)	1 piece

NOTES



OPERATION MANUAL

CC-301

PORTABLE COMPACT COIN COUNTER

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WARRANTY

The CC301 Portable Compact Coin Counter is under warranty for a period of 6 months from the original date of purchase.

Covered:

- Defects in workmanship or materials

Not Covered:

- Damage caused by physical abuse
- Misapplication
- Vandalism
- End user's attempt to repair on own
- End user's failure to follow recommended care and maintenance procedures

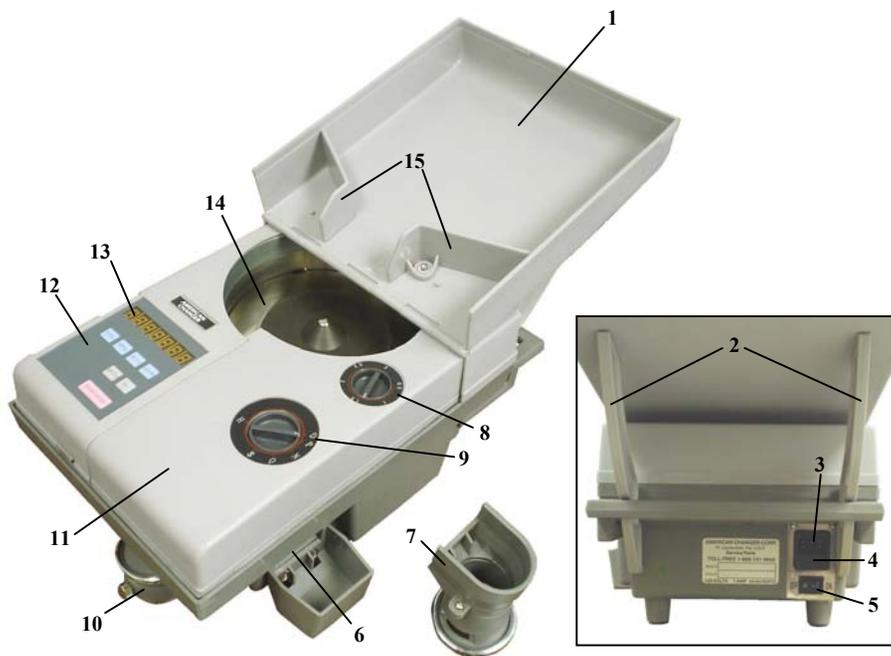
GENERAL INFORMATION

The CC301 coin counter is a compact and portable coin counting machine. Before using the CC301, please take a moment to read carefully and understand this manual. This document will explain the proper operation and maintenance procedures for the machine.

Should you have any questions, please contact your local distributor, sales representative, or American Changer for further assistance.

Please keep this manual readily available for future reference.

PRODUCT DESCRIPTION



CC301 Coin/Token Counter

CC301 Rear View

- | | |
|---|--|
| 1. Top Cover / Coin Hopper | 8. Thickness Adjustment Knob |
| 2. Snap-in Hopper Braces | 9. Diameter Adjustment Knob |
| 3. AC Power Cord Socket | 10. Coin Exit with Coin Bag Attachment |
| 4. Fuse Holder | 11. Removable Mechanism Cover |
| 5. Power Switch | 12. Operation Panel (Keypad) |
| 6. Rejected Coin Exit | 13. LED Display |
| 7. Optional Coin Bag Attachment
(Mounts to Rejected Coin Exit) | 14. Centrifugal Disk |
| | 15. Coin Guides |

MECHANICAL ADJUSTMENT

**Refer to the figure on the previous page, CC301 Interior Mechanism*

- Rotating the Diameter Adjustment Knob allows the machine to count coins of a specific diameter by changing the width of the Coin Path. The Diameter Plate is moved closer or farther away, depending on which way the knob is turned, to a fixed plate on the left side of the Coin Path. Coins that are larger in diameter than the Coin Path is wide will not be drawn through the path, and will not be counted. Coins with a smaller diameter than the Coin Path width is set to will fall out of the Coin Reject Chute. When making adjustments for token counting, the Coin Path width should be set, using the Diameter Adjustment Knob, wide enough so that the tokens are able to pass through, but not narrow enough so they do not fall through to the reject chute.
- Rotating the Thickness Adjustment Knob allows the machine to count coins of a specific thickness by changing the height of the Thickness Plate above the Centrifugal Disk. Depending on which way the knob is turned, the clearance between the Thickness Plate and the Centrifugal Disk is either increased or decreased, allowing thicker or thinner, respectively, coins to pass into the Coin Path. When making adjustments for token counting, the Thickness Plate should be set high enough off of the Centrifugal Disk to allow the tokens to pass easily underneath it, but low enough so that only one token is able to pass at a time.
- The Feed Belt runs between two pulleys, and is what draws the coins off of the Centrifugal Disk, through the Coin Path and the optical counting sensor, and out through the Coin Exit. Its height is also adjustable for proper operation with various size coins and/or tokens. Using screw A, the feed pulley height can be adjusted up and down; Screw B adjusts the exit pulley in the same manner. Using these two screws, the Feed Belt should be adjusted to create a gap between itself and the guide plate that is thinner than the thinnest coin/token to be counted by 0.5 mm, and that is constant through the entire Coin Path. *NOTE: This gap is adjusted at the factory so that all US coins can be counted without any further adjustment. Unless coins/tokens that fall outside of this range are to be counted, it should not be altered.*

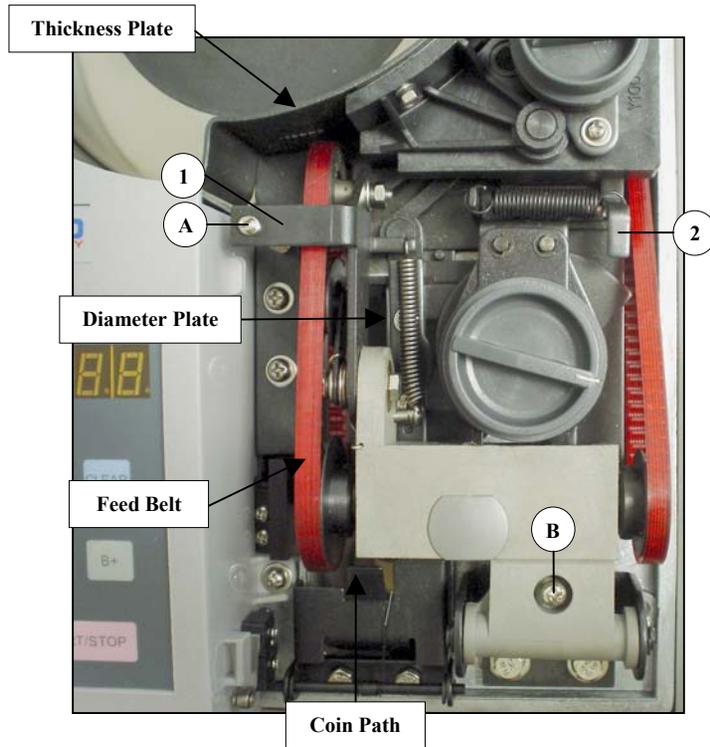
ROUTINE MAINTENANCE

**Refer to the figure on the previous page, CC301 Interior Mechanism*

- Caution!** Make sure to turn the main power OFF before attempting any routine maintenance of the machine.
- Lift off the Mechanism Cover to gain access to the Coin Path.
- Using a soft-bristle brush, or a soft, dry cloth, clean the Centrifugal Disk and the entire Coin Path, including the optical counting sensor located near the coin exit. The Coin Path can be accessed by pulling lever 1 upwards, until it locks into place, thereby moving the Feed Belt and feed pulley. To access the Centrifugal Disk, pull lever 2 to the right, and carefully lift the Thickness Plate up and out of the machine. Do the opposite to reinstall.
- Inspect the Feed Belt to see if it is dirty or worn. If it is dirty, clean it using a soft cloth saturated with denatured alcohol. If it is worn, replace it with a new belt.
- Check the Feed Belt height adjustment, and ensure that the Diameter and Thickness Adjustment Knobs are working properly.
- If the machine requires service or additional repair parts, please contact your local distributor, sales representative, or American Changer.

7. Set the coin counting mode (Continuous or Batch), and set the Coin Type to the desired number.
- Continuous Counting Mode:** Press the START/STOP key to begin the counting. The machine will continue counting until all of the coins in the hopper have been counted. To stop the counting before the hopper is emptied, press the START/STOP button again. When the key is pressed the next time, the machine will restart, and the count will be accumulated starting at the previous total. Press the CLEAR button at any time (when the machine is not running) to reset the number on the LED Display to zero. To accumulate a count starting at a number stored in memory, press the ACCU key to transfer the number in the current coin type's memory location to the display, followed by the START/STOP key to begin the counting. To save a count to memory, press the MEM button. There are a total of 10 memory locations, one for each coin type, numbered 0 through 9.
- Batch Counting Mode:** Use the BATCH and B+ keys to set the desired batch quantity, and then press the START/STOP button to begin the counting (please refer to the Keypad Functions section for information on how to set, clear, modify, and save batch quantities). The machine will count out coins until the total reaches the set batch quantity, at which point the counting will stop automatically. When the START/STOP button is pressed again, the machine will again count out the current batch quantity of coins, stopping automatically. The LED display will, by default, maintain a running total, incremented by the batch quantity for each batch counted. To reset the number on the display to zero after each batch, press the CLEAR key.

CC301 Interior Mechanism



TECHNICAL SPECIFICATIONS

Counting Speed:	1800 coins per minute
Hopper Capacity:	1500 coins
Countable Coin Size:	<ul style="list-style-type: none"> ▪ Thickness – 0.8 to 3.8 mm (0.0315 to 0.150 inches) ▪ Diameter – 14 to 34 mm (0.551 to 1.339 inches)
Number of Coin Types:	10 (0-9)
Display:	Seven-Digit LED: 9999999
Counting Modes:	<ul style="list-style-type: none"> ▪ Continuous Counting Mode ▪ Batch Counting Mode (default batch quantities: 50, 100, 200, 400, 500, 1000, 2000, 4000)
Power Consumption:	40 W (during operation)
Power Requirements:	AC 110V +/- 10%, 60 Hz
Dimensions:	<ul style="list-style-type: none"> ▪ 23 (width) x 32 (depth) x 17 (height) cm ▪ 9.06 (width) x 12.60 (depth) x 6.69 (height) inches
Operation Temperature:	0° C to +40° C (+32° F to +104° F)
Weight:	8.5 kg or 18.74 lbs

OPERATION PANEL (KEYPAD)



KEYPAD FUNCTIONS

- TYPE** : Coin Type key. Use this button to select the type of coin being counted. Each press will increment the coin type number, starting at 0, increasing to 9, and then cycling back to zero. The digit on the far left side of the LED display indicates the currently selected coin type.
- MEM** : Memory key. Press this button to store the coin count currently shown on the LED display to the memory location for the current coin type. Each coin type (0-9) has its own memory slot that is retained when the machine is powered off. *NOTE: Storing a number to memory will overwrite the number already saved in that location.* To clear the memory slot for the current coin, press the CLEAR key to set the display to 0, and then press the MEM key to save 0 to the memory location.
- ACCU** : Accumulate key. When this button is pressed, the number stored in the currently selected memory location (0-9) is shown on the LED display. The subsequent coin count will be accumulated starting at this number. *NOTE: Retrieving the saved number from memory does not erase it.*
- CLEAR** : Clear key. This button clears the number on the LED display to zero.
- BATCH** : Batch key. Pressing this button sets the machine to Batch Counting Mode. There are eight preset batch quantities: 50, 100, 200, 400, 500, 1000, 2000, and 4000. Starting with the first preset quantity after the first press, each successive press of the Batch key will display the next preset batch quantity. When the last preset batch quantity is displayed on the LED screen and the Batch key is pressed, the screen will be cleared to 0 indicating a return to Continuous Counting Mode. At this point, a counting operation will accumulate starting at the previous coin count that was displayed before entering Batch Counting Mode.
- B+** : Batch Quantity Increment key. Use this button when in Batch Counting Mode to increase the current batch quantity by 10.
- START/STOP** : Start/Stop key. Start or stop the counting with this key.

KEY COMBINATIONS:

- BATCH & B+** : Pressing these two buttons at the same time, only while in Batch Counting Mode, will decrease the current batch quantity by 1. For example, to select a batch quantity of 58:

<i>Press:</i>	<i>Display:</i>
	0
BATCH	50
B+	60
BATCH & B+	59
BATCH & B+	58

- BATCH & CLEAR** : Use this button combination in Batch Counting Mode to erase in memory the current preset batch quantity. *NOTE: Do not clear any preset batch quantities unless you are absolutely sure you want to do so. Presets that have been cleared can only be restored to their default values by manually re-entering them using the BATCH key and the BATCH & MEM key combination.*

- BATCH & MEM** : When the machine is in Batch Counting Mode, press these two buttons simultaneously to replace the current preset batch quantity with the number currently shown on the LED display. This allows you to customize up to eight preset batch quantities. *Again, NOTE: Do not clear any preset batch quantities unless you are absolutely sure you want to do so. Restoring the default presets must be done manually.*

OPERATING PROCEDURES

1. Install the Snap-In Braces on the rear of the unit, and then open the Top Cover. The braces will hold the cover at an angle so coins will be gravity-fed into the Centrifugal Disk. Rotate the two Coin Guides so they form a funnel shape as seen in the diagram on page 2.
2. Add the coins/tokens to be counted to the Hopper and let them pour down into the Centrifugal Disk, being careful not to let them overflow. *NOTE: When adding coins to the hopper, please remove any paper scraps, lint, rubber bands, etc. that may be mixed in with the coins. Foreign objects may cause jamming or faulty counting.*
3. Set up or install coin collection boxes, bags, cups, etc. to catch the ejected coins from the front of the machine, and the rejected coins from the side. *NOTE: When using a bag to collect coins, please place the bottom of the coin bag on the floor, or on a stand, to prevent the machine from tipping over.*
4. Set the Diameter Adjustment knob to the desired location according to the denomination of the coins to be counted. The label indicates the proper positions for US Dimes (D), Pennies (P), nickels (N), quarters (Q), \$1 coins (\$), and Half-Dollars (H). When counting tokens, the Diameter Adjustment Knob should be reset according to their specific diameter. Use the US coin dimension table below as a guide to help locate the correct knob position. *NOTE: Since measurements in-between the US coin positions are not marked, please perform trial and error qualification testing, making incremental knob adjustments, until the tokens are counted accurately. Refer to the Mechanical Adjustment section for more information.*

Coin	Diameter	Thickness
Dime (D)	0.705 in. (17.91 mm)	0.053 in. (1.35 mm)
Penny (P)	0.750 in. (19.05 mm)	0.061 in. (1.55 mm)
Nickel (N)	0.835 in. (21.21 mm)	0.077 in. (1.95 mm)
Quarter (Q)	0.955 in. (24.26 mm)	0.069 in. (1.75 mm)
Dollar (\$)	1.043 in. (26.50 mm)	0.079 in. (2.00 mm)
Half-Dollar (H)	1.205 in. (30.61 mm)	0.085 in. (2.15 mm)

5. Set the Thickness Adjustment Knob to the desired location according to the denomination of the coins to be counted. The thickness label does not indicate specific denomination locations. Rather, it lays out a numerical range, in millimeters (mm), of thicknesses around the knob. Refer to the Thickness column of the US coin dimension table on the previous page as a guide to help locate the correct knob position. When counting tokens, the same procedure should be employed, using the token thickness in millimeters (mm), to locate the proper knob position. *NOTE: Please perform trial and error qualification testing, making incremental knob adjustments, until the tokens are counted accurately. Refer to the Mechanical Adjustment section for more information.*
6. Locate and turn on the power switch on the back of the machine; the LED display will show the following:



Initially, the machine will be in Continuous Counting Mode, as indicated by a coin count of zero, and the Coin Type will be set to zero (1st of 10).