SEMACON

Count on one.

S-1200 Series Currency Counter
Operating Manual

Models S-1200, S-1215 and S-1225

CONTENTS

SEMACON S-1200 SERIES CURRENCY COUNTERS

This instruction manual serves as a general guide for operating your Semacon S-1200 Series Currency Counter. This machine is a heavy duty bank grade currency counter designed to save time and labor while counting banknotes in bulk. Before starting, please read the manual thoroughly to become familiar with the operation and functions of the machine. Please follow the operating instructions step by step and skip the functions that are not applicable to the model you purchased. If you have any questions or suggestions, please contact your authorized distributor or Semacon.

Model	Counting Mode	Adding Mode	Counting Speed (Notes/Min)	UV Counterfeit Detection	MG Counterfeit Detection
S-1200	√	√	800/1200/1600	-	-
S-1215	√	√	800/1200/1600	√	-
S-1225	√	√	800/1200/1600	√	√

WARNINGS:

● The machine should only be connected to a main AC socket with proper grounding and correct voltage.

● Please turn off the power switch and unplug the power cable before you open the back cover or when the machine will not be in use for an extended period of time.

S-1200 SERIES CURRENCY COUNTER
FRONT VIEW

1) Carrying Handle
2) Sliding Hopper Guides
3) Separation Mechanism
4) Display
5) Left Side Cover
6) Stacker Rack
7) Feed Deck
8) Control Panel
9) Stacker Roller
10) Right Side Cover
11) Feed Tension Adjustment Knob

Figure 1

S-1200 SERIES CURRENCY COUNTER
REAR VIEW

12) Upper Cover
13) Power Switch
14) Power Socket
15) Serial Number Label
16) Upper Rear Cover
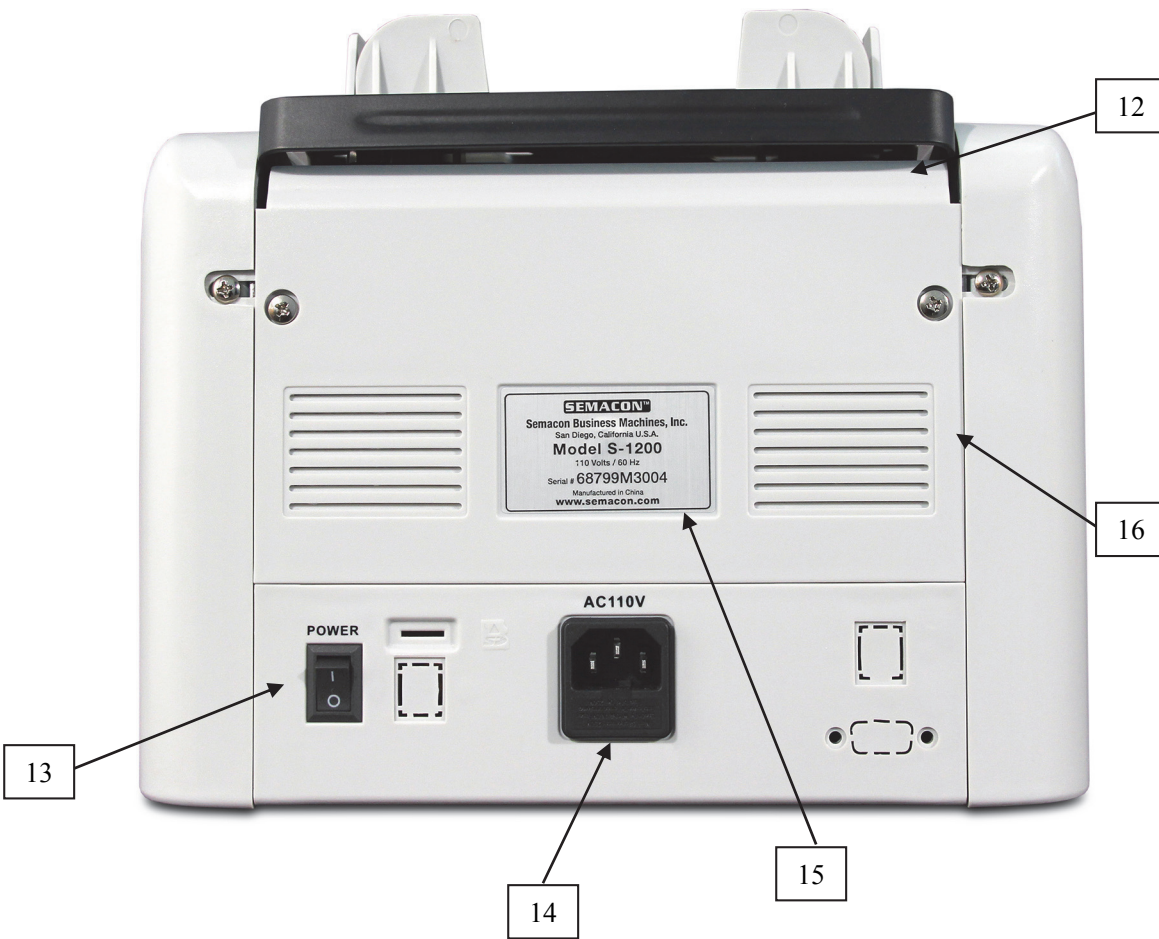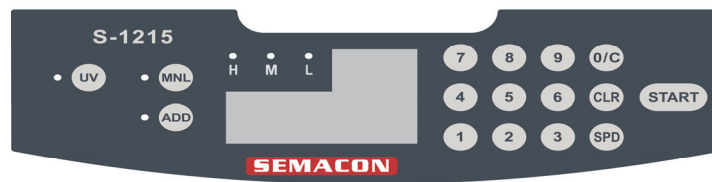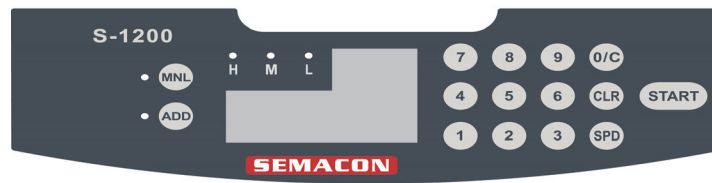
12

16

13

14

15

Figure 2

CONTROL PANEL OVERVIEW

Model S-1225 with Ultraviolet and Magnetic Counterfeit Detection
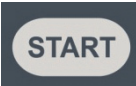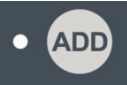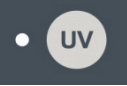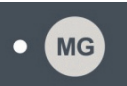
Model S-1215 with Ultraviolet Counterfeit Detection

Model S-1200

KEY	FUNCTION
START	Starts the counting process
CLR	Clears the counting number display
ADD	Selects add mode or normal counting mode
SPD	Changes the counting speed
MNL	Selects auto or manual feed mode
0/C - 9	Number buttons for selecting the batch stop setting
0/C	Clears the batch stop setting or functions as 0 when setting batch limit
UV	Turns on/off UV counterfeit detection (models S-1215 and S-1225)
MG	Turns on/off MG counterfeit detection (model S-1225 only)

CONTROL PANEL FUNCTIONS

START	The **START** button is used to restart the counting process after the machine stops during batch counting or after an error, and for manual feed mode.
0/C THRU 9	The number buttons are used for selecting the batch stop setting. In this mode, the counter will stop each time the batch stop setting is reached and the operator then removes the batch from the stacker. Batch stop settings between 1 and 999 bills can be entered. The batch stop setting will appear on the upper display. The selected batch number can be cleared by pressing the **0/C** button; this will remove the batch setting and deactivate the batch stop mode.
CLR	The quantity of banknotes counted, which appears on the lower display, will be reset to zero when the **CLR** button is pressed.
● ADD	The **ADD** button switches between ADD mode and normal mode. When the machine is in ADD mode, the machine will add the count for each stack of bills to the previous total. In normal mode, the total is cleared each time a stack of bills is removed from the stacker.
● UV	The **UV** button turns on/off Ultraviolet Counterfeit Detection. When Ultraviolet Counterfeit Detection is activated, a green light will appear next to **UV** on the control panel and the counter will scrutinize the paper of each banknote during the counting process to determine if there are any suspect counterfeit notes. If a suspect counterfeit banknote is detected, the counter will stop and alert the operator. If you are experiencing too many false UV suspects, the UV detection feature should be adjusted or deactivated. (This feature applies to models S-1215 and S-1225 only)
● MG	The **MG** button turns on/off Magnetic Counterfeit Detection. When Magnetic Counterfeit Detection is activated, a green light will appear next to **MG** on the control panel and the counter will scrutinize the ink of each banknote during the counting process to determine if there are any suspect counterfeit notes. If a suspect counterfeit banknote is detected, the counter will stop and alert the operator. If you are experiencing too many false MG suspects, the MG detection feature should be adjusted or deactivated. (This feature applies to model S-1225 only)
SPD	The **SPD** button adjusts the counting speed of the machine. When this button is pressed, the green lights above the count display will switch between **H** (1600), **M** (1200), and **L** (800), with 800 being the slowest counting speed and 1600 being the fastest. The recommended setting is **M** (1200).
● MNL	The **MNL** button switches between auto and manual feed mode. When the green light is off the machine will start counting the bills as soon as they are placed in the hopper. When the green light is on, the machine will not start counting until the **START** button is pressed.

OPERATING INSTRUCTIONS OVERVIEW

Startup

1) Turn on the power switch located on the back of the counter near the power socket. The display will read all 8's, indicating that the unit is completing a self-check process and checking each sensor.

2) **0** will appear to indicate that the counter has successfully completed its self-diagnostic process and is now in standby mode and ready to be used.

3) If the machine encounters a problem during the self-check startup process, an error message will appear on the display. For example: **E1**
                                                                              E6

Please refer to the **Startup Malfunction Codes** to determine what the error code represents.

Basic Counting Process

1) Place the banknotes in the hopper and the counter will auto-start the counting process. It will count all the banknotes in the hopper and show the total count on the display.

2) To continue counting, remove all of the counted banknotes from the stacker and place the next stack of banknotes in the hopper. The counter will begin counting from "0" again.

3) If the banknotes in the stacker are not removed before placing additional banknotes into the hopper, the counter will restart automatically but will add the additional banknotes to the previous total.

NOTE: Avoid placing damp or wet banknotes into the machine. Always be sure to remove any paper clips, rubber bands, staples or other items attached to the banknotes before counting. If the banknotes are curled, folded or bent, flatten them before running them through the machine.

Error Codes During The Counting Process

During the counting process, if a suspect counterfeit banknote is detected or a feeding error occurs (such as double note, chain note or half note), the counter will stop counting and the appropriate error code will be displayed. Please see the **Counting Error Code List** to interpret the meaning of any error codes.

MODES AND FUNCTIONS

Add Mode

Adding during count mode is performed by pressing the **ADD** button (green LED will light next to the button when activated). With this mode turned on, the machine will add the count for each stack of bills to the previous total.

> **NOTE**: Add mode can also be used when batching if the operator selects a batch stop setting while Add mode is activated.

Manual Start Mode

If you do not want the machine to start counting automatically when banknotes are placed in the hopper, you can press the **MNL** button (green LED will light next to the button when activated). This turns on the Manual Start Mode. In this mode, the machine will not start counting until the **START** button is pressed.

Batching

1) To set a batch stop setting, enter any number from 1-999 using the numeric buttons and the setting will appear in the upper display on the control panel. For example, to set the batch limit to "50", press the **5** key and then press the **0/C** key.

2) Place banknotes in the hopper. The machine will start counting and will stop once the counted number reaches the preset batch number.

3) To repeat the batch counting, simply remove the banknotes from the stacker and the machine will count the next batch.

4) To clear the batch stop setting, press the **0/C** button until nothing appears above the count on the display.

COUNTERFEIT DETECTION

Certain counter models contain a sophisticated counterfeit detection system (models S-1215 and S-1225). While the counterfeit detection features are designed to be as accurate as possible, they are specifically designed to pinpoint suspect banknotes that are believed to have a high probability of being counterfeit. An alert to a suspect counterfeit banknote does not assure or guarantee that the banknote is counterfeit. Additionally, while the counter is designed to detect potential counterfeit banknotes, there is always the possibility that an actual counterfeit banknote may pass through the screening process undetected.

The UV detection found in models S-1215 and S-1225 is designed to inspect and scrutinize the banknote paper for potential counterfeit properties while the MG detection found in model S-1225 is designed to inspect and scrutinize the banknote ink for potential counterfeit properties. The combination of UV and MG detection capabilities found in model S-1225 offers the greatest protection and has the highest probability of catching a suspect counterfeit banknote.

MAINTENANCE

⚠ **WARNING:** Never place your fingers inside the machine during operation.

Clearing A Jam

With the machine off and the power cord unplugged, reach in and remove any jammed banknotes if they are visible from either the top area of the machine near the feed rollers or the bottom area of the machine near the stacker. If the obstruction is not visible, the operator can cut a bill-sized piece from a file folder and use the feed wheels to manually roll it through the machine (with the power off) in order to push the obstruction to a point where it is visible and within reach. If this does not work, please contact your authorized Semacon service provider.

⚠ **WARNING:** Always switch off the power and unplug the power cord when cleaning the machine or before reaching into the counter to clear a jam.

Cleaning

In order to properly maintain your counter, it should be cleaned on a regular basis. We suggest regularly blowing any dust out of the counter with a can of compressed air which can be purchased at most office supply stores. We also recommend placing a dust cover over the machine when it is not in use and the power is off.

Depending on your usage level, your counter should be professionally cleaned and serviced on a regular basis by your authorized Semacon distributor or it can be sent to the Semacon Service Center for a general preventative cleaning & maintenance service. Contact your distributor to determine the proper location for service.

⚠ **WARNING:** Do not use any wet cleaning cards in the machine.

Feed Tension Adjustment

You may need to occasionally adjust the feed tension to compensate for the normal wear that the rubber feed wheels experience over time. The feed tension can be adjusted by turning the Feed Tension Adjustment Knob on the top of the machine. The initial factory setting is with the dot at the 0 position (in the center toward the back of the machine). Turning the knob clockwise (so the dot on the knob is at +1 or +2) will loosen the feeding system, while turning the knob counterclockwise (so the dot on the knob is at -1 or -2) will tighten the feeding system.

Most machines function best with the dot on the knob centered at 0, but if the machine is experiencing frequent jam errors, the knob may need to be turned clockwise so that the dot is at +1 or +2. Alternately, if the machine is experiencing frequent double note or chain note errors, the knob should be turned counterclockwise so that the dot is at -1 or -2.

> **IMPORTANT!** The dot on the knob should never be adjusted past +5 or -5. Contact your authorized Semacon service provider if your machine still receives error messages after the feed tension has been adjusted to either of these points.

MALFUNCTION CODE LIST

Malfunction Code	Cause	Solution
E1	The left count sensor pair is dirty, out of alignment or needs repair	Clean both sensors with a can of compressed air and then use a cotton swab dipped in alcohol or windex. If this does not correct the problem, your counter should be sent to an authorized Semacon service center or Semacon for repair.
E2	The right count sensor pair is dirty, out of alignment or needs repair	Clean both sensors with a can of compressed air and then use a cotton swab dipped in alcohol or windex. If this does not correct the problem, your counter should be sent to an authorized Semacon service center or Semacon for repair.
E3	The magnetic counterfeit detection sensor needs repair	Your counter should be sent to an authorized Semacon service center or Semacon for repair
E4	The ultraviolet counterfeit detection sensor needs repair	Your counter should be sent to an authorized Semacon service center or Semacon for repair
E5	The hopper sensor is dirty or needs repair	Clean the sensor with a can of compressed air and then use a cotton swab dipped in alcohol or windex. If this does not correct the problem, your counter should be sent to an authorized Semacon service center or Semacon for repair.
E6	The stacker sensor pair is dirty, out of alignment or needs repair	Clean both sensors with a can of compressed air and then use a cotton swab dipped in alcohol or windex. If this does not correct the problem, your counter should be sent to an authorized Semacon service center or Semacon for repair.

ERROR CODE LIST

Error Code	Cause	Solution
ECH	Chain Note Detection Alert	Adjust Feed Tension Adjustment Knob counterclockwise by one level (e.g. from 0 to -1). Run a stack of bills through the counter. If the machine still receives error messages, repeat this step until you reach -5. If you reach -5 and the machine is still receiving error messages, reverse the process and run a stack of bills through the machine after turning the Feed Tension Adjustment Knob clockwise by one level (e.g. from -4 to -3). This step can be repeated until you reach +5. If you reach +5 and your machine is still receiving errors, please contact your authorized Semacon service facility for further assistance.
ECL	Chain Note Detection Alert (on the first bill in the stack)	
dbH	Double Note Detection Alert	
dbL	Double Note Detection Alert (on the first bill in the stack)	
EH	Half Note Detection Alert	
EJ	Jam Detection Alert	
Ob	Skew Note Detection Alert	
CF1 (models S-1215 and S-1225)	Suspect Counterfeit Note - Ultraviolet Detection Alert	Inspect top banknote in stacker for counterfeit qualities.
CF2 (model S-1225 only)	Suspect Counterfeit Note - Magnetic Detection Alert	

TECHNICAL SPECIFICATIONS

1) Ambient Temperature   32 - 104ºF
       0 - 40ºC

2) Ambient Humidity   30 – 90%

3) Banknote Feeding System   SmartFeed™ Friction Roller System

4) Counting Speed   800/1200/1600 Notes Per Minute

5) Note Size   115 x 50 mm to 175 x 85 mm

6) Hopper Capacity   200 – 300 Notes

7) Stacker Capacity   200 Notes

8) Display   4 Digit (LED)

9) Power Source   110 – 120VAC / 60Hz or 220 – 240VAC / 50Hz

10) Power Consumption   <50W

11) Stand-by Consumption   <20W

12) Unit Size   10.5"(W) x 9.75"(D) x 9.5"(H)
        270mm(W) x 250mm(D) x 240mm(H)

13) Weight   15 lbs (6.8 kg)

Specifications are subject to change without notice.

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