

# JetScan<sup>®</sup> Single-pocket currency scanner

User guide



### Safety information, power specifications

## **A**WARNING

NOTICE

High voltage inside. Risk of electric shock.

Turn power **OFF** and unplug power cord from machine before cleaning.

Do not attempt repairs. Repairs must be made by authorized Cummins Allison personnel.

Use grounded plug and properly grounded outlet.

Read and understand all instructions before use.

## Improper voltage levels can cause equipment malfunction, damage electrical components, and void warranty.

Provide separate circuit serving only this device and follow listed power requirements to ensure proper operation.

Provide power conditioning/stabilizing devices if necessary.

- Voltage operating range: 105-130 VAC or 198-253 VAC, manual switching
- Frequency: 50/60 Hz
- Full load amps (FLA): 1A/.5A
- Electrical supply circuit: The customer must provide a single-phase, dedicated power line that meets the machine's power requirements. Use a properly grounded circuit breaker in compliance with applicable local electrical code.

### **Environmental operating conditions**

- Temperature: 60°F 85°F (15°C 29°C)
- · Humidity: 30% to 70% (non-condensing)

### Compliance acknowledgments

- Laser: This equipment may contain Class 2 laser products and complies with FDA Radiation Performance Standards, 21 CFR Subchapter 1 and the international laser safety standard IEC-60825.1-2001-08.
- FCC: 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.
- Regulatory: UL/CUL/FCC/CE

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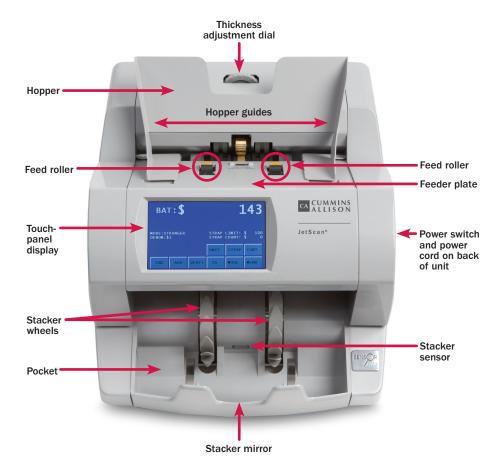
## About this guide

The single-pocket JetScan® currency scanner processes U.S. banknotes. The machine features:

- Selectable operating modes, which process mixed notes, detect stranger notes, and offsort target denominations.
- Facing and orientation functions.
- · Configurable strap limits.
- · Cumulative counting.
- A setting for recounting notes without impacting totals.
- · Several counterfeit detection options.

#### For more information, contact a Cummins Allison representative.

## Machine diagram



## **Communication ports**

Two RJ45 serial ports are located on the back panel of the machine. Port one is on top, and port two is on the bottom.

## Hopper



Machine is auto-start capable. Feed rollers in hopper rotate inward.

Entanglement and drawing-in hazard.

Do not operate with exposed long hair, neckties, jewelry or loose clothing.

The hopper is the area on the top of the machine where notes are placed for processing. If the machine is configured to auto-start, the rollers and wheels begin moving as soon as the machine detects notes in the hopper.

## Thickness adjustment dial

The dial located on the top of the machine adjusts the tightness of the feeder through which notes pass during operation. The dial has positive and negative adjustment numbers, with  $\mathbf{0}$  at the center of the adjustment range.



For normal feeding, start with **0** at the top of the dial.

To help reduce the occurrence of doubles or chains, turn the dial to the right, so a negative number is at the top, decreasing the distance between the rollers.

Turning the dial to the left, so a positive number is at the top, increases the spacing between the rollers, allowing notes to pass through more easily.

## **Getting started**

This section outlines basic features and functions of the single-pocket JetScan currency scanner.

## Powering ON/OFF

**A**WARNING

High voltage inside. Risk of electric shock.

Turn power **OFF** and unplug power cord from machine before cleaning.

Do not attempt repairs. Repairs must be made by authorized Cummins Allison personnel.

Use grounded plug and properly grounded outlet.

Read and understand all instructions before use.

To turn the machine **ON**, set the rocker switch located in the lower-right rear corner when facing the front of the machine to the **ON** position (I). Allow the machine to complete its **POWER-ON** sequence. The machine is ready to process notes when the touch panel displays the main screen.

To turn the machine **OFF**, ensure the machine is not processing notes, and then set the rocker switch located on the rear of the machine to the **OFF** position ( $\mathbf{0}$ ).

## Touch-panel display: Main screen

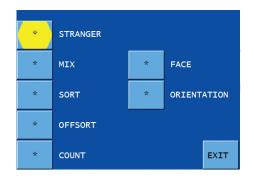
BAT	г:\$				0
MODE:ST DENOM:\$					\$ 10000 \$ 0
		PRINT	UNIT	STRAP	CONT
END	ADD	VERFY	SD	MODE	MENU

Main screen key	Description
PRINT	Button appears after the sub-batch or batch is ended and PRINT ON DEMAND is selected on the MAIN SUB-MENU. Press to generate reports as needed. Reports are not automatically generated after a batch or sub-batch is ended.
	When <b>ADD</b> is <b>OFF</b> , press <b>PRINT</b> to generate a report showing batch totals after notes are removed from the pocket.

Main screen key	Description
<b>PRINT</b> (Continued)	When <b>ADD</b> is <b>ON</b> , press <b>PRINT</b> to generate a report showing sub-batch or batch totals after <b>END</b> is pressed to end the sub-batch or batch.
UNIT	Press to change the batch total and sub-batch total on the main screen to piece counts.
STRAP	Press to prompt the STRAP SETTINGS screen, where strap limits are set, and strap counts are cleared.
CONT	Press to start the motor.
END	Press to clear current batch totals. When <b>SBAT ENABLE</b> is <b>ON</b> in <b>SETUP</b> , pressing <b>END</b> once clears the sub-batch total and pressing <b>END</b> a second time clears the batch total.
ADD	Press to enable or disable the <b>ADD</b> function. When enabled, sub-batch or batch totals accumulate after notes are removed from the pocket.
	Press to enable the verify function, which allows notes to be processed off-line. This function can be used to recount and reconcile any count suspected of being wrong without adding to current batch or day totals.
VERFY	When <b>VERFY</b> is pressed, machine totals return to zero, and the machine processes notes following rules of the indicated mode. When <b>VERFY</b> is pressed again to exit the function, the machine returns to the operating mode, as well as totals and settings, that were active prior to using the verify function.
SD	Press to activate counterfeit detection on applicable models.
MODE	Press to prompt the MODE SELECTION screen, which displays all processing modes that have been enabled in <b>SETUP</b> .
MENU	Press to prompt the MAIN SUB-MENU, which provides access to additional menus for reports and machine adjustments.

## **Operating modes**

Pressing **MODE** from the main screen displays all modes that have been enabled in **SETUP** and are available for use. The following screen shows all modes enabled.



Mode key	Description
STRANGER	Scans for the first denomination processed, which is the target, and stops when another denomination is found. When the machine encounters a different denomination, it is called a stranger. A grand total is provided.
МІХ	Scans all denominations without presorting. A grand total by denomination is provided.
SORT	Scans all denominations and stops when a denomination change occurs. Best used when notes are presorted by denomination and then stacked together. A grand total is provided.
OFFSORT	Scans notes of all denominations and stops for the selected target denomination. When a note is different than the target denomination, the machine stops and displays DENOMINATION CHANGE. Remove notes from the pocket, and the machine automatically continues processing. A grand total of all notes processed is provided.
COUNT	Counts any type of media that complies with document size and density-setting specifications. This mode only counts pieces; note scanning does not occur.

Mode key	Description
FACE	When <b>FACE</b> is selected in addition to <b>STRANGER</b> , <b>MIX</b> or <b>SORT</b> mode, the machine stops when it detects a non-faced note. The first note processed determines the facing.
ORIENTATION	When <b>ORIENTATION</b> is selected in addition to <b>STRANGER</b> , <b>MIX</b> or <b>SORT</b> mode, the machine stops when it detects a non-oriented note. The first note processed determines the orientation.

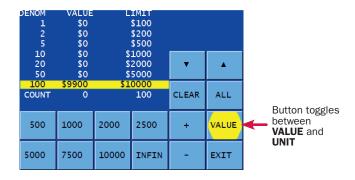
## **Memory levels**

The machine has four memory levels.

Memory level	Description
STRAP	Strap limits can be set from <b>1 - 100</b> or <b>infinite</b> ( <b>INFIN</b> ). The machine stops when it reaches a strap limit. Available in <b>STRANGER</b> , <b>SORT</b> and <b>COUNT</b> modes.
SUB-BATCH	A sub-batch is a deposit processed from one or several sources and treated as sub-groups within a batch. Sub- batch tracks individual amounts and provides a total by category, as well as a grand total. Available in all operating modes.
BATCH	A batch is a deposit processed from one general source. Batch tracks individual amounts and provides a total by category, as well as a grand total. Available in all operating modes.
DAY TOTAL	A day total is the grand total of deposits processed since the last time day totals were cleared. Day total tracks individual amounts and provides a total by category, as well as a grand total. Available in all operating modes.

## Strap counts and strap limits

To view current strap limits and counts, press **STRAP** on the main screen. The STRAP SETTINGS screen is displayed, similar to the following example:



A strap limit may be set for any denomination by piece count or value in all operating modes, except for **COUNT**, **MIX**, **MIX**/**FACE** and **MIX**/**ORIENTATION**.

Denominations are itemized in the DENOM column. The UNIT column indicates the current strap count. The LIMIT column indicates the current strap limit. The COUNT row refers to the non-value piece count and appears in **COUNT** mode only.

### How to set strap limits

To set a strap limit:

- 1. Define the strap limit type by selecting **UNIT** (piece count) or **VALUE** (amount). **UNIT/VALUE** buttons toggle.
- 2. Press  $\blacktriangle$  or  $\bigtriangledown$  to scroll through the denominations. Stop on the desired denomination.
- 3. Enter a strap limit by doing one of the following options:
  - Select a preset strap limit or **infinite** (**INFIN**). There are seven preset strap limits: **5**, **10**, **20**, **25**, **50**, **75**, and **100 pieces** (or their value equivalents).
  - Press + or to increase or decrease the strap limit setting as needed.
- Press ▲ or ▼ to select to the next desired note and repeat Step 2 to set the strap limit.
- 5. When configuration is complete, press **EXIT** to return to the main screen.

### How to clear strap counts

To clear a note's strap count to **0**, select the note using  $\blacktriangle$  or  $\blacktriangledown$  and then press **CLEAR**. To clear all note strap counts to **0**, press **CLEAR** followed by **ALL**. If STRAPS CLEAR is set to **ENDBT** in **SETUP**, then ending a batch automatically clears all strap counts.

## **Printed reports**

When an optional printer is connected to and configured on the machine, reports:

- Automatically print after batches or sub-batches are ended.
- Can be generated as needed (on demand) by navigating to the BATCH TOTALS, SUB-BATCH TOTALS and DAY TOTALS screens and pressing **PRINT**.
- Can be generated as needed (on demand) by pressing **PRINT** on the main screen. For more information, see **PRINT** on page 6.

Each automatically generated report shows an audit number. Within the audit number:

- The first five digits represent the transaction number of this report among all reports sent to the printer. The transaction number increments each time a report is sent and resets to zero when the day total is cleared.
- The next four digits represent the batch number.
- The final three digits represent the sub-batch number.

BATCH REPORT 00004-0001-00	)0			
DENOM	UNIT	١	/ALUE	
\$1	221	\$	221	
\$5	1	\$	5	
\$10	37	\$	370	
BATCH TOTAL	259	\$	596	

#### **Batch report example**

## Stopping conditions and recovery steps

The following conditions cause the machine to stop and require action by the user.

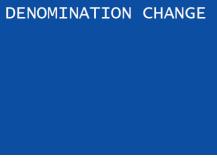
**Condition** ► The machine identified a note that is different than those it was processing while in **SORT** mode.

The change in denomination is the top note in the pocket.

Action ► Remove all notes from the pocket. Separate the top note from the remaining notes. Put the top note in the location for that denomination. Put all the other notes (they are the same) in the location for that denomination.

The machine will automatically restart.

#### **Denomination change only**



#### **Denomination change and strap limit**

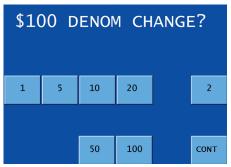


**Condition** ► A **denomination value key**, which is different from the target denomination, was pressed to identify a no call. Verification is needed to ensure the correct **denomination value key** was pressed.

**Action** ► There are two options:

• Confirm the previous **denomination value key** selection was correct by pressing the **denomination value key** again. The machine will automatically continue processing.

#### Denomination value key error



• Remove the note from the pocket and press **CONT**. The value will not be added to totals, and the machine will automatically continue processing.

**Condition** ► The machine stopped on a non-faced note.

Action ► Remove the note from the pocket. Face the note, place it in the hopper, and press **CONT**.

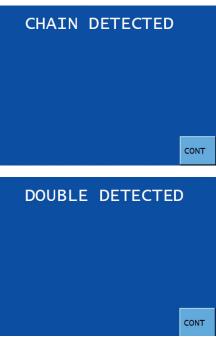


**Condition** ► The machine may have processed two or more notes as one.

Action ► Remove all notes from the pocket and place them on the hopper. Press **CONT**.

If an alarm repeatedly occurs, adjust the gray thickness dial on top of the machine behind the hopper extension. Rotate in the negative (-) direction as indicated by the numbers on the front of the dial.

#### **Feed errors**



**Condition** ► The machine cannot recognize the denomination and stopped. This NO CALL is the top note in the pocket and has not been included in the count.

Action ► Inspect the top note in the pocket. **Do not** remove all notes from the pocket.

To count the note, keep the note in the pocket and then enter its denomination using the correct **denomination value key** (\$1, \$5, \$10, etc.). The machine will start, and this note will be added to the count.

 NO
 CALL

 1
 5
 10
 20
 2

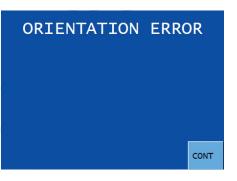
 50
 100
 CONT

To reject the note, remove the note from the pocket and press **CONT**. The machine will restart. The removed note **will not** be added to the count.

If the note is not mutilated, it may be returned to the hopper for reprocessing.

**Condition** ► The machine stopped on a non-oriented note.

Action ► Orient the note, place it in the hopper, and press **CONT**.



**Condition** ► The machine detected a different denomination from those being counted and stopped. This STRANGER is the top note in the pocket and has not been included in the count.

Action ► Remove the top note from the pocket and press **CONT**.



**Condition** ► The number of notes in the pocket reached the pocket limit.

Action ► Remove notes from the pocket. The machine will automatically continue processing if additional notes remain in the hopper.

## STACKER FULL

**Condition** ► The number of notes in the pocket reached the preset strap limit.

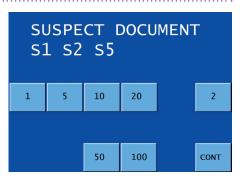
Action ► Remove notes from the pocket. The machine will automatically continue processing if additional notes remain in the hopper. \$100 STRAP LIMIT COUNT: 100

STRAP VALUE: \$10000

**Condition** ► Sensors detected a possible counterfeit note. The machine stopped with this note as the top note in the pocket. This note has not been included in the count.

Action ► Inspect the top note in the pocket. Next there are two options:

• If the note is deemed genuine, return it to the pocket and press the appropriate **denomination value key**. The machine will restart, and this note will be added to the count.



• If the note is deemed counterfeit, place it aside and press **CONT**. It will not be included in the count.

Code	Possible causes	Code	Possible causes
<b>S1</b>	<ul> <li>Incorrect note paper</li> <li>Soiled note</li> </ul>	S8*	<ul> <li>Note failed advanced counterfeit test</li> <li>Worn note</li> </ul>
S2	<ul> <li>Incorrect note paper</li> <li>Machine-washed note</li> <li>Taped note</li> </ul>	<b>S10</b> *	<ul> <li>Incorrect ink error</li> <li>Genuine AK Series \$100</li> <li>Worn note</li> </ul>
\$3	<ul> <li>Incorrect note paper</li> <li>Soiled note</li> </ul>	<b>S11</b> *	<ul> <li>Incorrect ink error</li> <li>Worn note</li> </ul>
S5	<ul> <li>Incorrect ink error</li> <li>Worn note</li> </ul>	* These error codes are most common among super notes, which are high-quality counterfei Notes producing these codes should be caref examined.	

<b>S1</b>	<b>S</b> 2	<b>S</b> 3	S5		<b>S</b> 8	<b>S10</b>	S11	
super identif	note, bi	ility of a ut comn r-quality otes	nonly		0	er probal super no		

**Condition** ► Notes or foreign material are jammed in the paper path.

Action ► To clear a jam, follow these procedures:



### NOTICE

Do not use tools or metal devices to remove jammed notes from paper path.

Use of tools or metal devices could cause machine damage and void existing warranty.

For proper removal of jammed notes, follow the steps below.

**1** Remove all notes from the hopper and pocket.



Remove the hopper extension.



Remove the feeder plate. Place fingers in openings on left and right side of feeder plate and lift.



Raise the two red plastic "T" handles at the same time and hook them onto the metal shaft. Next, do any of the following:

- Move jammed notes by turning the large black feed rollers forward (direction of note flow). This action moves other shafts and rollers while sending dirt or stray material out of the unit.
- Press **FWD** to slowly move the feeder forward.
- $\cdot$  Press REV to slowly move the feeder in reverse.

Remove all jammed notes and foreign material.

Unhook the two red plastic "T" handles from the metal shaft and lower them at the same time.



Replace the feeder plate. Insert the curved edge of the feeder plate first. Gently press down on the feeder plate until it snaps into position.

Curved edge

7

5

6



Replace the hopper extension and press **CONT**. Reprocess all notes that were in the hopper and pocket at the time of the jam. **Condition** ► There may be an issue with the right, left or both doubles sensors.

Action ► Press CONT to attempt continued operation. If the alarm occurs again, clean the machine by following the daily cleaning procedures. If the message continues to appear, call a Cummins Allison service representative.

#### Warning for doubles sensor

### WARNING LEFT DOUBLES SENSOR IS FAULTY

ENSURE THAT SENSORS ARE CLEAR OF PAPER AND DUST

CALL SERVICE IF PROBLEM PERSISTS

CONT

## WARNING RIGHT DOUBLES SENSOR IS FAULTY

ENSURE THAT SENSORS ARE CLEAR OF PAPER AND DUST

CALL SERVICE IF PROBLEM PERSISTS

CONT

### WARNING BOTH DOUBLES SENSORS ARE FAULTY

ENSURE THAT SENSORS ARE CLEAR OF PAPER AND DUST

CALL SERVICE IF PROBLEM PERSISTS

CONT

**Condition** ► There may be an issue with the ultraviolet (UV) bulb.

Action ► Press CONT to continue operation. If the machine is not equipped with UV, turn the feature OFF in SETUP. If the message continues to appear, contact a Cummins Allison service representative.

#### Warning for UV bulb



CONT

## Daily cleaning procedures

Daily cleaning of the single-pocket JetScan currency scanner is recommended to ensure maximum productivity and reliability.

### **Recommended cleaning materials**



Simple Green, the recommended cleaning agent, can be an eye irritant. Avoid eye contact.

If eye contact occurs, flush eye(s) with cool water for 5 minutes – remove contact lenses if present – continue flushing eye(s) with cool water for 15 more minutes. If irritation persists, consult physician.

Individuals with sensitive skin should rinse hands after using.

- **Simple Green Safety Towels.** (Part number: 022-2118-00.) A pre-moistened microfiber towel also may be used. If using Simple Green concentrate, dilute to: 1 ounce of Simple Green per 8 ounces of water. For a material-safety-data sheet, see simplegreen.com.
- · Microfiber towels. (Part number: 022-2223-00.)
- · A clean, soft eraser. (Part number: 022-1695-00.)
- Vacuum. (Part number for standard vacuum: 022-1959-00; part number for heavyduty vacuum: 022-1308-00.)

### **Daily cleaning**

High voltage inside. Risk of electric shock.

Turn power **OFF** and unplug power cord from machine before cleaning.

## NOTICE

To avoid machine/component damage and potential voiding of existing warranty, follow these procedures:

Only use specified tools for cleaning machine. Never use metal tools.

If using Simple Green concentrate, dilute to: 1 ounce of Simple Green per 8 ounces of water.

Never use cleaners containing ammonia. Ammonia may remove labels from machine.

Never spray cleaners directly on machine components.

- **1** Turn the power switch **OFF** (rocker panel to **0**).
- **2** Disconnect the power cord from the back of the unit.



Remove the hopper extension.



Use a microfiber towel to clean the start sensor on the feeder plate.

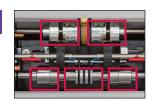




Remove the feeder plate.



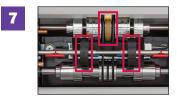
9



Clean the upper and lower aluminum rollers by:

- Using a Simple Green Safety Towel.
- Removing heavy buildup with a clean, soft eraser.

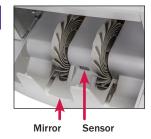
To clean the entire surface of each aluminum roller, turn the large black feed rollers forward (direction of note flow). This action moves other shafts and rollers while sending dirt or stray material out of the unit.



Use a Simple Green Safety Towel to clean:

- All rubber sections of the large black feed rollers. Turn the rollers to clean the entire surface of each roller.
- $\cdot$  The center rubber-drive tire.

8 Use a microfiber towel or vacuum to clean the pocket.



Use a microfiber towel to clean the stacker sensor and mirror.



Replace the feeder plate. Insert the curved edge of the feeder plate first. Gently press down on the feeder plate until it snaps into position.

Curved edge

**11** Use a Simple Green Safety Towel to clean exterior surfaces.



Replace the hopper extension.



Carefully reconnect the power cord.



Turn the power switch **ON** (rocker panel to **I**).



Perform a test run with some notes.

## CA CUMMINS



# Cleaning supplies

The following items are available for purchase through **Cummins Allison** 

## Desktop currency equipment cleaning kit 406-1000-01

#### The kit contains:

- Two stick erasers
- 50 Simple Green Safety Towels
- 20 microfiber towels
   User guides

## Items sold separately

- One stick eraser. 022-1695-00
- 10 microfiber towels. 022-2223-00
- 50 Simple Green Safety Towels. 022-2118-00
- Vacuum, for use in the United States only. Standard vacuum: 022-1959-00 Heavy-duty vacuum: 022-1308-00

## How to order

To place an order in the United States, visit **store.cumminsallison.com**.

To place an order outside of the United States, contact your local Cummins Allison representative.

Notes	)
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