

# JetScan<sup>®</sup> 150

## Currency scanner

User guide



## Safety information, power specifications

### **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.

### **NOTICE**

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:** 100-240V
- **Frequency:** 50/60 Hz
- **Full load amps (FLA):** 2.4A at 100V, 1A at 240V
- **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

- **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.

### **CAUTION**

For continued protection against risk of fire, replace only with same type and rating of fuse.

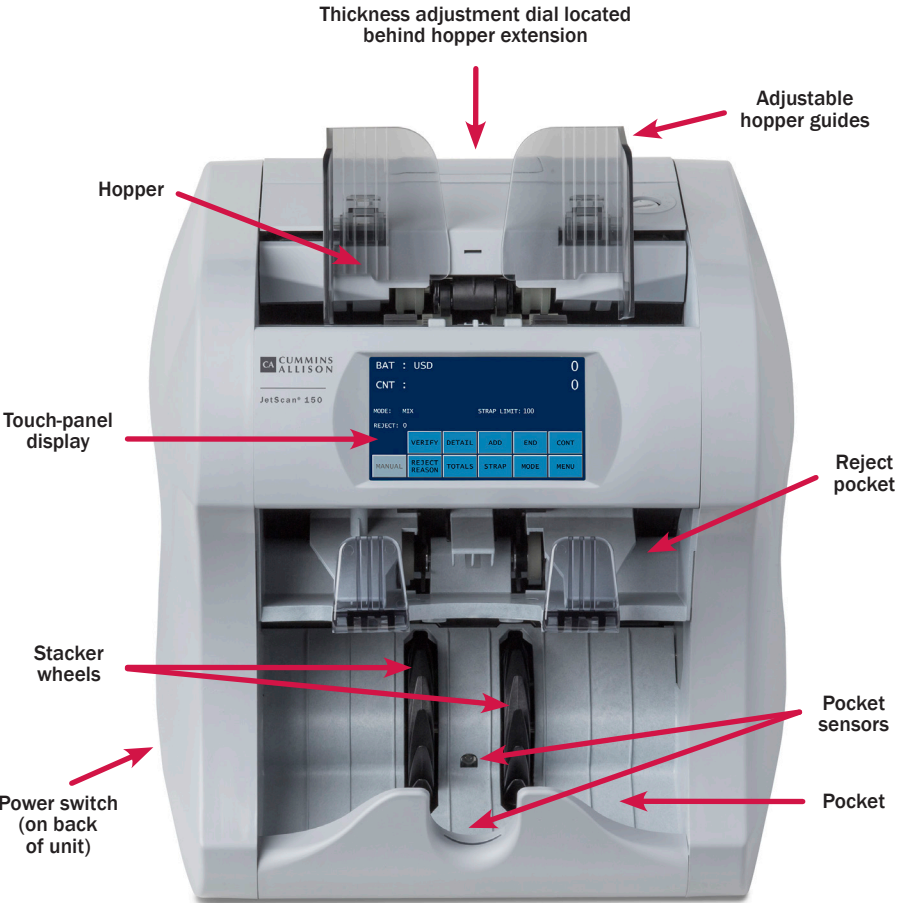
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## About this guide

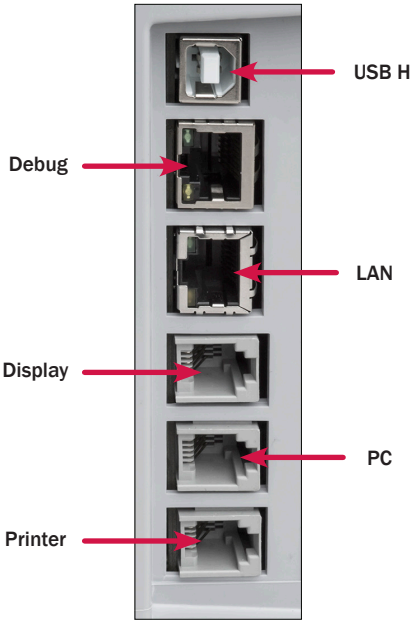
This guide covers basic features of the JetScan® 150 currency scanner which processes U.S. banknotes.

# Machine diagram



# Communication port diagram

Communication ports are located on the back of the machine.



## NOTICE

Only connect Ethernet cable to Ethernet port.  
Use of any other cable may damage equipment.

## Hopper

### CAUTION

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 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 **0** at the center of the adjustment range.



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

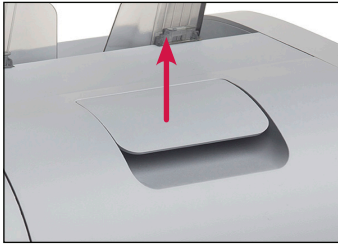
To help reduce the occurrence of doubles or chains, turn the dial to the right, so a negative number is at the top, decreasing the distance between the rollers.

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.

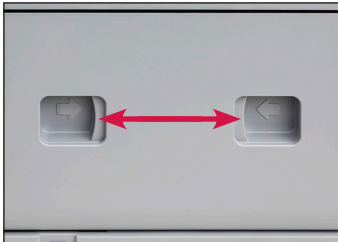
# Upper and lower transport sections

The upper and lower transport sections must be opened for jam recovery and cleaning.

To open the upper transport, lift the latch below to release and raise the section to the locked position. To close the section, guide it to its operating position and press to lock it in place.



To open the lower transport, pinch the two tabs below to release and lower the section. To close the section, guide it to its operating position and press to lock it in place.



# Getting started

This section outlines basic features and functions of the JetScan 150 currency scanner.

## Powering ON/OFF



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.

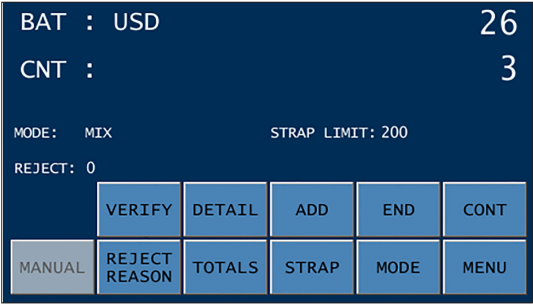
Use grounded plug and properly grounded outlet.

Read and understand all instructions before use.

To turn the machine **ON**, set the rocker switch located in the lower-left 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 (**O**).

# Touch-panel display: Main screen



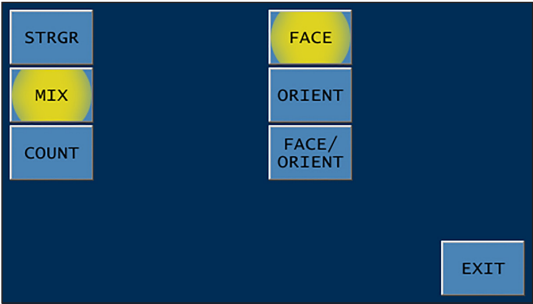
Main screen key	Description
MANUAL	<p>Press <b>MANUAL</b> to prompt a screen that is used to input mutilated notes that could not be processed.</p> <p>Press <b>ADD</b> and then press the specific denomination to enter the value of a note. Press <b>ADD</b> repeatedly to enter that note more than once.</p> <p>Press <b>SUB</b> to remove a note's value from the screen. Press <b>SUB</b> repeatedly to remove a note's value more than once.</p> <p>Press <b>EXIT</b> to add the manual amount to batch totals and return to the main screen.</p>
VERIFY	<p>Press to enable the verify function, which allows notes to be processed off-line.</p> <p>This function can be used to recount and reconcile any count suspected of being wrong without adding to current batch or day totals.</p> <p>When <b>VERIFY</b> is pressed, machine totals return to zero, and the machine processes notes following rules of the indicated mode.</p> <p>When <b>VERIFY</b> is pressed again (to exit the function), the machine returns to the operating mode, as well as totals and settings, that were previously active.</p>



Main screen key	Description
<b>REJECT REASON</b>	Press <b>REJECT REASON</b> to prompt a screen displaying all rejected notes and their respective error codes.
<b>DETAIL</b>	Press <b>DETAIL</b> to prompt the <i>VALUE DETAIL</i> screen for a denominational breakdown of the batch totals.
<b>TOTALS</b>	<p>Press <b>TOTALS</b> to prompt a screen displaying three levels of accumulated totals: <b>TOTALS</b>, <b>SUB TOTALS</b> and <b>GRAND TOTALS</b>.</p> <p>These categories can be defined for any level of tracking, such as teller (<b>TOTALS</b>), shift (<b>SUB TOTALS</b>) and day (<b>GRAND TOTALS</b>) reporting.</p>
<b>ADD</b>	Press <b>ADD</b> to enable or disable the <b>ADD</b> function. When enabled, batch totals accumulate after notes are removed from the pocket.
<b>STRAP</b>	Press <b>STRAP</b> to prompt the <i>STRAP-SETTINGS</i> screen, where strap limits are set.
<b>END</b>	Press <b>END</b> to clear current batch totals.
<b>MODE</b>	Press <b>MODE</b> to prompt the <i>MODE-SELECTION</i> screen, which displays all processing modes.
<b>CONT</b>	Press <b>CONT</b> to start the motor.
<b>MENU</b>	Press <b>MENU</b> to prompt the <i>MAIN SUB-MENU</i> , which provides access to additional menus.
	Press <b>OLD/NEW</b> on the <i>MAIN SUB-MENU</i> to enable series separation. The first note processed determines the series. All other series of that denomination ( <b>STRGR</b> mode) or denominations ( <b>MIX</b> mode) will be rejected and uncounted.

# Operating modes

Pressing **MODE** from the main screen displays all modes for use. Each mode is described in the table.



Mode key	Description
<b>STRGR</b> (STRANGER)	Scans for the first denomination processed (target), and diverts all other denominations to the reject pocket. A grand total is provided.
<b>MIX</b>	Scans all denominations without presorting. A grand total by denomination is provided.
<b>COUNT</b>	Counts any type of media that complies with document size and density-setting specifications.  This mode only counts pieces; document scanning does not occur.
<b>FACE</b>	When <b>FACE</b> is selected in addition to <b>STRGR</b> or <b>MIX</b> mode, the machine diverts non-faced notes to the reject pocket. The first note processed determines the facing.

Mode key	Description
<b>ORIENT</b>	When <b>ORIENT</b> is selected in addition to <b>STRGR</b> or <b>MIX</b> mode, the machine diverts non-oriented notes to the reject pocket. The first note processed determines the orientation.
<b>FACE/ORIENT</b>	When <b>FACE/ORIENT</b> is selected in addition to <b>STRGR</b> or <b>MIX</b> mode, the machine diverts non-faced and non-oriented notes to the reject pocket. The first note processed determines the facing and orientation.

# 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):

DENOM	LIMIT			
1	100	7	8	9
2	100			
5	100	4	5	6
10	100			
20	100			
50	100	1	2	3
100	100			
COUNT	100			
MIXED	100	▲	0	◀
LIMIT	CLEAR	ALL	▼	EXIT

Strap limits may be set for each denomination in all operating modes, except for **MIX**, **MIX/FACE** and **MIX/ORIENT**.

Denominations are itemized in the **DENOM** column. 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:

- Press **▲** or **▼** to scroll through the denominations. Stop on the desired denomination.
- Enter a strap limit by doing one of the following options:
  - Press **LIMIT** to scroll through the preset strap limits. There are six preset strap limits: **10, 25, 40, 50, 75** and **100**. Stop on the desired setting.
  - Use the numeric keypad to enter the strap limit or press **0** for **infinite**. To delete one character from the right, press **◀**.
- Do one of the following:
  - Press **ALL** to set all denominations at this strap limit.
  - Press **▲** or **▼** to select the next desired denomination and repeat Step 2 to set the strap limit.
- When configuration is complete, press **EXIT** to return to the main screen.

# Printed reports

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

- Automatically print after batches are ended.
- Can be generated on demand by pressing **DETAIL** or **TOTALS** on the main screen and then pressing **PRINT** on the respective screens below. To generate a report listing rejected notes in a batch, press **REJECT REASON** on the main screen.

VALUE DETAIL				BATCH TOTAL			
	Denom	UNIT	VALUE		Denom	UNIT	VALUE
USD	1	0	0	USD	1	357	357
USD	2	0	0	USD	2	0	0
USD	5	0	0	USD	5	97	485
USD	10	0	0	USD	10	0	0
USD	20	0	0	USD	20	0	0
USD	50	0	0	USD	50	0	0
USD	100	0	0	USD	100	0	0
TOTAL		0	0	TOTAL		454	842
<div>PRINT</div>				<div>TOTAL</div>			
<div>EXIT</div>				<div>SUB TOTAL</div>			
				<div>GRAND TOTAL</div>			
				<div>PRINT</div>			
				<div>CLEAR</div>			
				<div>EXIT</div>			

Each automatically generated report shows the date and time of creation.

## Batch report example

BATCH REPORT			
MACHINE SN: 123456-7890			
09/30/2014		14:49:18	
	DENOM	UNIT	VALUE
USD	1	1	1
USD	5	1	5
USD	20	2	40
USD	TOTAL	4	46

# Stopping conditions and recovery steps

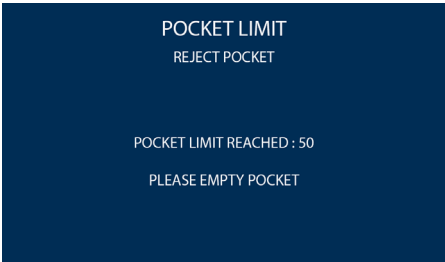
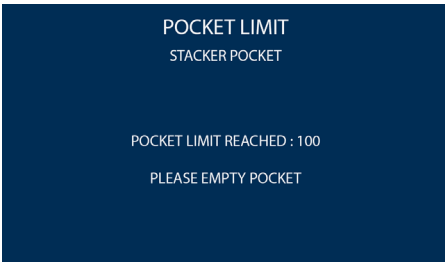
The following conditions cause the machine to stop and require action by the user.

## Notes at limit

### Conditions ▶

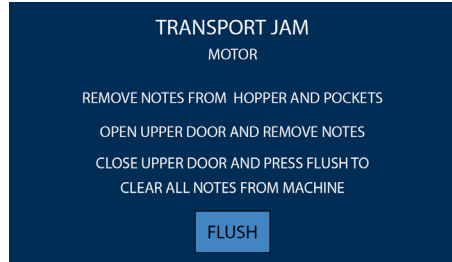
- The number of notes in the pocket reached the pocket limit selected in **SETUP**.
- The number of notes in the pocket reached the preset strap limit.
- The number of notes in the reject pocket reached the pocket limit selected in **SETUP**.

**Action ▶** Remove notes from the pocket. The machine automatically continues processing if additional notes remain in the hopper.



**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 listed below.

1. Remove notes from the hopper and pocket.
2. Open the upper transport section. **Follow directions on Page 6.** Remove notes, and close the upper transport section.
3. Press **FLUSH**. Motors will engage and divert notes that remain in the paper path to the reject pocket.

If this procedure does not fully clear the paper path, open the lower transport section. **Follow directions on P. 6.** Manually remove remaining notes, and close the lower transport section.

4. Return the following items to the hopper:
  - Notes that were removed from the hopper and pocket in Step 1.
  - Notes that were flushed from the machine or manually removed in Step 3.
5. The machine will automatically continue processing.

# Daily cleaning procedures

Daily cleaning 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 material-safety-data sheets, see [simplegreen.com](http://simplegreen.com).*
- **Microfiber towels.** (Part number: 022-2223-00.)
- **Vacuum cleaner.** (**In the United States:** Order standard vacuum part number 022-1959-00 or heavy-duty vacuum part number 022-1308-00. **Outside of the United States:** Buy vacuum locally.)

## Daily cleaning



High voltage inside. Risk of electric shock.

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



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.

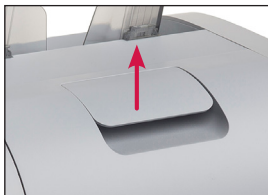
Never spray cleaners directly on machine components.



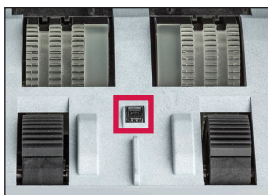
**1** Turn the power **OFF** (rocker panel to **0**).

**2** Disconnect the power cord.

**3** Lift the lever on the back of the machine to disengage the upper transport plate.



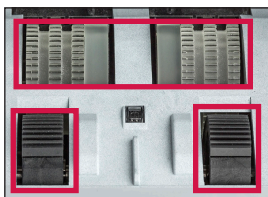
**4** Use a dry microfiber towel to clean the black start sensor located in the center of the feeder plate.



**5** Use a Simple Green Safety Towel to clean all rubber sections of the feed rollers located on the upper transport and feeder plates. Rotate the rollers.



Upper transport plate



Feeder plate

**6** Vacuum underneath the upper transport plate, as well as the top of the upper transport path.



**7**



Use a dry microfiber towel to wipe buildup off of the image sensors.

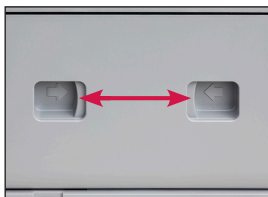
**8**

Close the upper transport plate.

**9**

Use a dry microfiber towel or vacuum to remove any remaining dust in the pocket.

**10**



Pinch the tabs on the back of the unit, and guide the panel downward to access the lower transport path.

**11**



Vacuum the lower transport path.

**12**

Lift and close panel.

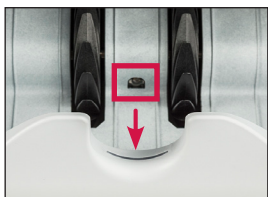
**13**



Press the tab on the back of the unit to release the debris cup.

Remove, empty and replace the debris cup.

**14**



Use a dry microfiber towel to clean the pocket sensors.

## NOTICE

Avoid damaging touch-panel display.

Only clean touch-panel display with dry microfiber towel as directed.

**15** Clean the touch-panel display with a dry microfiber towel.

**16** Clean remaining hard-plastic exterior surfaces as necessary with a Simple Green Safety Towel.

**17** Carefully reconnect the power cord.

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

**19** Perform a test run with some notes.



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