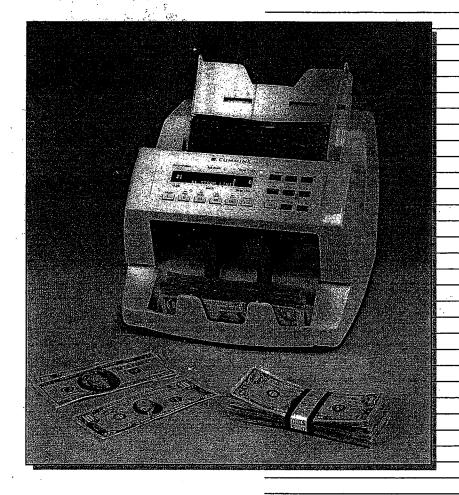
# JetScan

CURRENCY SCANNERS 9900 Series

**OPERATING INSTRUCTIONS** 



CUMMINS-ALLISON CORP.

Form 022-7202-00

MADE IN USA

## **JETSCAN 9900 SERIES**

WARNING: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

## TABLE OF CONTENTS

MACHINE SPECIFICATIONS	7
THE 4062, 4063, 4064, 4065 & 4068 JETSCAN CONTROL PANEL	8
GENERAL OPERATING PROCEDURES	11
Introduction	11
Read Heads	11
Operating Modes	11
Additional Operating Modes	11
Memory Levels	12
Set-up Fields	13
Density Operation	18
Choosing a Mode of Operation	19
Setting Strap Limits	19
Setting Suspect Document Detection	20
Verification Function	20
Facing Currency	21
Orienting Currency	22
Stop Conditions	23
Daily Maintenance	26
BATCH, SUB-BATCH AND DAY TOTALS	27
REVIEWING SUB-BATCH, BATCH, STRAP AND DAY TOTALS FOR INDIVIDUAL DENOMINATIONS	31
Reviewing Day Totals	32
PRINTING REPORTS	33
STRANGER DETECT MODE OPERATION	39
MIXED MODE OPERATION	47
SORT MODE OPERATION	51
COUNT MODE OPERATION	57
OFFSORT MODE OPERATION	61
GLOSSARY	
	THE 4062, 4063, 4064, 4065 & 4068 JETSCAN CONTROL PANEL  GENERAL OPERATING PROCEDURES

## **MACHINE SPECIFICATIONS**

Adjustable

**Processing Speed:** 

600, 800, 1000, 1200, 1500 notes per minute

**Denominations Scanned:** 

\$1.00, \$2.00, \$5.00, \$10.00, \$20.00 (new and

old series), \$50.00 (new and old series),

\$100.00 (new and old series)

Accuracy:

99.99%

**Stacker Capacity:** 

150 notes

**Dimensions:** 

9.5" H x 12" D x 11.75" W

Weight:

15 lbs.

**Power Requirements:** 

115V, 60Hz or 220V, 50Hz.

#### **MACHINE OPTIONS**

Second Read Head

Suspect Document Detection Magnetic

**RS-232 Communications** 

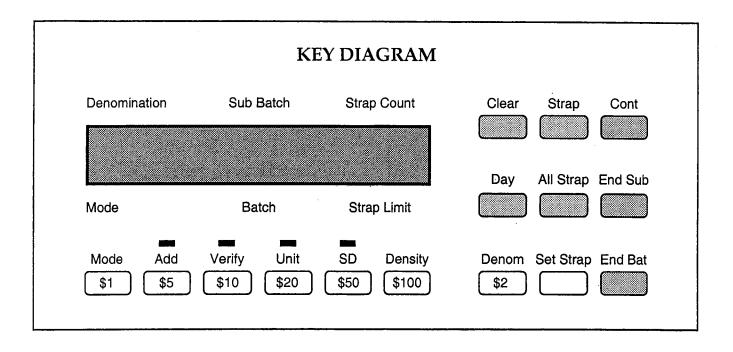
Second Read Head and RS232 Communications

**Extended Hopper (U.S. Currency)** 

#### **MODEL CHART**

	Model		Features		
		Dual Read Head	Magnetic SD	UV/FL	Comms
4062	Basic JetScan with dual read heads, comm's and magnetic SD.	Standard	Standard	Not Available	Standard
4063	Basic JetScan with one read head.	Optional	Optional	Not Available	Optional
4064	Basic JetScan with one read head and magnetic SD.	Optional	Optional	Not Available	Optional
4065	Fully loaded JetScan with dual read heads, comm's, magnetic and UV/Fluorescence SD.	Standard	Standard	Standard	Standard
4068	Basic JetScan with dual read heads and comm's.	Standard	Optional	Not Available	Standard

## THE 4062, 4063, 4064, 4065 & 4068 JETSCAN CONTROL PANEL



KEY EXPLANATION	CLEAR	This key is used when clearing either Day or Strap totals and reconciling Sub-Batch and Batch totals.
	STRAP	This key is pressed <u>after</u> the <b>CLEAR</b> key to clear a denomination Strap Count.
	CONT	The continue key is used to restart the machine after a stopping condition.
	DAY	This key changes the display screen to the Day totals screen and displays the Grand total for the day. It is also used when pressed <u>after</u> the <b>CLEAR</b> key to clear Day totals. The Day key may also be used to adjust processing speed. After holding down the <b>DAY</b> key for 3 seconds machine speed may be set to LOW, MED or HI by scrolling with the <b>DAY</b> key.
	ALL STRAP	This key is used in conjunction with the CLEAR key to clear Strap Counts for all denominations simultaneously.
	END SUB	This key is used to clear Sub-Batches. It is also used when pressed after the CLEAR key to reconcile a Sub-Batch.

## THE 4062, 4063, 4064, 4065 & 4068 JETSCAN CONTROL PANEL

**DENOM** This key is used to select the denomination appearing

on the display screen.

**SET STRAP** This key is used for setting a Strap Limit at any

preset value (5, 10, 20, 25, 50, 75, 100, or infinity). This key is also used to set strap values at levels other than the preset values (i.e., 53, 79, etc.).

**END BAT** This key clears all Batch and Sub-Batch totals and is

used in conjunction with the CLEAR key to reconcile batches. It will also clear all Strap totals and generate a print report, if these features have been enabled.

MODE This key is used for setting an operating mode.

ADD This key is used for accumulating a Batch total even

after bills have been removed from the stacker. It is

also used to enable SUB-BATCH mode.

**VERIFY** This key is used to review a count suspected of being

erroneous.

UNIT This key is used to toggle between value and piece

count.

SD This key is used to activate suspect document

detection and set sensitivity by denomination.

DENSITY VALUE KEYS

This key is used for setting doubles detection

sensitivity by denomination.

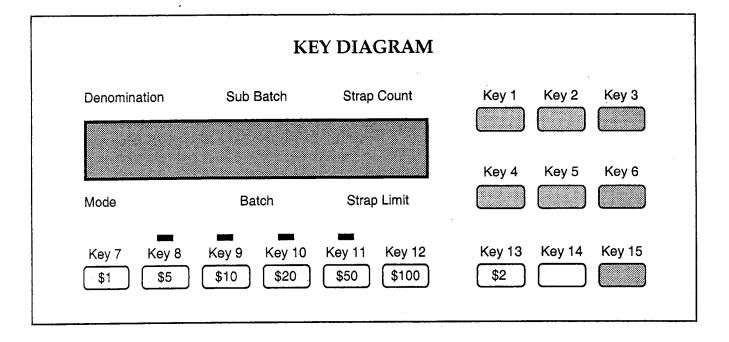
**DENOMINATION** Denomination values are printed on the **MODE** (\$1),

ADD (\$5), VERIFY (\$10), UNIT (\$20), SD (\$50), DENSITY (\$100), and DENOM (\$2) keys. If, during setup, these keys have been activated, recovering from certain stop conditions is accomplished by simply pressing the key that corresponds to the top bill in the stacker. This will add that bill amount to

the machine's total and restart the machine.

## THE 4062, 4063, 4064, 4065 & 4068 JETSCAN CONTROL PANEL

Instructions shown on display refer to "Key" numbers. Key positions are as follows:



#### INTRODUCTION

This manual is designed to provide the new user with a detailed description of the various features and modes of operation for the JetScan Models 4062, 4063, 4064, 4065 and 4068 Currency Scanner/Counter. For ease of use, the manual is divided into two main sections. The first, encompassing pages 7 through 36, contain general information that relates to all of JetScan's five operating modes. The second section, beginning with page 36, provides individual descriptions for each of JetScan's operating modes.

#### READ HEADS

Basic JetScan models 4063 and 4064 come equipped with a single head for scanning and reading currency. A second read head is available on models 4062, 4065 and 4068, and is also a machine option for models 4063 and 4064. The JetScan you are working with may be equipped with this extra head. The descriptions of various operations in this manual may vary depending on how your machine is equipped. Where appropriate, the manual describes the differences in how JetScan will operate.

An important general consideration, however, is that in a machine equipped with a single read head, bills must be placed in the hopper "green-side-up" in every mode except COUNT. Every bill that is not "green-side-up" will cause a NO CALL stopping condition.

### THICKNESS ADJUSTMENT KNOB

This is a gray knob which is located on the top of the JetScan. The knob adjusts the tightness of the feeder in which the notes pass through during JetScan operation. To adjust the Thickness Knob, turn the knob to the right or left. If the machine is experiencing consistent chains or doubles, adjust the Thickness Knob to allow the notes to pass through the JetScan without error. Note: By turning the Thickness Knob to the right, the rollers are made tighter. This might be done when new or "brick" currency is being processed. By turning the Thickness Knob to the left, the rollers are made looser, thereby allowing the bills to flow through the JetScan easier. This might be done when older or dirty currency is being processed.

#### **OPERATING MODES**

IetScan provides five basic operating modes for processing documents: STRANGER DETECT, MIXED, SORT, OFFSORT, and COUNT. Processing speed is 1200 documents per minute in all modes. The JetScan Models 4062, 4063, 4064, 4065, and 4068 scan and read U.S. currency only.

#### ADDITIONAL OPERATING MODES

### **Stranger Detect**

Scans bills for a selected denomination and stops when another denomination is found.

#### Mixed

Scans bills of all denominations.

#### Sort

Scans bills of all denominations. Best used when bills are in a presorted stack, i.e., denominations are sorted, but stacked together.

OffSort

Scans bills of all denominations and stops for a selected denomination.

Count

Counts any currency, food stamps, coupons, etc., that fit the hopper and paper size specifications. In this mode, JetScan is only counting "slips of paper" (no currency scanning is taking place).

Facing Mode

It is possible to use JetScan to select bills that are not "matching-side-up" (i.e., in a stack that is green-side-up, the machine will stop if a black-side-up bill is encountered, and vice versa). In a JetScan equipped with an optional second scan head, facing is only possible if this feature is enabled during setup and the machine is in STRANGER FACE, MIXED FACE, or SORT FACE.

Using a JetScan with a single read head, facing is only possible when bills are fed through the machine green-side-up. Using a JetScan with a single read head, whether facing has been enabled or not, the machine will stop and give a NO CALL indication each time a black-side-up bill is encountered. This is true in all modes except COUNT.

**Orientation Mode** 

In the STRANGER ORIENT, MIXED ORIENT and SORT ORIENT modes, it is possible to stop on bills that are not "correct-edge-facing-top" (i.e., in a stack that is oriented so the words "THE UNITED STATES OF AMERICA" are at the top edge of the bills, the machine will stop if a bill in any other orientation is found, and vice versa). This is only possible if the feature is enabled during setup. ORIENTATION mode operates the same whether the unit is equipped with one or two read heads.

**MEMORY LEVELS** 

JetScan has four memory levels:

**STRAP** – Available in STRANGER DETECT, SORT, and COUNT modes. Strap Limits can be set at any number between 1-100 or at infinity. JetScan stops when reaching the Strap Limit.

**SUB-BATCH** – Sub-Batch is monies processed from one or several sources and treated as sub groups within a Batch. This memory level tracks documents within a Sub-Batch. It is available in all operating modes.

**BATCH** – A Batch is money that is recorded as coming from one general source and processed as an overall group. Batch tracks all documents processed. Available in all operating modes.

DAY TOTAL – Tracks the grand total of currency processed since the last time "Day total" was cleared.

#### **SET-UP FIELDS**

JetScan has 17 set-up fields that control a number of operating conditions. The fields are: DEFAULT TYPE, SUB-BATCH STATUS, MODE STATUS, KEY STATUS, AUDIO ALARM STATUS, DENOMIN KEYS USAGE, PORT 1 STATUS, PORT 2 STATUS, STRAPS CLEAR, STRANGER RECORD, MAGNETIC HEAD STATUS, SD FUNCTION CONTROL, COUNT MODE TRANSMIT, SEPARATE SERIES, COMM REPORT, SPEED SETUP, SETUP REPORT, PASSWORD, and PRINTER READY CHECK.

To set-up the various fields, depress the any key on the control panel while turning the power on. To turn JetScan on, press the switch located at the lower right rear corner of the machine (when facing the machine). Enter USER SET UP by pressing KEY 5, then pressing KEY 3. You may then scroll forward through the 17 fields with KEY 5 or backwards with the KEY 4. To change a particular field's setting, press the KEY 3 for an arrow prompt and then either KEY 13 (to scroll backwards) or KEY 14 (to scroll forward) to select among the options. To make a sub-selection within a field, press KEY 5 or KEY 4 to move the setting arrow. Then press KEY 13 or KEY 14 to make the sub-selection. Press KEY 6 to exit a set-up option and continue set-up selection. Note: In order to save settings (or changes to settings), you must exit the set-up option (the arrow prompt must not appear on the display screen). To exit set-up and begin operation, press KEY 7.

#### THE VARIOUS OPERATING FIELDS INCLUDE:

#### **DEFAULT TYPE**

Because JetScan can be used in a number of different working environments, it is built with two pre-programmed default settings: a "Factory" setting, and a "User" setting. The "User" setting allows you to customize the machine's default settings.

The settings for the preset "Factory" operating modes are:

Status Item	<b>Default Item</b>	<b>Factory</b>
Sub-Batch Status		Off
Mode Status	Count	On
	Stranger	On
•	Stranger Face	Off
	Stranger Orient	Off
	Mixed	On
	Mix Face	Off
	Mix Orient	Off
	Sort	Ori
	Sort Face	Off
	Sort Orient	Off
	OffSort	On
Key Status	Unit	On

Status Item	Default Item	<u>Factory</u>	
	Add	On	
Key Status	Density	On	
	Day	On	
	Verify	On	
	Suspect Document	On	
Alarm Status	Stranger	Off	
	Strap Limit	Off	
	Denomination Change	Off	
	Suspect Document	Off	
	Chain	On	
	Double	On	
	Jam	On	
	No Call	Off	
Denomin Keys			
Usage	No Call	On	
-	Suspect Document	On	
	Facing	Off	
	Orientation	Off	
Port 1 Status		Off	
Port 2 Status		Off	
Straps Clear		Manual	
Stranger Record		Off	
Magnetic Head Status		On	
	UV + FL	Off	
SD Function Control	1	On	
Count Mode Transmit		On	
Separate Series		Off	
Comm Report		Normal	
Speed Setup		LOW	600
		MEDIUM	1200
		HIGH	1500
Setup Print Report	_		
Password		Off	
Printer Ready Check		Off	

To select the mode in which the machine will operate, you must enter Setup fields.

If a Password has been set in setup (see page 18 for Password setup), the screen on the following page will appear:

Denomination

Sub Batch

Strap Count

### **ENTER 4 DIGIT PIN**

0000

Mode

Batch

Strap Limit

The first digit should be marked with a blinking cursor box. Use Key 14 to increase the digit by a value of one. Use Key 13 to decrease the digit by a value of one. Press Key 4 to move the cursor to the left, and Key 5 to move the cursor to the right. When finished, press Key 6 enter the password. If an incorrect password is entered, the screen will ask the operator to "ENTER PIN AGAIN", using the above instructions. If the incorrect password is entered a second time, the machine will return to normal operating mode.

If the correct password is entered, the following screen will appear:

Denomination

Sub Batch

Strap Count

1) DEFAULT: press KEY 3

next selection: press KEY 5

Mode

Batch

Strap Limit

Press the **KEY** 3 to set the selected default mode as the current operating mode. A screen will appear indicating current Default setting. Pressing any key will exit set-up to normal operating mode.

Press the **KEY** 5 to proceed to the next Set-up type and the following screen:

Denomination

Sub Batch

Strap Count

2) USER SET UP: press KEY 3

next selection: press KEY 5

Mode

Batch

Strap Limit

Press the KEY 3 to enter set-up fields and select Default type setting. Note: After selecting Default type and settings, be sure to return to set-up and set the Default operating mode. Re-enter set-up by depressing a key on the control panel while turning the machine ON. In the first screen shown above, press the Key 3 to save default operating mode.

Press **KEY 5** to scroll forward to the third Set-up option or **KEY 3** to scroll backwards. Pressing the **KEY 5** will produce the following screen:

Denomination

Sub Batch

Strap Count

3) DIAG SET UP: press KEY 3

next selection: press KEY 5

Mode

Batch

Strap Limit

Press KEY 7 to exit and return to normal operating mode or press KEY 5 to go back to the Default screen.

#### **SUB-BATCH STATUS**

When using the ADD function, JetScan automatically records Sub-Batches if this status is set to ON. Within this field it is possible to select whether a printout will be generated each time a Sub-Batch is ended. The default is sub-batch OFF. In order to generate a print report each time a Sub-Batch is cleared, this mode must be set to ON PRINT.

#### **MODE STATUS**

Mode status turns the 11 operating modes (Stranger, Stranger Face, Stranger Orient, Mixed, Mixed Face, Mix Orient, Sort, Sort Face, Sort Orient, Offsort, and Count) ON or OFF.

#### **KEY STATUS**

Allows UNIT, ADD, DENSITY, DAY, VERIFY, and SUSPECT DOCUMENT, keys to be "locked out" (i.e., when pressed during operation, nothing happens).

#### **AUDIO ALARM**

The audio alarm sounds for Stranger Detect, Strap Limit, Denomination Change, Suspect Document, Chaining Errors, Doubles, Jams, and No Call. The alarm will sound three beeps for a Jam, Double, or Chaining Errors, and one beep for each of the other conditions. The alarm can be turned ON or OFF for each condition. Whether it is ON or OFF depends on the setup of the machine, but defaults to ON for Jams Doubles and Chaining Errors, OFF for the other conditions.

## DENOMINATION VALUE KEYS USAGE

JetScan includes a feature that allows adding to the recorded totals when certain stopping conditions occur. For example, when a No Call, Suspect Document, Facing Error, or Orientation Error occurs, you have the option of either taking the top bill in the stacker and returning it to the hopper and pressing the CONT key (Key 3), or simply pressing the "DENOMINATION VALUE" key that corresponds to the top bill in the stacker. When this key is pressed, the denomination value is added to the value of the currency processed and the machine resumes counting. This feature can be turned ON or OFF for the four stopping conditions with this setup field. More on

the operation of this function appears under the descriptions of the major operating modes.

PORT 1 STATUS

This port is used when interfacing with a computer, our own cash settlement system (CISS), CISS+ST (status), CRM (Cash Room Manager) JetSort, printer and remote display.

**PORT 2 STATUS** 

This port is also used when interfacing with a computer, our own cash settlement system (CISS), CISS+ST (status), CRM (Cash Room Manager) JetSort, printer and remote display.

STRAPS CLEAR

This field may be set to one of two conditions. The MANUAL setting keeps Strap Counts in memory until a Strap Limit is reached or Straps are cleared manually using the CLEAR key (Key 1). The END BTCH setting automatically clears all Strap Counts each time a Batch is cleared.

STRANGER RECORD

In Stranger Mode, the machine will record all the "stranger" bills encountered in the Batch total, and track them against their respective Strap Counts.

MAGNETIC HEAD STATUS

The magnetic head function and enhanced UV/Fluorescence feature (included only on model 4065) for suspect document detection can be enabled if the magnetic head or UV/FL head is installed, otherwise it should be disabled. Please refer to Product Line Features on page 7. Note: For machines without magnetic and/or UV/FL SD, settings should be disabled (OFF).

SD FUNCTION CONTROL

Enables or disables the ability to turn on or off the suspect document function. If the suspect document function is on (SD light lit) and the SD Function Control is turned OFF, this will prevent the operator from accidentally turning the SD function off in all modes.

**COUNT MODE TRANSMIT** 

This special mode enables (ON) or disables (OFF) standard computer communications (COMP) in the COUNT mode only.

SEPARATE SERIES

This special mode enables (ON) or disables (OFF) the ability to distinguish between old and new series bills while in the stranger mode only.

**COMM REPORT** 

This field enables normal communications report format or Wedge communications report format. When connected to Cummins' software Wedge, be sure to set Port 1 or Port 2 to standard computer interface (COMP) and COMM Report to "Wedge." In all other circumstances, set COMM Report to "Normal."

SPEED SETUP

Speed Setup allows the adjustment of processing speeds for the LOW, MED, and HI setting. Speeds of 600, 800, 1000, 1200, and 1500 may be selected for each speed setting.

#### SETUP REPORT

This field will appear <u>only</u> if Port 1 or Port 2 is set to PRINTER. By pressing **KEY 3** a print report is sent to the printer. See Print Reports on page 36 for an example.

#### **PASSWORD**

Select ON to enable the password feature if the password has already been set. Select NEW to enable the password feature and set the password. If no password has been set previously, ON works the same as NEW.

If the selection involves setting a new password, JetScan will return to the User Setup menu. If a new password is requested, the operator will be required to enter a 4 digit pin. Use Key 14 to increase the marked digit by one unit. Use Key 13 to decrease the marked digit by one. Key 5 moves the cursor to the right, and Key 4 moves the cursor left. Once the password is complete, press Key 6 to enter. After it has been entered the first time, the operator will be required to enter it again for verification.

Each time an operator needs to default the machine, or enter setup or diagnostics, this 4 digit password will be required.

#### PRINTER READY CHECK

If a printer, other than Cummins' Citizen printer models, is connected to JetScan, this feature may be turned OFF. If a Citizen printer is used, this feature should be enabled to allow the JetScan to notify the operator whether a Cummins Citizen printer has been disconnected.

#### **DENSITY OPERATION**

Density is used to set doubles detection sensitivity for currency and for food stamps. Though adjusting this sensitivity is not a part of configuring the set-up fields, it should be adjusted before processing currency.

To adjust density for currency, the machine must be in a "normal time-out" status. Press the **DENSITY** key (Key 12). The default setting is "3". The display will read:

Denomination

Sub Batch

Strap Count

## \$1 DENSITY SENSITIVITY

3

Mode

Batch

Strap Limit

There are six settings for density: 1, 2, 3, 4, 5, and OFF. If JetScan is detecting doubles frequently, scroll to a lower (less sensitive) setting by pressing the **DENSITY** key (Key 12).

It is also possible to set density for individual denominations. To do this, press the DENOM key (Key 13) to scroll to a specific denomination. Press the DENSITY key (Key 12) to change the setting. To exit, press any key except DENSITY or DENOM.

If JetScan is frequently passing doubles, scroll to a higher (more sensitive) setting. You may disengage doubles detection for individual denominations by turning the density setting to OFF. To leave the DENSITY mode, simply press any key except **DENSITY** or **DENOM** and JetScan returns to the exact processing state it was in before exiting for the density adjustment.

When in the COUNT mode, to adjust the sensitivity for food stamps, follow the same procedure used to set up for currency. When the DENSITY SETTING screen appears, press the MODE key (Key 7). The letters FS will appear on the screen. Density may now be set for food stamps. Pressing the MODE key again returns to the currency screen.

## CHOOSING A MODE OF OPERATION

When JetScan is turned on, it defaults to the mode it was in when last turned off.

To choose a mode of operation simply press the MODE key (Key 7), which moves the display through each operating mode.

#### **SETTING STRAP LIMITS**

JetScan allows you to set individual Strap Limits for each specific denomination. Straps may be set for any piece count between 1-100. There are eight preset strap levels: 5, 10, 20, 25, 50, 75, 100, and infinity. Repeatedly pressing the **SET STRAP** key (Key 14) allows you to select among the eight values. The following screen shows the strap set to "50" in the STRANGER mode.

Denomination	Sub Batch		Strap Count	
\$1	\$	0	\$	0
STRNGR	\$	0	\$	50
Mode	Ва	tch	Strap	Limit

To select a Strap Limit between 1-100 that is not a preset quantity (e.g., "30"), press the SET STRAP key (Key 14) until the display shows the preset level nearest and below the desired number. If you continue to hold down the SET STRAP key, the value will increase in single digit increments until you reach the desired level.

Strap Limits are available in all operating modes except MIXED.

## SETTING SUSPECT DOCUMENT DETECTION

UV, Fluorescence and Magnetic Suspect Document detection is enabled by pressing the SD key (Key 11). The red LED illuminates to indicate that the Suspect Document feature is enabled. This key may be "locked" ON or OFF in set-up.

JetScan allows for the setting of different sensitivity levels of UV, Fluorescence, and Magnetics for individual denominations. To make this adjustment, press and hold the SD key. A screen will appear showing the current denomination and each sensitivity setting.

Denomi	nation	Sub Batch	Strap Count
	UV	FLUOR	MAG
\$1	OFF	5	5
Mode	•	Batch	Strap Limit

To alter the sensitivity level, press the **ALL STRAP** (key 5) or **DAY** key (Key 4) and scroll to the desired level using the **SET STRAP** key (Key 14).

Only JetScan model 4065 is equipped with UV/FL, therefore all other models (4062, 4063, 4064, and 4068) should set UV/FL sensitivity settings to OFF. If the machine is not equipped with magnetic SD, sensitivity setting must remain OFF as well.

Note: The lower the sensitivity level, the greater the opportunity to pass a counterfeit bill. The higher the sensitivity level, the greater the opportunity to stop on a good (non-counterfeit) bill. The appropriate level of sensitivity will depend on the individual machine, the condition of the currency and the counterfeit bill frequency.

To change the sensitivity of another denomination, press the **DENOM** key and scroll through the denominations.

To leave the Suspect Document screen, press the **CONT** key (Key 3).

For information on how to handle a suspect document during processing, see "Stop Conditions" later in this manual.

VERIFICATION FUNCTION

The verify function makes it possible to reconcile any count through the machine that is suspected of being erroneous. This function reproduces the functions of the present operating mode, but starts with all totals at zero.

Press the **VERIFY** key (Key 9) and JetScan will enter the VERIFY mode. Note that the red LED is illuminated over the **VERIFY** key.

Denomination	Sub Batch		Strap Count	
\$1	\$	0	\$	0
STRNGR	\$	0	\$	50
Mode	Ba	tch	Stran	Limit

JetScan is now ready to verify the count. Simply process the documents again following the normal procedure. To return to normal operating status (exactly where processing left off before verification), press the **VERIFY** key again.

## SUB-BATCH/BATCH RECONCILIATION

It is possible to reconcile Sub-Batch, Batch and Day totals if a processed group of currency is suspected of being erroneous. By simply pressing the CLEAR key, followed by the END BAT (Batch) or SUB BAT (Sub-Batch) key (whichever applies), the JetScan will erase the current Sub-Batch or Batch count, reconcile the Day total, and reset for the processing of additional currency.

You may now re-process the currency to ensure accuracy and the correct totals will be added to memory. This reconciliation process can continue until you are satisfied with the count accuracy.

#### FACING CURRENCY

It is possible to use JetScan to face currency. This feature makes it possible to select bills that are not "matching-side-up" (i.e., in a stack that is green-side-up, the machine will stop if a black-side-up bill is encountered, and vice versa).

In a JetScan equipped with a single scanning head, it is not necessary for facing to be enabled during set-up. This is because bills must always be placed in the hopper green side up. In all modes except COUNT, the machine will stop each time it finds a bill that is faced improperly and the screen will read "NO CALL". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the bill. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key.

With a JetScan equipped with an optional second scan head, currency can be faced green side up or black side up. To do this, move to the STRFCE (Stranger Face), MIXFCE (Mix Face), or SRTFCE (Sort Face) mode if facing was enabled during set-up.

Place currency in the hopper with the bottom bill faced in the direction you want all bills faced i.e., green side up or black side up (JetScan will use this as a reference, stopping at any bill that does not match this facing). The machine will begin processing currency. It will stop each time it finds a bill that is faced improperly and the screen will read "FACING ERROR". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the top bill in the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key.

#### **ORIENTING CURRENCY**

It is possible to use the machine to orient currency (also called "Heading" currency) if this feature has been activated during set-up. Orienting can be performed whether the machine has a single read head or is equipped with an optional additional read head. With this feature, it is possible to select bills that are not "correct-edge-facing-top" (i.e., in a stack that is oriented so the words "THE UNITED STATES OF AMERICA" are at the top edge of the bills, the machine will stop if a bill in any other orientation is found).

To do this, move to the STRORT (Stranger Orient), MIXORT (Mix Orient), or SRTORT (Sort Orient) mode.

Place the currency in the hopper. Always have the bottom bill aligned with the desired portrait orientation in the hopper. This is the orientation JetScan will use as a reference and will stop on all bills that are aligned in the opposite direction. The machine will begin to read the currency. Every time the machine stops, and the display reads ORIENTATION ERROR the bill in the stacker will be oriented improperly. If the "Denomination Value" keys have been activated, simply press the one corresponding to the value of the top bill in the stacker. The machine will resume processing with the correct total.

When using a JetScan equipped with two read heads, and encountering an unfaced bill, the machine will stop and the display will read "ORIENTATION ERROR". Correctly orient/face the bill and press the "Denomination Value" key to restart the machine.

If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the **CONT** key.

#### STOP CONDITIONS

JetScan will stop for any one of eleven reasons, all of which require action on your part.

Normal "Time-out"

Documents are fed from the top hopper to the stacker until the hopper is empty. The machine will "time-out" in two seconds and is ready for the next group of documents. This stop condition is present in all 11 operating modes.

**Stranger Detect** 

The machine has stopped because a bill other than the expected denomination has been detected. The machine stops with the display reading REMOVE STRANGER. You must remove the "stranger" bill from the stacker and press the CONT key (Key 3). The machine will then resume processing from the previous bill count. This stop condition only occurs in the STRANGER DETECT, STRANGER FACE, or STRANGER ORIENT modes.

NOTE: If the stranger record feature (see set-up instructions) is being used, the value of the "stranger" bill is added to it's own respective totals—Strap, Sub-Batch, Individual Denomination and Batch.

Denomination Change

The machine has stopped because it has detected a new denomination value. The display will read "DENOMINATION CHANGE". To resume processing, remove the bills from the hopper and the machine will resume processing. This stop condition will only occur in the SORT mode.

No Call

The machine has read a bill it cannot identify. This could be caused by the bill skew, bill condition, a foreign object, an unfaced bill, or other reason. The machine will stop and NO CALL REMOVE BILL will appear on the display. There are two ways to continue. The first involves the use of the "Denomination Value" keys: MODE (\$1), ADD (\$5), VERIFY (\$10), UNIT (\$20), SD (\$50), DENSITY (\$100), and DENOM (\$2). If, during setup, these keys have been activated, simply pressing the key that corresponds to the top bill in the stacker will add that amount to the machine's total and restart the machine. More details concerning the use of the "Denomination Value" keys appears in the descriptions for the individual operating modes.

If these keys have not been activated, remove the bill from the stacker. Place it back in the hopper, and press the **CONT** key (Key 3). The machine will continue processing from the previous bill count with no effect on the Strap, Sub-Batch, Individual Denomination and Batch quantity.

This stop condition will occur in the STRANGER, MIXED, SORT, STRANGER FACE, STRANGER ORIENT, MIXED FACE, MIXED ORIENT, SORT FACE, SORT ORIENT, modes.

Strap Limit

The machine has reached a Strap Limit. The machine will stop and the display will read STRAP LIMIT for that denomination. Remove the bills from the stacker and the machine will automatically clear the Strap and will con-

tinue counting, provided there are still bills in the machine. This stop condition will occur in the STRANGER, COUNT, SORT, STRANGER FACE, STRANGER ORIENT, SORT FACE, and SORT ORIENT modes.

#### **Suspect Document**

For machines equipped with Counterfeit Detection, the machine will stop for a possible counterfeit bill. The machine will stop and toggle between two screens: "SUSPECT DOCUMENT." "M" indicates Magnetic, "FL" represents Fluorescence, and "UV" represents UV. The second screen will display "CHECK NOTE/PRESS KEY 3."

To continue processing, the operator has two options to recover:

- 1) Remove the "suspect" bill from the stacker and press the CONT key (Key 3). The machine will continue processing from the previous bill count with no impact on the Total count.
- 2) The second involves the use of the "Denomination Value" keys: MODE (\$1), ADD (\$5), VERIFY (\$10), UNIT (\$20), SD (\$50), DENSITY (\$100), and DENOM (\$2). If, during setup, these keys have been activated, simply pressing the key that corresponds to the top bill in the stacker will add that amount to the machine's total and restart the machine. (More details concerning the use of the "Denomination Value" keys appears in the descriptions for the individual operating modes.) However, if the operator removes the bills in the stacker, without pressing the CONT key (Key 3) and the hopper is empty, JetScan will beep three times and flush the last bill out of the machine. The machine will add that last bill, but the total will not include the counterfeit note.

The Suspect Document stop condition will only be present when suspect document detection is enabled.

Jam

The machine has jammed. The display will read "JAM REMOVE HOPPER". To clear jam, remove the hopper tray as well as any currency left in the hopper. Carefully pull cover plate up and off by grasping onto the two slots. The display will then read:

Denomination

Sub Batch

Strap Count

ATTACH HANDLES TO SHAFT <CLEAR> = FWD <STRAPS> = REV

Mode

Batch

Strap Limit

Firmly grab the two black handles/clasps with forefingers and hook both over the shaft. If there is a possibility an object besides bills (i.e. paper clips)

has jammed, then use the drum rollers to manually remove objects and/or bills. Otherwise press the **CLEAR** key (Key 1) to move rollers forward or the **STRAP** key (Key 2)to reverse and flush the machine.

The Strap, Sub-Batch, Individual Denomination and Batch Counts will revert to the values that existed prior to the run that caused the jam. Remove the black handles/clasps off the shaft and replace cover plate and hopper tray. Remove the documents from the stacker and feed <u>all</u> documents into the machine. This stop condition is present in all operating modes.

## Chain and Chain\*)

The machine has run two or more documents through the reading mechanism without the proper spacing. The display will read CHAIN DETECTED. Remove the documents from the stacker and place them back into the hopper. Press the CONT key. (Key 3). The machine will continue processing from the previous bill count with no impact on Strap, Sub-Batch, Individual Denomination, Batch and Day counts.

#### **Doubles**

The machine has run two documents through the reading mechanism simultaneously (stacked on top of one another). The display will read DOUBLE DETECTED. Remove the documents from the stacker and place them back into the hopper. Press the **CONT** key (Key 3). The machine will continue processing from the previous bill count with no impact on Strap, Sub-Batch, Individual Denomination, Batch and Day counts. This stop condition is present in all operating modes.

### Facing Error

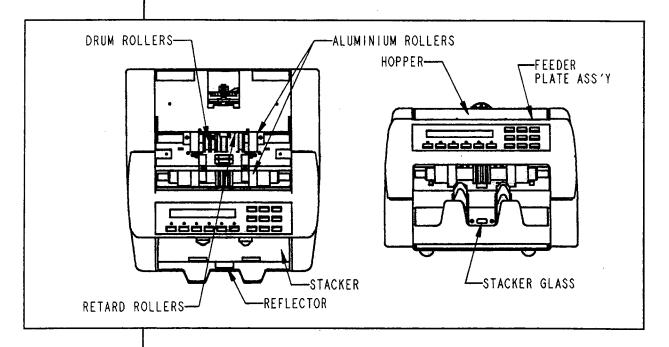
When using a JetScan with one read head in a FACING mode, the machine will stop and the display will read NO CALL each time the bill in the stacker is either unreadable or not faced properly. In the case of an improperly faced bill, simply face the bill properly and press the appropriate "Denomination Value" key (if they have been activated in set-up). The correct amount will be added to the total and the machine will continue processing. If these keys have not been activated, remove the bill from the stacker and return it to the hopper in the correct orientation (it has not been added to the total) for further processing, and press the CONT key (Key 3).

When using a JetScan with two read heads in a FACING mode, the machine will stop and display FACING ERROR each time the bill in the stacker is not faced properly. Simply face the bill properly and press the appropriate "Denomination Value" key (if they have been activated in set-up). The correct amount will be added to the total and the machine will continue processing. If these keys have not been activated, remove the bill from the stacker and return it to the hopper in the correct orientation (it has not been added to the total) for further processing, and press the CONT key (Key 3).

#### Orientation Error

When the machine is in an ORIENTATION mode it will stop, and the display will read ORIENTATION ERROR each time the bill in the stacker is not

oriented properly. Simply orient the bill properly and press the appropriate "Denomination Value" key (if they have been activated in set-up) and the correct amount will be added to the total and the machine will continue processing. If these keys have not been activated, remove the bill from the stacker and return it to the hopper in the correct orientation (it has not been added to the total) for further processing, and press the CONT key (Key 3).



#### DAILY MAINTENANCE **ROUTINE**

The JetScan should be cleaned and given routine maintenance on a regular (200) 186.5103 \$15 - CASE basis. To perform this maintenance you will need:

- A soft cotton cloth
- Cummins Roll Cleaner (Part #022-1725-00)
- Cummins "UltraJet" Spray Air (Part #022-1651-00)

The following maintenance procedure should be performed every day.

- Use a pressurized aerosol duster, such as Cummins "UltraJet", to blow the dust out of the hopper side of the currency path.
- Blow the dust from the area around the aluminum rollers.
- Blow the dust out of the stacker area.
- Spray a small amount of roll cleaner on a rag and clean the retard drum rollers. Note: Do not spray the roll cleaner directly into the JetScan.
- Replace the feeder plate assembly and blow out any dust in the hopper area.
- Clean the glass and the metal reflector in the stacker.

#### CLEARING A BATCH TOTAL

Clearing Batch totals is accomplished using the END BAT key (Key 15). Pressing this key returns both the Batch and the Sub-Batch to zero and generates a print and/or computer report, if this option was activated during set-up.

IT IS IMPORTANT TO NOTE THAT CLEARING BATCHES CLEARS THE BATCH AND SUB-BATCH COMPLETELY. ONCE THE TOTALS HAVE BEEN CLEARED, THEY CANNOT BE RECOVERED.

For an example of the clearing process, assume that \$100 has been processed in the SORT mode. The screen may look like this:

Denomination	Sub Batch		Strap Count	
\$1	\$	20	\$	20
SORT	\$	100	\$	50
Mode	Ba	atch	Stra	Limit

To clear the Batch total, press the END BAT key (Key 15). The screen now looks like this:

Denomination	Sub Batch		Strap Count	
\$1	\$	0	\$	20
SORT	\$	0	\$	50_
Mode	Batch		Strap	Limit

Note that clearing the Batch total also clears any Sub-Batch totals (Sub-Batch totals appear above the Batch total). It may be noted, too, that clearing the Batch total did not affect the Strap value unless the STRAPS CLEAR END BATCH was engaged during setup (see page 19).

### CLEARING SUB-BATCHES

Mode

Assume that \$100 has been processed in the SORT mode. For this example, the screen will look like this:

Denomination	Sub Batch		Strap Count	
\$10	\$	100	\$	30
SORT	\$	<b>\$ 100 \$</b>	\$	1000
Mode	Batch		Str	ap Limit

To clear the Sub-Batch total in preparation for starting a new Sub-Batch, simply remove the bills from the stacker and press the **END SUB** key (Key 6). Once it is pressed, the screen looks like this:

Denomination	Sub Batch		Strap Count	
\$10	\$	0	\$	30
SORT	\$	100	\$	1000
Mode	В	atch	Str	ap Limit

Note that the Batch total and the Strap Counts are not affected. If a printer is attached and activated, a Sub-Batch report will be generated.

#### **CLEARING STRAPS**

Straps may be cleared for individual denominations or for all denominations at once. Using the example above, \$100 is processed in the SORT mode, producing this screen:

Denomination	Sub	Sub Batch		Strap Count	
\$10	\$	100	\$	30	
SORT	\$	100	\$	1000	
Mode	В	Batch Str		ap Limit	
Pressing the CLE	AR key (I	Key 1) prese	nts the	CLEAR	
Denomination Sub Batch		Stra	p Count		
	·				
	CL	EAR?			
Mode	В	atch	Stra	ap Limit	

To clear the strap for the present denomination (in this case, \$10.00), press the **STRAP** key (Key 2). The screen now looks like this:

Denomination	Sub Batch		Strap Count	
\$10	\$	100	\$	0
SORT	\$	100	\$	1000
Mode	Batch		Strap Limit	

The \$10 Strap has been reset to 0 without affecting the Batch or Sub-Batch totals. Scrolling through the denomination screens (by repeatedly pressing the **DENOM** key (Key 13)) will show that the Straps for denominations other than \$10.00 are be unchanged. For example, in this case, the \$1.00 screen looks like this:

Denomination	Sub Batch		Strap Count	
\$1	\$	20	\$	20
SORT	\$	20	\$	50
Mode	Ва	ıtch.	Strap	Limit

To clear ALL Straps, again press the **CLEAR** key (Key 1). Pressing the **ALL STRAP** key (Key 5) resets all Strap Counts at zero. Scrolling through the denomination screens will confirm that all Straps are reset to zero.

#### **CLEARING DAY TOTALS**

Clearing Batches and Sub-Batches has no effect on Day total. The only way to clear Day totals is through this process.

Press the CLEAR key (Key 1). This screen appears:

Denomination	Sub Batch	Strap Count
	CLEAR?	
Mode	Batch	Strap Limit

Press the DAY key (Key 4) once and the screen will change to:

Denomination

Sub Batch

Strap Count

## **CLEARING DAY TOTALS**

Mode

Batch

Strap Limit

IT IS IMPORTANT TO NOTE THAT CLEARING DAY TOTALS CLEARS THE DAY TOTAL COMPLETELY. ONCE THE TOTAL HAS BEEN CLEARED, IT CANNOT BE RECOVERED.

# REVIEWING SUB-BATCH, BATCH, STRAP AND DAY TOTALS FOR INDIVIDUAL DENOMINATIONS

Assume that \$230 has been processed of which \$30 are \$1.00 bills, and \$200 are \$5.00 bills.

Denomination	Sub Batch		Strap Count	
\$5	\$	230	\$	200
SORT	\$	230	\$	500
Mode	В	atch	Stra	p Limit

Press the **DENOM** key (Key 13) and scroll to the \$1.00 denomination for review:

Denomination	Sub Batch		Strap Count	
\$1	\$	30	\$	30
SORT	\$	30	\$	100
Mode		atch	Stra	p Limit

This display indicates that the denominational Batch total for \$1.00 bills is \$30. It also indicates that the \$1.00 Strap total is currently \$30, and the \$1.00 denominational Sub-Batch total is \$30.

Press the **DENOM** key (Key 13) to scroll to the \$5.00 totals:

Denomination	Sub Batch		Strap Count	
<b>\$</b> 5	\$	200	\$	200
SORT	\$	200	\$	500
Mode	B	atch	Stra	ıp Limit

The display now shows the Batch to be \$200, which is the total of \$5.00 bills in this Batch. The display shows the \$5.00 Strap and Sub-Batch total, which is displayed as \$200 for each.

# REVIEWING SUB-BATCH, BATCH, STRAP AND DAY TOTALS FOR INDIVIDUAL DENOMINATIONS

## REVIEWING DAY TOTALS

Press the **DAY** key (Key 4). The display will read:

Denomination

Sub Batch

Strap Count

DAY TOTAL \$230

Mode

Batch

Strap Limit

This is the grand total of currency processed since the last time the Day total was cleared.

To review Individual Denomination Day totals, press the **DENOM** key (Key 13) and scroll to the desired denomination. This is an example of what the screen might look like for the \$5.00 total:

Denomination

Sub Batch

Strap Count

\$5 DAY TOTAL \$ 7500

Mode

Batch

Strap Limit

Port #1 or Port #2 on the rear of the JetScan (the bottom connector at lower right hand corner when facing the front of the machine) is designed for the connection of a printer. The printer can be enabled or disabled during the setup process.

#### Generating reports:

## BATCH AND SUB-BATCH REPORTS

If the ADD function is enabled, printer Batch reports are sent when the END BAT (Key 15) or END SUB key (Key 6) is used to clear a Batch or Sub-Batch accumulations.

To generate Sub-Batch reports, it is necessary that the Sub-Batch set-up field be enabled in the ON PRNT setting. Reports will <u>ONLY</u> be sent when ON PRNT is selected in set-up. Simply setting Sub-Batch status ON will <u>not</u> generate print reports. It is also necessary to select PRINTER in set-up field #8 (PORT 2 STATUS) and to set speeds, etc., to match those of your printer.

If sub-batching has been enabled and the **ADD** key (Key 8) is ON, Sub-Batches will accumulate and a report will be sent to the printer when the Sub-Batch is cleared by pressing the **END SUB** key (Key 6). The last Sub-Batch processed will be sent to the printer automatically when the Batch is cleared, unless previously sent using the **END SUB** key (Key 6).

When the ADD function is disabled, print reports are sent to the printer automatically. They are sent when the machine is in "time-out" and the stacker has been cleared of documents. Since there is no Sub-Batch when the ADD function is "OFF", only Batch reports are sent.

#### REPORT APPEARANCE

Each report generated by JetScan features a number immediately below the name of the report. The first five digits in this number indicate the transaction number of this report among all reports sent to the printer. It will increase by one digit each time a report is sent and will reset to zero each time the Day total is cleared.

The next four digits indicate Batch number.

The final three digits indicate Sub-Batch number.

If the ADD function is enabled:

SUB-BATCH REPORT 00001-0001

DENOM UNIT VALUE \$1 97 \$ 97

SUB-BATCH 97 \$ 97

TOTAL

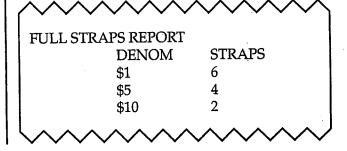
SUB-BATCH REPORT 00002-0001-002 DENOM UNIT VALUE \$1 124 124 \$ \$10 34 \$. 340 SUB-BATCH 158 456 TOTAL

	<b>///</b>	<b>\</b>	<b>///</b>
BATCH REPORT 00004-0001-000			
DENOM	UNIT		VALUE
\$1 \$5 \$10	221 1 37	\$ \$ \$	221 2 370
BATCH TOTAL	259	\$	593
If ADD function is no	ot enabled	<b>✓</b>	·
BATCH REPORT 00001-0001-000			
DENOM	UNIT		VALUE
1		ው	60
\$1 \$5 \$10	60 29 8	\$ \$ \$	145 80

### STRAP REPORTS

For modes other than MIXED mode, a Strap report can be sent to the printer. This report is automatically sent when all Straps are cleared by pressing the **CLEAR** key (Key 1) and then the **ALL STRAP** key (Key 5). Generating this report resets all Strap Counts to zero.

Report appearance:



DAY TOTAL REPORTS

Day total reports are automatically generated when Day totals are cleared. To do this, press the **CLEAR** key (Key 1). This screen appears:

Denomination

Sub Batch

Strap Count

**CLEAR?** 

Mode

Batch

Strap Limit

Press the DAY key (Key 4) once and the screen will change to:

Denomination

Sub Batch

Strap Count

## **CLEARING DAY TOTALS**

Mode

Batch

Strap Limit

If a printer is attached to JetScan, this printout will be automatically generated.

<b>/////</b>	<b>////</b>	<b>\</b>	<b>///</b>
DAY REPORT			
DENOM	UNIT		VALUE
\$1	263	\$	263
\$2	1	\$	2
\$10	37	\$	370
DAY	301	\$	635
TOTAL		•	
	^ ^ ^	^	A A A

### **SETUP REPORT**

This print report is only generated in setup fields, when Port 1 or Port 2 is set to PRINTER. In Setup, the following screen appears:

Denomination

Sub Batch

Strap Count

17) SETUP REPORT
Press KEY 3 to print

Mode

Batch

Strap Limit

Press KEY 3 to generate the SETUP report. To cancel printing, press KEY 6.

•	JETSCAN (	SETUP
DATE:	·	
Serial number: CORE:020-4062-7 020-4062-21R13	20R03	
DEFAULT TYPE		USER
SUB-BATCH STAT	US	ON PRNT
MODE STATUS		
COUNT	ON	
STRANGER	ON	
STR-FACE	OFF	
STR-ORNT	OFF	
MIXED	ON	•
MIX-FACE	OFF	
MIX-ORNT	OFF	
SORT	ON	
SRT-FACE	OFF	
SRT-ORNT OFFSORT	OFF ON	

(	^	<b>////</b>	<b>\\\\</b>
Ì	KEY STATUS		
-	UNIT	ON	
1	ADD	ON	• .
1	DENSITY	ON	
1	DAY	ON	
1	VERIFY	ON	
	SPCT DC	ON	
	AUDIO ALARM ST	TATUS	
I	NO CALL	OFF	
	STRNGER	OFF	
	STRP LM	OFF	
	DNM CHG	OFF	
	SPCT DC	OFF	
1	CHAIN	ON	
	DOUBLE	ON	
	JAM	ON	
	DENOM KEYS USA		
Ì	NO CALL	ON	
	SUSP DOC	ON	
	FACING	OFF	·
	ORIENT	OFF	
	PORT 1 STATUS		
	PRINTER	2400	7 NONE
	t materi	2400	7 MUME
	PORT 2 STATUS		<i>y</i>
	OFF	1200	7 NONE
			, ,,,,,
-	STRAPS CLEAR		MANUAL
	OTDANOED DEGO	nn	
	STRANGER RECO	КU	OFF
	MAGNETIC HEAD	CTATHC	
	MAG HD	otar⊕o On	
	UV+FL	OFF	
	UVTIL	UFF	
	SD FUNCTION CO	NTROL	ON
	COUNT MODE TRA	ANSMIT	ON
	SEPARATE SERIES	OCE	
	SEFARIATE SERVE	) UFF	
	<b>COMM REPORT</b>		NORMAL
l			

## STRANGER DETECT MODE OPERATION

STRANGER DETECT mode scans bills for a selected denomination and stops when another denomination is found.

#### SET-UP PROCEDURE

Turn JetScan on by pressing the power switch at the lower right rear corner of the machine.

Press the **MODE** key (Key 7) to select STRANGER, STRANGER FACE, or STRANGER ORIENT.

With the **ADD** key (Key 8) ON, Sub-Batch set to ON in set-up, and the STRANGER mode selected, the display shows:

Denomination	Sub Batch		Strap Count	
\$1	\$	0	\$	0
STRNGR	\$	0	\$	100
Mode	Bato	:h	Stra	ıp Limit

JetScan defaults to the \$1.00 denomination with a Strap Limit of 100 bills.

The JetScan will operate in the same manner whether the unit you are using has a single scanning head or an optional second scanning head, except in the STRANGER FACE mode and in the way bills must be placed in the hopper.

If the JetScan you are using has a single scanning head, it is necessary to place all bills in the hopper green side up. Any bill that is not green side up will cause a NO CALL and stop the machine. If the JetScan is equipped with two scanning heads, the bills can be placed in the hopper in any orientation.

JetScan may also stop if one of the following conditions occurs: JAM, CHAIN, DOUBLE, SUSPECT, STRAP LIMIT, STRANGER, FACING ERROR, or ORIENTATION ERROR. Consult the "STOP CONDITIONS" section for instructions on handling these specific conditions.

Whether the unit has one head or two, make sure that all bills are stacked neatly and that the desired denomination to be scanned is on the bottom of the stack. Place the new stack of bills in the hopper. The machine will now scan for the bottom bill of the new stack in the hopper.

Based on the denomination of that bottom bill, the machine will stop on every "stranger" it encounters. A "stranger" is defined as any bill other than the selected denomination.

When a "stranger" bill is found, the machine will stop and the stranger bill will be the very top one in the stacker. Remove the stranger bill and press the CONT key (Key 3) to continue. If STRANGER RECORD was selected during setup, the stranger will be added to all appropriate totals. If STRANGER RECORD was not enabled, the stranger will not be added to the totals.

# USING DENOMINATION VALUE KEYS

The "Denomination Value" keys operate the same in STRANGER DETECT mode as they do in other modes, with a single exception.

Say, for example, \$5.00 bills were passing through the machine, the "Denomination Value" keys were activated, and a NO CALL occurs, JetScan will stop and the screen would read NO CALL REMOVE BILL.

Pressing the \$10 "Denomination Value" key would produce this screen:

Denomination

Sub Batch

Strap Count

\$10 STRANGER?

Mode

Batch

Strap Limit

If the \$10 key had been pressed in error, pressing the \$5 key would add \$5.00 to the total and processing would continue.

If, however, the \$10 key was pressed intentionally, pressing it again would produce this screen:

Denomination

Sub Batch

Strap Count

## **REMOVE STRANGER**

Mode

Batch

Strap Limit

Removing the \$10.00 from the stacker and pressing the CONT key (Key 3) will add \$10 to the total (ONLY if STRANGER RECORD was activated during set-up) and resume processing. The "stranger" will not be counted towards the various totals <u>UNLESS</u> the special STRANGER RECORD set-up option has been initialized during set-up.

Based on the denomination of that bottom bill, the machine will stop on every "stranger" it encounters. A "stranger" is defined as any bill other than the selected denomination.

When a "stranger" bill is found, the machine will stop and the stranger bill will be the very top one in the stacker. Remove the stranger bill and press the CONT key (Key 3) to continue. If STRANGER RECORD was selected during setup, the stranger will be added to all appropriate totals. If STRANGER RECORD was not enabled, the stranger will not be added to the totals.

# USING DENOMINATION VALUE KEYS

The "Denomination Value" keys operate the same in STRANGER DETECT mode as they do in other modes, with a single exception.

Say, for example, \$5.00 bills were passing through the machine, the "Denomination Value" keys were activated, and a NO CALL occurs, JetScan will stop and the screen would read NO CALL REMOVE BILL.

Pressing the \$10 "Denomination Value" key would produce this screen:

Denomination

Sub Batch

Strap Count

\$10 STRANGER?

Mode

Batch

Strap Limit

If the \$10 key had been pressed in error, pressing the \$5 key would add \$5.00 to the total and processing would continue.

If, however, the \$10 key was pressed intentionally, pressing it again would produce this screen:

Denomination

Sub Batch

Strap Count

### **REMOVE STRANGER**

Mode

Batch

Strap Limit

Removing the \$10.00 from the stacker and pressing the CONT key (Key 3) will add \$10 to the total (ONLY if STRANGER RECORD was activated during set-up) and resume processing. The "stranger" will not be counted towards the various totals <u>UNLESS</u> the special STRANGER RECORD set-up option has been initialized during set-up.

### BATCH ACCUMULATION, ADD FUNCTION "OFF"

Operating in STRANGER DETECT mode with the ADD key (Key 8) off produces this screen when \$45 in \$1 bills are processed:

Denomination	Sub	Batch Stra  45 \$	Strap	ap Count	
\$1					
STRNGR	\$	45	\$	100	
Mode	Ва	ıtch	Stra	p Limit	

The number over the STRAP LIMIT label is the current Strap Limit. The number on the bottom row above the label BATCH indicates the current count. If the bills are left in the stacker, then the next run will be added to the Batch. If the bills are removed from the stacker, then the next run will restart from zero.

Assume that the bills were left in the stacker, and another 55 had been run. The machine will "time out" showing a Strap Limit has been reached.

Denomination		Sub Batch	Strap Count
\$1			
	\$1	STRAP LIM	IT
Mode		Batch	Strap Limit

Once bills are removed from the stacker the machine automatically resumes counting until it either counts all the bills in the hopper or reaches another Strap Limit. In this case, the display reads:

Denomination	Sub Batch		Strap Count	
\$1				
STRNGR	\$	100	\$	100
Mode	В	Batch		p Limit

Removing the bills from the stacker resets the Batch to zero and, if a printer is enabled, automatically prints out a Batch report. Reaching a Strap Limit also resets the Batch to zero.

SUB-BATCH ACCUMULATION, ADD KEY "ON"

JetScan will accumulate only Batch totals unless the SUB-BATCH function was enabled during set-up and when the ADD function is enabled. Press the ADD key (Key 8). The indicator above the ADD will light and the display will read:

Denomination	Sub Ba	atch	Stra	p Count
\$1	\$	0	\$	0
STRNGR	\$	0	\$	100
Mode	Bato	:h	Stra	p Limit

The Strap Limit remains at 100 bills. The number underneath the STRAP COUNT label is the Strap Count against the limit. The number under the SUB BATCH label is the Sub-Batch. The number above the BATCH label on the bottom line of the display reflects the Batch total.

### For example:

The operator runs 30, \$1.00 bills. The display is as follows:

Denomination	Sub Batch		Strap Count	
\$1	\$	30	\$	30
STRNGR	\$ 30		\$	100
Mode	Batch		Stra	ıp⊹Limit

The hopper is empty and the machine is in a normal "time-out" condition. The Strap, Sub-Batch and Batch totals are now \$30.00.

Continuing this example, the operator now runs 70 more \$1.00 bills completing a full strap of 100, \$1.00 bills. The display reads as follows:

Denomination	Sub	Batch	Strap	Count
\$1	\$	100	\$	0
	\$1 STR	AP LIMIT	•	
Mode	Ва	atch	Strap	Limit

The hopper is empty, and the 70 bills are still in the stacker. The display indicates that the \$1.00 limit of 100 bills has been reached. Upon removal of the bills from the stacker, the display shows:

Denomination	Sub	Batch	Strap	Count
\$1	\$	100	\$	0
STRNGR	\$	100	\$	100
Mode	В	atch	Stra	p Limit

When the next run begins, the Sub-Batch and Batch totals remain at 100 and accumulate from that count.

Now assume the operator has cleared the machine of currency, and cleared the Batch totals (see page 27 for instructions on how to clear Batch totals).

The operator runs 30 \$1.00 bills. Again, the display reads as follows:

Denomination	Sub	Batch	Strap	o Count
\$1	\$	30	\$	30
STRNGR	\$	30	\$	100
Mode	Ba	itch	Stra	n Limit

The operator now wants to process \$5.00 notes, which are to be included in the same Batch total. The hopper and transport mechanism are clear of bills. The processed \$1 bills should be removed from the stacker and set aside to await a complete strap quantity.

The operator simply loads the bills into the hopper and the machine begins processing. The LED display will show the following:

Denomination	Sub Batch		Strap Count	
<b>\$</b> 5	\$	130	\$	100
STRNGR	\$ 130		\$ 500	500
Mode	Batch		Stra	p Limit

The Strap Count reflects the 20, \$5.00 bills just processed, while the Batch and Sub-Batch counts add the two totals together for \$130.

JetScan retains in memory the Strap total for \$1.00 bills. Consequently, if the operator desires to run \$1.00 bills again, the same procedure is followed, and the display will read:

Denomination	Sub Batch		Strap Count	
\$1	\$	150	\$	50
STRNGR	<b>\$</b> 150		\$	100
Mode	Batch		Stra	n I imit

There are now 50 dollars credited against the \$1.00 limit after the additional 20 bills were processed. The Sub-Batch and Batch totals reflect the addition of 20 dollars.

Assume now that this Sub-Batch is complete and the operator wishes to clear it to prepare for a new Sub-Batch. Pressing the **END SUB** key (Key 6) produces this screen:

Denomination	Sub Batch		Strap Count	
\$1	\$	0	\$	50
STRNGR	\$	150	\$	100
Mode	Batch Strap Limit		p Limit	

A new Sub-Batch of 20 \$1.00 bills is processed. The screen then looks like this:

Denomination	Sub	Sub Batch		Strap Count	
\$1	\$	20	\$	70	
STRNGR	\$	170	\$	100	
Mode	В	Batch		n Limit	

### FACING CURRENCY

It is possible to use JetScan to face currency. This feature makes it is possible to select bills that are not "matching-side-up" (i.e., in a stack that is green-side-up, the machine will stop if a black-side-up bill is encountered, and vice versa).

In a JetScan equipped with a single scanning head, facing can be performed in either the STRANGER, STRANGER FACE, or STRANGER ORIENT mode, but bills must always be placed in the hopper green side up. In all modes except COUNT, the machine will stop each time it finds a bill that is faced improperly and the screen will read "NO CALL". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the bill at the top of the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

With a JetScan equipped with an optional additional scan head, currency can be faced green side up or black side up. To do this, move to the STR-FCE (Stranger Face) mode. Make certain that the bottom bill in the stack is faced in the orientation you want all bills faced. JetScan will use the bottom bill as a reference and will stop on all bills faced in the opposite direction.

Place currency in the hopper. The machine will begin processing currency. It will stop each time it finds a bill that is faced improperly and the screen will read "FACING ERROR". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the bill at the top of the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

### **ORIENTING CURRENCY**

It is possible to use the machine to orient currency (also known as "Heading" currency) if this feature has been activated during set-up, whether the machine has a single read head or is equipped with an optional additional read head. With this feature, it is possible to select bills that are not "correct-edge-facing-top" (i.e., in a stack that is oriented so the words "THE UNITED STATES OF AMERICA" are at the top edge of the bills, the machine will stop if a bill in any other orientation is found, and vice versa).

To do this, move to the STRORT (Stranger Orient) mode.

Place the currency in the hopper with the bottom bill oriented in the direction you desire. The JetScan will use the bottom bill in the stacker as a reference document, so it should be oriented in the same direction as

you want all bills oriented. The machine will begin to read the currency. Every time the machine stops, and the display reads ORIENTATION ERROR, the bill in the stacker will oriented improperly. If the "Denomination Value" keys have been activated, simply press the one corresponding to the value of the top bill in the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

MIXED mode scans bills of all denominations.

#### SET-UP PROCEDURE

Turn JetScan on by pressing the power switch, located at the lower right rear of the machine.

Use the MODE key (Key 7) to select MIXED, MIXFCE (MIXED FACE), or MIXORT (MIXED ORIENT).

Upon choosing the MIXED mode with the **ADD** key (Key 8) ON, and Sub-Batch set to ON in set-up the display reads:

Denomination	Sub Batch		Strap Count
\$1	\$	20	
MIXED	\$	150	
Mode	Batch		Strap Limit

With the **ADD** key (Key 8) OFF, it reads:

Denomination	Sub Batch		Strap Count	
MIXED	\$	150		
Mode	В	atch	Strap Limit	

The counts appearing on the display are "holdover" counts from the previous mode. These numbers will be erased immediately upon beginning to count currency in the current mode.

#### MIXED OPERATION

If your JetScan is equipped with a single read head, place the bills face down (i.e., green side up) in hopper (any bill that is not green side up will cause a NO CALL and stop the machine). If the unit has an optional second read head, currency may be placed in the hopper in any orientation.

Once currency has been placed in the hopper, JetScan will begin counting while reading each individual bill. The machine will add the face value of all the bills in the stack and provide a total. JetScan will stop automatically within two seconds when all documents have been run.

The machine could also stop if one of the following conditions occurs: JAM, DOUBLE, CHAIN, SUSPECT DOCUMENT, NO CALL, FACING

BATCH ACCUMULATION, ADD FUNCTION "OFF" ERROR, or ORIENTATION ERROR. Consult the STOP CONDITIONS section of this manual for instructions on processing these situations.

Assume that \$245 has been processed. The display would read:

Denomination Sub Batch Strap Count

MIXED \$ 245

Mode Batch Strap Limit

JetScan has counted \$245 of mixed currency. To review specific denomination totals press the **DENOM** key repeatedly and scroll through all denominations.

The Batch total is retained when the next bundle of bills is processed if bills are left in the stacker. When additional bills are processed through the JetScan, the Batch total will reset itself each time the stacker has been emptied.

BATCH AND SUB-BATCH ACCUMULATION, ADD FUNCTION "ON"

If a printer has been enabled, a print report will be generated each time the Batch total clears.

JetScan will accumulate both Batch and Sub-Batch totals when the **ADD** key (Key 8) is enabled and the SUB-BATCH mode has been turned "ON" during the setup process. Select the MIXED mode and turn the ADD function on. The screen reads:

Denomination	Sub Batch		Strap Count
	\$	0	
MIXED	\$ 0		
Mode	Bato	h	Strap Limit

To process mixed currency, place the bills in the hopper. The machine begins processing and the display reads:

Denomination	Sub Batch		Strap Count
	\$	50	
MIXED	<b>\$</b> 50		
Mode	Ra	tch	Stran Limit

To process another Sub-Batch, currency is removed from the stacker and the END SUB key (Key 6) is pressed, which clears the Sub-Batch total and produces this display:

Denomination	Sub Batch		Strap Count		
	\$	0			
MIXED	\$ 50				
Mode	Ва	tch	Strap Limit		

A second Sub-Batch consisting of 20, \$1.00 bills is processed. The resulting screen looks like this:

Denomination	Sub Batch		Strap Count
	\$	20	
MIXED	\$	70	
Mode	Bat	ch	Strap Limit

#### **FACING CURRENCY**

It is possible to use JetScan to face currency. This feature makes it is possible to select bills that are not "matching-side-up" (i.e., in a stack that is green-side-up, the machine will stop if a black-side-up bill is encountered, and vice versa).

In a JetScan equipped with a single scanning head, facing can be performed in either the MIXED, MIXFCE, or MIXORT mode, but bills must always be placed in the hopper green side up. In all modes except COUNT, the machine will stop each time it finds a bill that is faced improperly and the screen will read "NO CALL". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key

corresponding to the value of the bill. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

With a JetScan equipped with an optional additional scan head, currency can be faced green side up or black side up. To do this, move to the MIXFCE (Mix Face) mode. Make certain that the bottom bill in the stack is faced in the orientation you want all bills faced. JetScan will use the bottom bill as a reference and will stop on all bills faced in the opposite direction. Place currency in the hopper. The machine will begin processing currency. It will stop each time it finds a bill that is faced improperly and the screen will read "FACING ERROR". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the bill at the top of the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

### **ORIENTING CURRENCY**

It is possible to use the machine to orient currency (also known as "Heading" currency) if this feature has been activated during set-up, whether the machine has a single read head or is equipped with an optional additional read head. With this feature, it is possible to select bills that are not "correct-edge-facing-top" (i.e., in a stack that is oriented so the words "THE UNITED STATES OF AMERICA" are at the top edge of the bills, the machine will stop if a bill in any other orientation is found, and vice versa).

To do this, move to the MIXORT (Mix Orient) mode.

Place the currency in the hopper with the bottom bill oriented in the direction you desire. The JetScan will use the bottom bill in the stacker as a reference document, so it should be oriented in the same direction as you want all bills oriented. The machine will begin to read the currency. Every time the machine stops, and the display reads ORIENTATION ERROR, the bill in the stacker will oriented improperly. If the "Denomination Value" keys have been activated, simply press the one corresponding to the value of the top bill in the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

SORT mode scans bills of all denominations. It is best used when bills are sorted by denomination, but grouped or stacked together.

#### **SET-UP PROCEDURE**

Turn JetScan on by pressing power switch, located at the lower left rear corner of the machine.

Press the **MODE** key (Key 7) to select SORT, SORT FACE, or SORT ORIENT operation. Selecting SORT with the Add function ON, and Sub-Batch enabled in set-up will produce this screen:

Denomination	Sub Batch		Strap Count	
\$1	\$	0	\$	50
SORT	\$	150	\$	100
Mode	В	atch	Stra	p Limit

The counts shown on the display are merely "holdover" counts from the previous mode. These numbers will be erased immediately upon beginning processing in the current mode.

JetScan defaults to the \$1.00 denomination with a Strap Limit of 100 bills. When processing bills in the SORT mode, the operator only has to place the currency stack in the hopper. JetScan reads the first bill through, from the bottom of the stack, and automatically scans for that denomination.

#### SORT OPERATION

The JetScan will operate in the same manner whether the unit you are using has a single scanning head or an optional second scanning head, except in the FACING mode and in the way bills must be placed in the hopper.

If the JetScan you are using has a single scanning head, it is necessary to place all bills in the hopper green side up. Any bill that is not green side up will cause a NO CALL and stop the machine. If the JetScan is equipped with two scanning heads, the bills can be placed in the hopper in any orientation.

JetScan may also stop if one of the following conditions occurs: JAM, CHAIN, DOUBLE, SUSPECT DOCUMENT, STRAP LIMIT, DENOMINATION CHANGE, FACING ERROR, or ORIENTATION ERROR. Consult the "STOP CONDITIONS" section for instructions on handling these specific conditions.

Place currency in the hopper and JetScan will begin counting while reading each individual bill. The machine will add the face value of all the bills in the stack and provide a total. Each time the denomination passing through

BATCH ACCUMULATION, ADD KEY "OFF" the machine changes, JetScan will stop and the screen will read DENOMI-NATION CHANGE. JetScan will stop automatically within two seconds when all documents have been run.

JetScan will accumulate only Batch totals if the Sub-Batch field was not enabled during set-up and if the ADD key (Key 8) is not activated.

Assume that a stack of 150 bills divided into equal groups of \$1.00's, \$5.00's, and \$10.00's is to be processed. As the bills are processed, the machine will stop and show DENOMINATION CHANGE as it encounters each new denomination (this process is discussed in greater detail in the following section). Removing the currency from the stacker will cause JetScan to resume processing until the next stop or until all bills are counted. In this example, when all bills are counted, the screen will read:

Denomination	Sub Batch		Strap Count	
\$10				
SORT	\$	150	\$	1000
Mode	Batch		Stra	ao Limit

When the bills are removed from the stacker, a print report will automatically be generated if a printer is enabled.

The Batch total is retained when the next bundle of bills is processed if bills are left in the stacker. When additional bills are processed through JetScan, the Batch total will reset itself each time the stacker has been emptied.

BATCH AND SUB-BATCH ACCUMULATION, ADD KEY "ON" As in the previous example, the operator has a stack of 150 bills divided into equal groups of \$1.00's, \$5.00's, and \$10.00's. The bills are stacked in that order. The bills are placed in the hopper and JetScan starts to process the currency, reading the bottom bill in the stack and scanning for that denomination. The machine scans all 50, \$1.00 bills and then reads a \$5.00 bill. JetScan will stop upon reaching the \$5.00 bill and the display will show the following:

Denomination	Sub B	satch	Strap (	Jount
<b>6</b> E	Φ.	EE	ф.	_

The operator removes the bills from the stacker. The group of currency will contain 50, \$1.00's, and one \$5.00 bill. The bills should be removed, separated, and placed in a holding area. The count against their respective Strap Limits is \$50.00 in ones and \$5.00 in fives.

After the removal of the currency from the stacker, the machine resumes processing, automatically switching to the \$5.00 denomination. JetScan will continue processing until another denomination change is recognized. This time it is the \$10.00 denomination and the machine will stop with the display showing the following:

Denomination	Sub	Batch	Strap Count	
\$10	\$	310	\$	10
	ENOMINA	TION CHA	NGE	
Mode	В	atch	Strap	Limit

The operator removes the bills from the stacker. This group will contain 49 \$5.00 bills and one \$10.00 bill. The operator should separate the \$10.00 bill from the \$5.00's and place the currency in a holding area. The count against their respective Strap Limits is now \$50.00 in ones, \$250.00 in fives and \$10.00 in tens.

After removal of currency, the machine automatically resumes processing, switching to the \$10.00 denomination. JetScan will continue processing until all tens have been run. The display now shows:

Denomination	Sub	Sub Batch		Strap Count	
\$10	\$ 800		\$	500	
SORT	\$	\$ 800		1000	
Mode	Batch		Str	ap Limit	

The final group of bills to be removed from the stacker will contain 49, \$10.00 bills. The \$10.00 Strap Count is \$500.00, while the Batch and Sub-Batch counts are \$800.00.

Assume that the operator wishes to clear the Sub-Batch total in preparation for beginning a new Sub-Batch. Pressing the **END SUB** key (Key 6) produces this screen:

Denomination	Sub Batch		Strap Count	
\$10	\$	0	\$	500
SORT	\$	800	\$	1000
Mode	Batch		Str	ap Limit

If a printer is enabled, a Sub-Batch printout will be generated.

If the operator now processes a new Sub-Batch of 40, \$10.00 bills this screen results:

Denomination	Sub Batch		Strap Count	
\$10	\$	400	\$	900
SORT	\$	1200	\$	1000
Mode	, E	Batch	Str	ap Limit

### HANDLING NO CALLS

When NO CALL, SUSPECT DOCUMENT, FACING, or ORIENTATION ERROR conditions occur, the "Denomination Value" keys can be used to restart JetScan. Simply pressing the "Denomination Value" key that corresponds to the top bill in the stacker adds the amount to the Batch, Strap and Sub-Batch totals and restarts the machine.

If you press a "Denomination Value" key other than the denomination currently being processed, however, JetScan treats it like a denomination change.

So, for example, if \$5.00 bills were passing through the machine and a NO CALL occurred, the screen would read:

Denomination	Sub Batch	Strap Count
	NO CALL	
Mode	Batch	Strap Limit

Pressing the \$10.00 "Denomination Value" key would produce this screen:

Denomination

Sub Batch

Strap Count

\$10

\$10 DENOM CHANGE?

Mode

Batch

Strap Limit

Pressing the \$10 "Denomination Value" key accepts the \$10.00 change. The machine resumes counting once bills are removed from the stacker. If, however, the \$10.00 key was pressed in error, pressing the \$5.00 key would resume counting normally.

#### FACING CURRENCY

It is possible to use JetScan to face currency. This feature makes it is possible to select bills that are not "matching-side-up" (i.e., in a stack that is green-side-up, the machine will stop if a black-side-up bill is encountered, and vice versa).

In a JetScan equipped with a single scanning head, facing can be performed in either the SORT, SRTFCE, or SRTORT mode, but bills must always be placed in the hopper green side up. In all modes except COUNT, the machine will stop each time it finds a bill that is faced improperly and the screen will read "NO CALL". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the bill at the top of the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

With a JetScan equipped with an optional additional scan head, currency can be faced green side up or black side up. To do this, move to the SRT-FCE (Sort Face) mode. Make certain that the bottom bill in the stack is faced in the orientation you want all bills faced. JetScan will use the bottom bill as a reference and will stop on all bills faced in the opposite direction.

Place currency in the hopper. The machine will begin processing currency. It will stop each time it finds a bill that is faced improperly and the screen will read "FACING ERROR". If the "Denomination Value" keys have been activated, simply place the bill in the correct orientation and press the key corresponding to the value of the bill at the top of the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

#### ORIENTING CURRENCY

It is possible to use the machine to orient currency (also known as "Heading" currency) if this feature has been activated during set-up, whether the machine has a single read head or is equipped with an optional additional read head. With this feature, it is possible to select bills that are not "correct-edge-facing-top" (i.e., in a stack that is oriented so the words "THE UNITED STATES OF AMERICA" are at the top edge of the bills, the machine will stop if a bill in any other orientation is found, and vice versa).

To do this, move to the SRTORT (Stranger Orient) mode.

Place the currency in the hopper with the bottom bill oriented in the direction you desire. The JetScan will use the bottom bill in the stacker as a reference document, so it should be oriented in the same direction as you want all bills oriented. The machine will begin to read the currency. Every time the machine stops, and the display reads ORIENTATION ERROR, the bill in the stacker will oriented improperly. If the "Denomination Value" keys have been activated, simply press the one corresponding to the value of the top bill in the stacker. The machine will resume processing with the correct total. If the "Denomination Value" keys are not activated, simply place the top bill from the stacker back in the hopper in the correct orientation and press the CONT key (Key 3).

COUNT mode counts any currency, food stamps, etc., that fit the hopper size (see specifications section at the beginning of this manual). In this mode, unit is only counting "slips of paper" (no currency scanning is taking place).

#### **SET-UP PROCEDURE**

Turn JetScan on by pressing the power switch, located in the lower left rear corner of the machine.

Press the MODE key (Key 7) to reach the COUNT mode screen. Because the COUNT mode can also be used to process currency (which is described later in this chapter) the screen that you will see depends on the settings of the ADD key (Key 8) and the UNIT key (Key 10).

If the ADD key (Key 8) is enabled, Sub-Batch ON in set-up, and the UNIT key is OFF, the display will read:

Denomination	Sub B	atch	Stra	p Count
\$1	\$	0	\$	0
COUNT	\$	0	\$	100
Mode	Bato		Stra	p Limit

If the **ADD** key (Key 8) is not enabled and the **UNIT** key (Key 10) is OFF, the screen will read:

Denomination	Sub Batch		Strap Count	
\$1			:	
COUNT	\$	0	\$	100
Mode	Batch	•	Stra	ap Limit

If the **ADD** key (Key 8) is enabled and the **UNIT** key (Key 10) is ON, the display will read:

Denomination	Sub Batch	Strap Count
	0	0
COUNT	0	100
Mode	Batch	Strap Limit

If the **ADD** key (Key 8) is not enabled and the **UNIT** key (Key 10) is ON, the screen will read:

COUNT 0 100

Mode Batch Strap Count

In the COUNT mode, JetScan is intended to count in units and not dollars (though it is possible to count (not scan) dollars if the denomination setting matches the face value being counted and the UNIT key is OFF). Therefore the Count total reflects the number of pieces. This is desirable when counting items such as food stamps, coupons, etc. JetScan can only process these media in the COUNT mode.

If the ADD function has been engaged, JetScan will remember Batch and Strap totals from previously processed denominations.

# PROCESSING DOCUMENTS:

Place the documents in hopper. The machine will begin counting. The machine will time out and stop automatically within two seconds when all documents have been run.

JetScan may also stop if one of the following conditions occurs: JAM, DOUBLE, CHAIN, STRAP LIMIT, SUSPECT DOCUMENT. Consult the "STOP CONDITIONS" section of this manual for instructions on handling these specific situations.

### BATCH ACCUMULATION, ADD KEY "OFF"

Use the **MODE** key (Key 7) to scroll to the COUNT mode. To count pieces, press the **UNIT** key (Key 10). This screen will appear:

Denomination	Sub Batch	Strap Count	
COUNT	0	100	
Mode	Batch	Strap Limit	

Processing 45 coupons will produce this screen:

Denomination

Sub Batch

Strap Count

COUNT 45 100

Mode

Batch

Strap Limit

BATCH AND SUB-BATCH ACCUMULATION, ADD KEY "ON"

Pressing the **ADD** key (Key 8) while the UNIT function is active, produces this screen:

Denomination

Sub Batch

Strap Count

0 0 COUNT 0 100

Mode

Batch

Strap Limit

Processing 45 coupons in this mode will produce this screen:

Denomination

Sub Batch

Strap Count

45 45 COUNT 45 100

Mode

Batch

Strap Limit

Assume that the operator wishes to clear the Sub-Batch total in preparation for beginning a new Sub-Batch. Pressing the END SUB key (Key 6) produces this screen:

Denomination

Sub Batch

Strap Count

0 45 COUNT 45 100

Mode

Batch

Strap Limit

If a printer is enabled, a Sub-Batch printout will be generated.

If the operator now processes a new Sub-Batch of 40 coupons, this screen results:

Denomination	Sub Batch	Strap Count	
	40	95	
COUNT	95	100	
Mode	Batch	Strap Limit	

# PROCESSING CURRENCY IN COUNT MODE

With the UNIT function turned OFF, JetScan will count in dollars with a multiplier equal to the denomination chosen, e.g., \$1.00—1 to 1, or \$5.00—5 to 1.

To change the multiplier/denomination simply press the **DENOM** key (Key 13) to scroll through the seven possibilities (\$1.00, \$2.00, \$5.00, \$10.00, \$20.00, \$50.00, \$100.00).

For example, the screen for processing \$5.00 bills looks like this.

Denomination	Sub B	Batch	Stra	p Count
\$5	\$	0	\$	0
COUNT	\$	0	\$	500
Mode	Bat	ch		p Limit

When counting currency, individual Strap Limits may be set for each different denomination.

To return to counting "slips of paper" press the UNIT key (Key 10) again.

OFFSORT mode scans bills of all denominations and stops on a selected denomination.

#### SET-UP PROCEDURE

Turn JetScan on by pressing power switch, located at the lower left rear corner of the machine.

Press the **MODE** key (Key 7) to select OFFSORT operation. Selecting OFFSORT with the Add function ON, and Sub-Batch enabled in set-up will produce this screen:

Denomination	Sub Batch		Strap Count	
\$1	\$	0		
OFFSRT	<b>\$ 150</b>			
Mode	В	atch	Strap Limit	

The counts shown on the display are merely "holdover" counts from the previous mode. These numbers will be erased immediately upon beginning processing in the current mode.

JetScan defaults to the \$1.00 denomination. When processing bills in the OFFSORT mode, the operator only has to place the currency stack in the hopper. JetScan scans all denominations, but stops for the selected denomination.

#### OFFSORT OPERATION

The JetScan will operate in the same manner whether the unit you are using has a single scanning head or an optional second scanning head, except in the way bills must be placed in the hopper.

If the JetScan you are using has a single scanning head, it is necessary to place all bills in the hopper green side up. Any bill that is not green side up will cause a NO CALL and stop the machine. If the JetScan is equipped with two scanning heads, the bills can be placed in the hopper in any orientation.

JetScan may also stop if one of the following conditions occurs: JAM, CHAIN, DOUBLE, SUSPECT DOCUMENT, STRAP LIMIT, or DENOMINATION CHANGE. Consult the "STOP CONDITIONS" section for instructions on handling these specific conditions.

Place currency in the hopper and JetScan will begin counting while reading each individual bill. The machine will add the face value of all the bills in the stack and provide a total, as well as totals for individual denominations (which can be viewed by scrolling with the **DENOM** key (Key 13)). Each time the denomination passing through the machine changes to or from the selected denomination JetScan will stop and the screen will read "DENOM-INATION CHANGE". JetScan will stop automatically within two seconds when all documents have been run.

### BATCH ACCUMULATION, ADD KEY "OFF"

JetScan will accumulate only Batch totals if the Sub-Batch field was not enabled during set-up and if the ADD key (Key 8) is not activated.

Assume that a stack of 160 bills divided into equal groups of \$1.00's, \$5.00's, \$10.00's, and \$1.00's is to be processed and \$1 is selected to offsort. As the bills are processed, the machine will stop and show DENOMINATION CHANGE as it encounters a denomination other than the selected OFFSORT denomination or when it reencounters the selected denomination (this process is discussed in greater detail in the following section). Removing the currency from the stacker will cause JetScan to resume processing until the next stop or until all bills are counted. In this example, when all bills are counted, the screen will read:

Denomination	Sub Batch		Strap Count
\$1			
OFFSRT	\$	150	
Mode	Ba	ıtch	Strap Limit

When the bills are removed from the stacker, a print report will automatically be generated if a printer is enabled.

The Batch total is retained when the next bundle of bills is processed if bills are left in the stacker. When additional bills are processed through JetScan, the Batch total will reset itself each time the stacker has been emptied.

BATCH AND SUB-BATCH ACCUMULATION, ADD KEY "ON" As in the previous example, the operator has a stack of 160 bills divided into equal groups of \$1.00's, \$5.00's, \$10.00's and \$1.00's. The bills are stacked in that order. \$1 is selected as the OFFSORT denomination. The bills are placed in the hopper and JetScan starts to process the currency, scanning for that denomination. The machine scans all 40, \$1.00 bills and then reads a \$5.00 bill. JetScan will stop upon reaching the \$5.00 bill and the display will show the following:

Denomination	Sub Batch	Strap Count
\$1	\$ 40	
[	ENOMINATION C	HANGE
Mode	Batch	Strap Limit

The operator removes the bills from the stacker. The group of currency will contain 40, \$1.00's, and one \$5.00 bill. The bills should be removed, separated, and placed in a holding area.

After the removal of the currency from the stacker, the machine resumes processing. JetScan will continue processing until the selected denomination is reencountered. When the machine recognizes the \$1 bill again, JetScan will stop with the display showing the following:

Denomination	Sub Batch	Strap Count
\$1	\$ 640	
	DENOMINATION CI	IANGE
Mode	Batch	Strap Limit

The operator removes the bills from the stacker. This group will contain 39 \$5.00 bills, 10 \$10.00 bills and one \$1 bill. The operator should separate the \$1 bill, the \$5.00's and the \$10.00's and place the currency in a holding area.

After removal of currency, the machine automatically resumes processing, JetScan will continue processing until all one's have been run. The display now shows:

Denomination	Sub Batch		Strap Count
\$1	\$	680	
OFFSRT	\$	680	
Mode	Ва	atch	Strap Limit

The final group of bills to be removed from the stacker will contain 39, \$1.00 bills. The Batch and Sub-Batch counts are \$680.00.

Assume that the operator wishes to clear the Sub-Batch total in preparation for beginning a new Sub-Batch. Pressing the **END SUB** key (Key 6) produces this screen:

Denomination	Sub Batch		Strap Count
\$1	\$	0	
OFFSRT	\$	680	
Mode	Ва	atch	Strap Limit

If a printer is enabled, a Sub-Batch printout will be generated.

If the operator now processes a new Sub-Batch of 40, \$1.00 bills this screen results:

Denomination	Sub Batch		Strap Count
\$1	\$	40	
OFFSRT	\$	720	
Mode	В	atch	Strap Limit

HANDLING NO CALLS

When NO CALL or SUSPECT DOCUMENT conditions occur, the "Denomination Value" keys can be used to restart JetScan. Simply pressing the "Denomination Value" key that corresponds to the top bill in the stacker adds the amount to the Batch, and Sub-Batch totals and restarts the machine.

If you press a "Denomination Value" key other than the selected OFFSORT denomination currently being processed, however, JetScan treats it like a stranger.

So, for example, if 30 \$1 bills has passed through the machine and a NO CALL occurred, the screen would read:

Denomination	Sub Batch	Strap Count
\$1	\$ 3	10
	NO CALL	-
Mode	Batch	Strap Limit

Pressing the \$10.00 "Denomination Value" key would produce this screen:

Denomination	Sub Batch	Strap Count
\$1	\$ 30	·
\$10	STRANGER?	
Mode	Batch	Strap Limit

Pressing the \$10 "Denomination Value" key accepts the \$10.00 stranger. The machine resumes counting once bills are removed from the stacker. If, however, the \$10.00 key was pressed in error, pressing the \$1.00 key would resume counting normally.

### **GLOSSARY**

### **AUTO DENOMINATION**

In STRANGER Mode, machine will read the first bill through from the hopper and then every different denomination found becomes the "stranger" and the machine stops.

BATCH

Documents processed as an overall group. Documents will be recorded as coming from one general source.

**CHAINS** 

A condition that occurs when two or more documents run through the JetScan reading mechanism without proper spacing. (For information about clearing chains, see page 25.)

CLEAR

To reset accumulated totals for Batches, Sub-Batches, Day totals and Straps to zero. Accomplished by pressing **CLEAR** key, then press the key corresponding to the total to be cleared.

**COUNT MODE** 

Counts any currency, food stamps, coupons, etc., that fit the hopper size. Operates like any other currency counter in that it is only counting "slips of paper" (no currency scanning takes place).

DAY TOTAL

The grand total of currency processed since the last time Day total was cleared.

**DEFAULT** 

Conditions of operation that are either established during the setup process (which remain unchanged until reset) or have been incorporated into JetScan during manufacture (to which the machine returns each time it is turned "OFF", then "ON"). For more on default settings, see page 13.

**DISPLAY** 

Vacuum Fluorescent Display (VFD) screen on the front of the machine that reports operating status.

**DOUBLES** 

A condition that occurs when two documents pass through the JetScan reading mechanism simultaneously, stacked one on top of the other. The machine will stop when this condition occurs. (For information about how to clear the machine after a doubles condition, see page 25).

**FACING CURRENCY** 

It is possible to use JetScan to face currency if this feature has been activated during set-up. This feature makes it is possible to select bills that are not "matching-side-up" (i.e., in a stack that is green-side-up, the machine will stop if a black-side-up bill is encountered, and vice versa).

**HOPPER** 

The area on top of JetScan where documents to be processed are placed.

MIXED MODE

A mode of operation in which bills of all denominations are scanned, regardless of the mixture of bills.

### GENERAL OPERATING PROCEDURES

NO CALL

The machine cannot identify a bill's denomination. Recovering from a No Call condition is described in detail on page 23.

**OFFSORT MODE** 

Scans bills of all denominations and stops on a selected denomination.

ORIENTING CURRENCY

With this feature, it is possible to select bills that are not "correct-edge-facing-top" (i.e., in a stack that is oriented so the words "THE UNITED STATES OF AMERICA" are at the top edge of the bills, the machine will stop if a bill in any other orientation is found, and vice versa).

**SET-UP FIELDS** 

There are fourteen pre-operating conditions that can be assigned or controlled by the operator (discussed in detail on pages 13-18). Once they are set, they remain set (even if the machine is turned off) unless reset by re-entering the setup process.

**SORT MODE** 

Scans bills of all denominations. Best used when bills are in a presorted stack, i.e., denominations are sorted, but stacked together.

STACKER

The area at the bottom front of JetScan where processed documents are delivered.

STRANGER DETECT

A mode of operation in which JetScan scans bills for a selected denomination and stops when any other denomination is found.

STRANGER RECORD

In STRANGER Mode, machine will record all the "stranger" bills encountered in the Batch total, and track them against their respective Strap Counts.

**STRAP** 

Quantity of documents to be prepared for banding.

SUB-BATCH

Documents processed from one of several sources as part of a Batch. Allows for more detailed tracking of proceeds within a Batch.

SUSPECT DOCUMENT SENSITIVITY

JetScan allows the setting of different sensitivity levels of UV, FL, and MAG per denomination for the detection of suspect documents. The lower the sensitivity, the greater the opportunity to pass a counterfeit bill. The higher the sensitivity, the greater the opportunity to stop on a good (non-counterfeit) bill.

**FACTORY MODE** 

A special set of pre-programmed defaults for JetScan's set-up fields. For more information on specific Factory Mode defaults, see pages 13-16.