

February 26, 2016



## AS7200 User Manual

Document Revision 16-01



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## Document History

Doc Rev	Date	Changes (click blue text to go to that page)
16-01	Feb. 26, 2016	The AS7200 User Manual was completely restructured for better viewing on a tablet style reader.

If you find errors, inaccuracies, or any other issues or concerns with this document, please contact the OPEX Technical Writers via email at:

[GroupTechwriters@opex.com](mailto:GroupTechwriters@opex.com)

AS7200 User Manual (OPEX part no. #5068900)



## From the President of OPEX Corporation

### **The AS7200 scanner offers an extremely flexible, efficient and ergonomic method for capturing images and data**

The OPEX AS7200 is the flagship product in our line of document scanning devices. Long established as the industry leader in check/document scanning and processing, the AS7200 brings the capability of imaging documents of nearly every type and size. With the versatility of the AS7200 scanner, your company now has the ability to efficiently capture images and necessary information in a single touch, eliminating nearly all of the traditional prep processes associated with other scanning devices.

The AS7200i is either mounted to an OPEX Model 72 or Model 51 Rapid Extraction Desk for processing mail from envelope to image. The AS7200t is mounted to a workstation table and provides a solution for scanning documents whose source may not be an envelope, such as from file folders and storage boxes.

Whatever the application, the key to this process is YOU, the AS7200 Operator. We've gone to great lengths to design our equipment to be efficient, comfortable and simple to operate, and believe that you will be pleased with the final result.

Thank you for taking the time to familiarize yourself with the contents of this manual. We trust that you will find using the AS7200 scanner an enjoyable and productive experience and a welcome addition to your workday.

Sincerely,

Dave Stevens  
President/CEO  
OPEX CORPORATION

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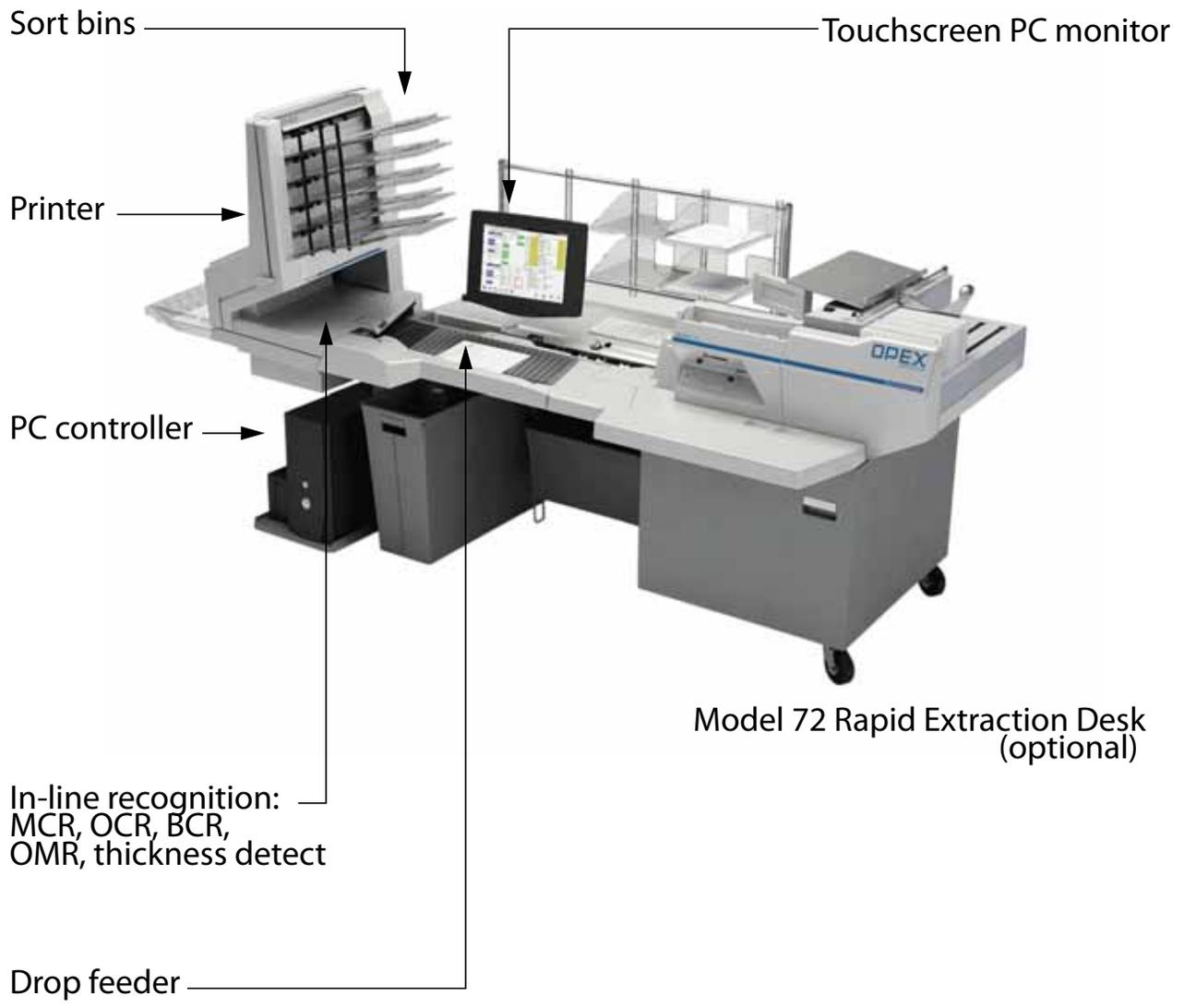
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## Overview

The AS7200 is a high-speed, color scanner that serves to reduce the costs and time involved in processing documents. By scanning paper documents and converting them into electronic files, the AS7200 makes processing mail and other paper documents as simple as pressing a few buttons. In just one step, the AS7200 can identify, prepare, capture, orient, read, create an audit trail, and sort documents.

The AS7200 sets a new standard for scanning excellence with its all-new 300 DPI imager and exclusive multi-function feeder. No other scanner in the world offers high-performance drop-feeding, packet-feeding, and auto-feeding. It can scan multi-stream, perform in-line recognition of barcodes, optical character recognition (OCR), optical mark-sense recognition (OMR), magnetic ink character recognition (MICR), and document type classification. When OPEX CertainScan™ software is equipped with VRS technology, a variety of additional optimizations can be performed in-line including: content-based rotation, background smoothing, and more. This all adds up to unmatched image quality, recognition, and cleanup at full speed, full color, and full resolution.

Other features of the AS7200 include:

- Color 17" LCD display with touch-screen controls
- Duplex scanner with native 300 DPI scanning
- Selectable color drop-out
- Front and back audit trail printers
- Double-feed, length, skew, thickness, and envelope detection
- Six output trays (four fully sortable bins, one thick mail bin, one reject bin)

## AS7200 specifications

Speed	Up to 120 pages/minute
Paper & Envelope Specifications	Length: 3.5" to 18.25" Width: 2" to 12.25" Thickness: Up to 1/16"
Duty Cycle	Unlimited
Operator/Service Clearance	3' all around

### About this manual

The purpose of this manual is to instruct operators of the AS7200 in how to use the scanner to perform tasks. For more information on how to set up jobs, page types, audit trails and other functions of the machine, consult either the "AS7200 CertainScan - Standard Scanning" or "AS7200 CertainScan - Remittance Processing" manual.

### How the AS7200 Works

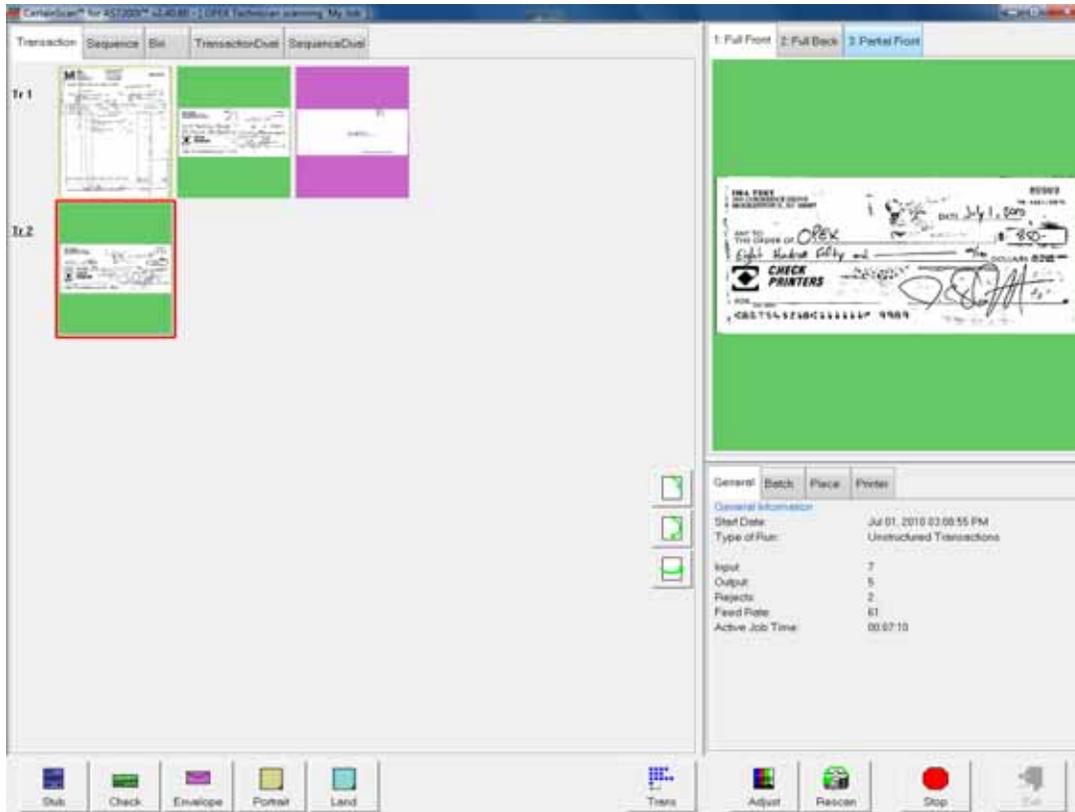
The AS7200 scanner is controlled by a single, Windows 7 driven PC. The operator interacts with the system via the CertainScan software and simply drops documents onto the drop feeder. The system scans the items based on the current job parameters. The scanner can capture MICR and OCR information, print audit trails on the documents, and sort them to a specified bin.

### Software

The AS7200 uses two software applications which control the system:

**INtime Controller** The INtime Controller runs in the background of the CertainScan software and controls all machine related functions, such as monitoring sensors, triggering gates, and turning motors on and off. The INtime Controller runs in its own real-time operating system, called INtime. **You do not need to access the INtime controller and should never close the INtime window.**

**CertainScan** The CertainScan software interfaces with the Controller and manages the non-machine related functions performed by the scanner. CertainScan provides an interface for setting up jobs, page types, and audit trails, and for running jobs. **This is the main interface with the machine.**



## Jobs

A job is a collection of parameters the AS7200 use for scanning documents. The jobs you set up allow you to process documents in a similar manner from run to run.

The scanner captures images of documents and stores the information it collects in batches, which consist of one or more transactions. The definition of a transaction can vary from customer to customer, and even from job to job. A transaction may consist of several page types. For example, a check, a stub (or remittance piece), and an envelope.

## **Structured vs. Unstructured jobs**

Structured jobs require you to scan documents in a particular order. For example, when running a structured job, the machine may prompt you to scan a batch ticket first, then a stub, then a check, and/or another document, and finally an envelope to signify the end of the transaction. If a page type is scanned out of sequence or if the system is expecting a certain page type, the system will alert you.

In an unstructured job, you can scan any of the expected page types in any sequence. The only restriction is that the transaction boundary, in most cases an envelope, is scanned last in the transaction. The transaction boundary tells the system the current transaction is complete and the next transaction will begin.

## **Page types**

The term “page type” is used to specify a collection of criteria that a piece must meet to be classified as a certain type of document: in other words, length, height, barcode, mark detect, MICR, etc. The system uses the page type parameters set up by your System Administrator to classify documents that come into the system. When the scanner processes documents in a job, it gathers data (such as length and width) on each item and compares the item to the page types you have designated for that job. This is how the system identifies each document scanned into the system. The system then collects the appropriate data from the document and sorts it according to the current job parameters.

# Operating the System

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## Overview

Chapter 2: “Operating the System” provides basic information on how to process documents with the AS7200. Refer to Chapter 1 for safety precautions, user interface information, and how to run the machine.

**Note:** This manual describes operation of the AS7200 scanner. If you have a Model 72, Model 51 or Model 60 Rapid Extraction Desk installed, refer to the RED Operator Guide before proceeding with this manual.

## Safety precautions

Follow these safety precautions to avoid injury when operating the AS7200. Failure to follow these precautions may result in severe personal injury or damage to the machine.

- **Be careful when working with AC power.** Electrical wiring can be hot any time the machine is plugged in. Failure to use caution may result in electric shock or death.
- **Do not set liquids (such as drinks) on the scanner that could spill into the machine.**
- **Keep loose objects away from any exposed, moving parts of the machine.** The moving parts of the AS7200 can become jammed and/or damaged by foreign objects. Also, keep hands, hair, loose clothing or jewelry away from the moving parts.
- **Do not attempt to clean the machine while it is running.** A cloth (or similar material) should never be used to clean moving parts such as belts or rollers. The use of such material on moving mechanisms can result in damage to the machine or severe personal injury.
- **Do not use flammable, high pressure, “canned air” to clean paper scraps and dust from the machine.**
- **Do not move the machine while the power is on.** Unplug the machine from the power source first.

## Ergonomics

As in any occupation which requires you to perform the same motion repeatedly during the course of your work, it is important to consider how you perform your task. Always use proper operating procedures when operating the AS7200. Follow the directions for using and adjusting your chair and scanner. Using improper procedure can result in a potentially serious injury. The AS7200 scanner has been designed for safe operation by over 95% of the user population. Operation by individuals with limited reach capability or who cannot follow the suggestions listed should be avoided or limited in duration.

To reduce possible risks, we strongly urge you to follow these suggestions:

- Maintain an upright body posture. Avoid the tendency to slump in your chair. The angle between your torso and thighs should always be close to 90 degrees.
- Adjust the seat height on your chair or the height of the scanner so that your elbow is approximately even with the top of the work surface when your arms are near your sides and your feet are flat on the floor. If this cannot be achieved with normal chair and scanner adjustments, a footrest for shorter operators or scanner leg extensions for taller operators should be used.
- Adjust your chair position to allow your torso to touch the front edge of the scanner work surface. Chairs with arm rests that prevent this body position should not be used.
- If the touch screen is used frequently during processing, adjust the touch screen position to minimize your reach movements to the frequently touched areas.
- Your position should allow you to comfortably reach the frequent work pick-up area(s) and the frequently touched areas of the screen without extending either arm fully or changing your posture.
- Occasionally change the angle of your posture and, if possible, vary your tasks to create short breaks from the most repetitive motions.
- If possible, avoid operating the machine for longer than a single 8-hour shift.

While no suggestions can guarantee completely against work-related injuries, you will certainly increase your comfort and safety while operating the AS7200 if you put these suggestions into practice. The scanner has been designed with you in mind. If it is operated correctly, you should find your work experience comfortable and enjoyable.

## **Main controls and system components**

The list below describes many of the controls and components of the AS7200 system. Refer to Figure 1 on page 17.

**Sort bins** Scanned documents are sorted into one of six selectable output bins.

**Override feed control button** The override feed control button allows you to disable the ultrasonic multifeed detector when you are scanning thicker pieces, such as certain envelopes that would not fit the profile of a regular envelope.

**Audit trail printers** The audit trail printers are located behind the sort bins. Audit trails can be applied to the front and/or back of each scanned document.

**Main power switch** The main power switch is located on the electrical box under the stacker bins as shown in Figure 1. This is the main “on/off” switch for the AS7200 system. For more info on turning the AS7200 system on and off, see page 18.

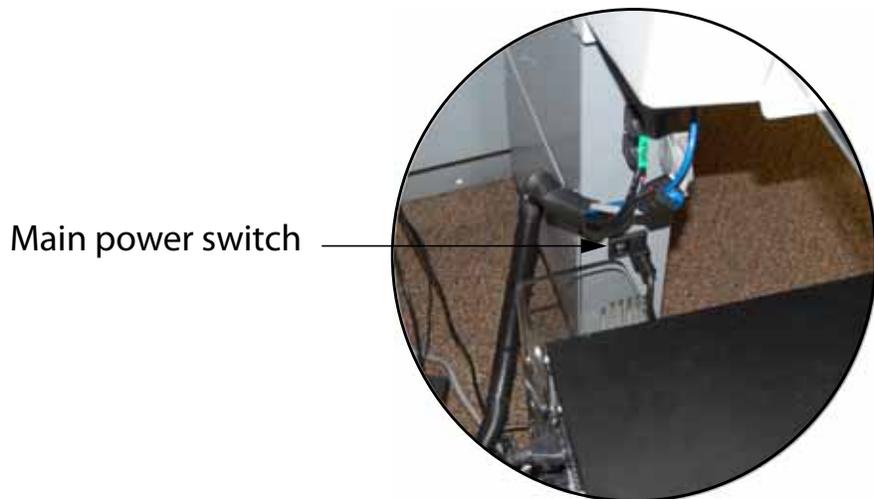
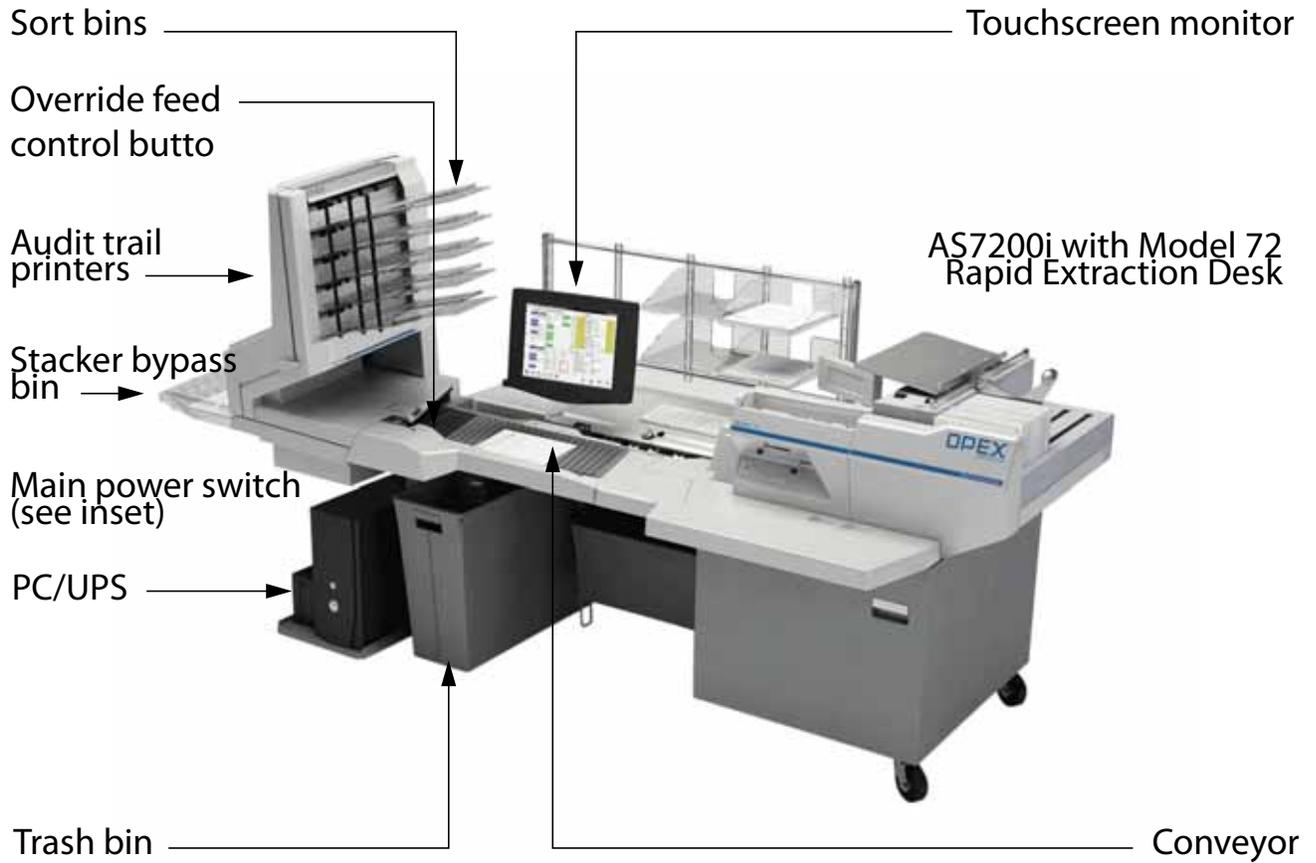
**UPS (Uninterrupted Power Supply)** The APC UPS provides backup battery power to the AS7200 PC to complete transactions or save work should the site’s AC power supply be interrupted.

**Touchscreen monitor** Use the monitor to log in and out of the AS7200 system. The monitor’s touchscreen controls should be used to operate the system and run jobs.

**Conveyor** Place documents onto the drop feeder for scanning into the AS7200 system.

**Keyboard/mouse** Typically, the keyboard and mouse are only used for setting up jobs and for use with other software. Use the touchscreen monitor for running jobs and operating the machine.

**IdAssist indicator** The blue IdAssist indicator LED will light up when running a job that includes IdAssist. Also, when the operator triggers IdAssist the LED will go out briefly, indicating to the operator that IdAssist has been activated.



**Figure 1: Main controls and components**

## Getting Started

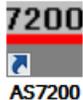
### Power up the system:

If the AS7200 system is not already up and running, turn on the power:

- 1 Turn on the main power switch (see Figure 1).
- 2 Press the power button on the UPS. The monitor will turn on and the computer will begin to boot up.
- 3 Log in to Windows with your Windows/network user name and password. If your AS7200 is not connected to a network, you may not have to log in to Windows first. Proceed to step 4.

Once the computer has finished booting Windows, it will launch the AS7200 CertainScan application.

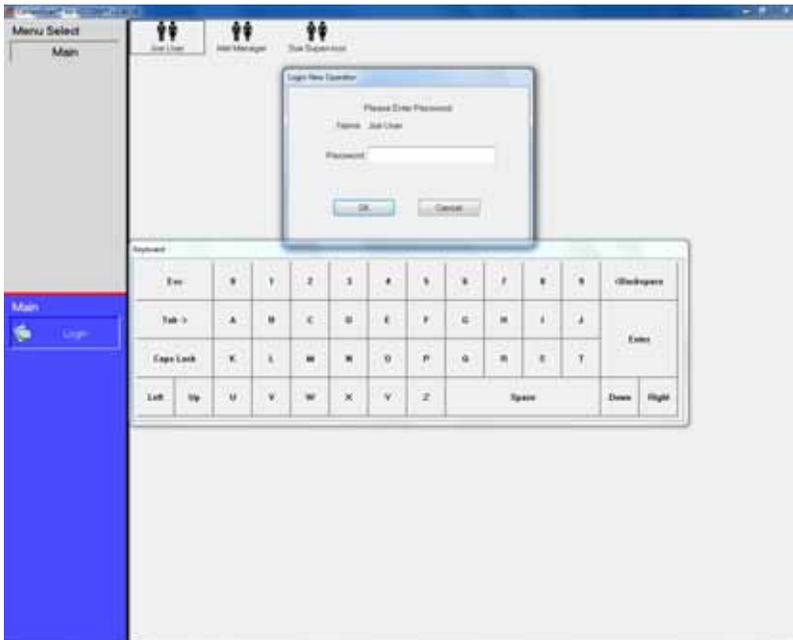
**Note:** If you mistakenly close CertainScan, double-click the icon on the desktop to start it again.



### Log in to the system:

- 4 On the vertical menu bar, select the icon for your user account.

**Note:** If you do not have your own user account, ask your AS7200 Administrator for assistance.



**Figure 2: Login screen**

- 5 Enter your password via the on-screen keyboard or computer keyboard. Press **OK**.

## Navigating the AS7200 CertainScan software

Use the CertainScan software to select jobs and process documents on the AS7200 system. The CertainScan interface consists of:

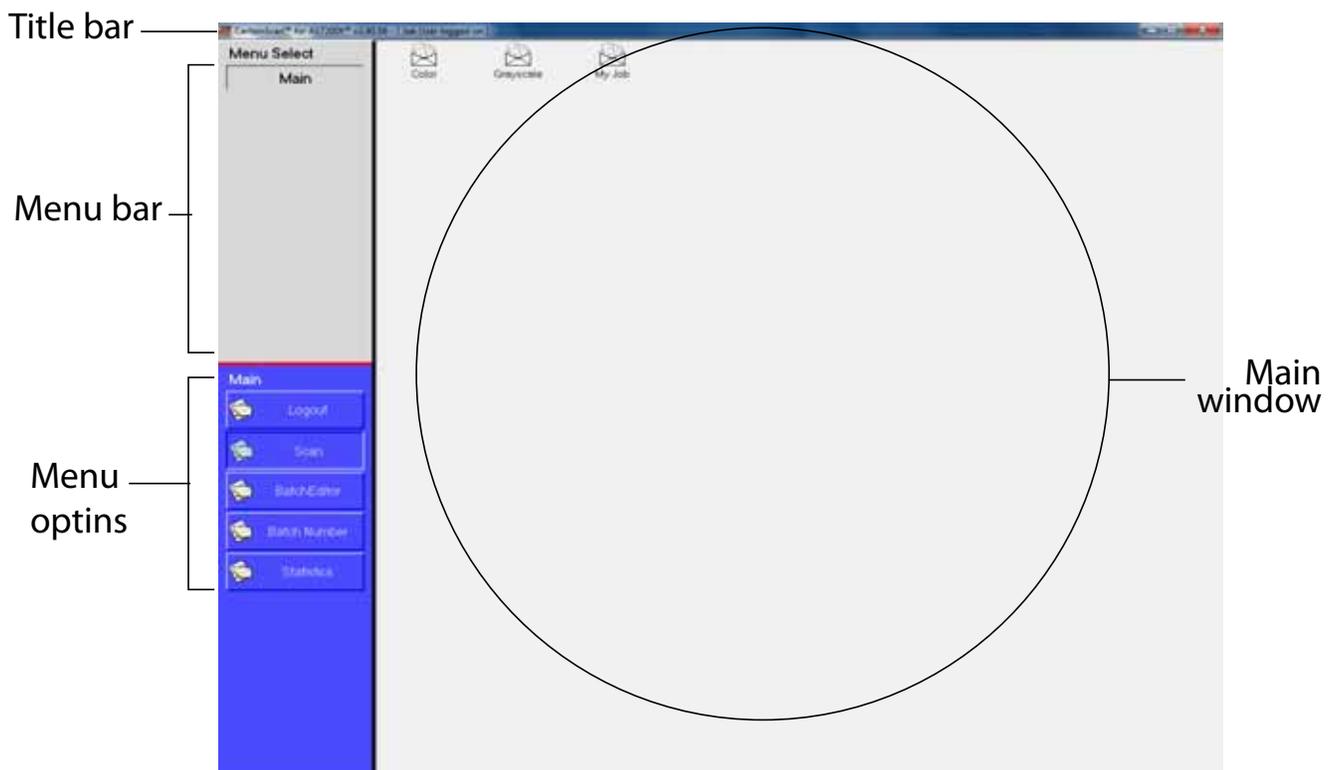
**Title bar** The title bar displays the name of the current operator and other pertinent information. Click the AS7200 icon in the title bar to access the Windows functions (Restore, Move, Size, Minimize, Maximize, Close), as well as the following menus:

- The **DIAGNOSTICS** menu contains the AS7200 system options. These options are used by OPEX technicians to evaluate system performance.
- The **HELP** menu accesses the About screen, which provides version information for the AS7200 CertainScan software.

**Menu bar** The vertical menu bar provides access to the main system functions. Select a category from the menu bar and make selections from the main window or the menu options bar.

**Menu options** The menu options provide subcategories for the selections in the menu bar. The menu options bar will change based on the current menu bar selection.

**Main window** View and adjust settings and parameters in the main window.



**Figure 3: CertainScan interface**

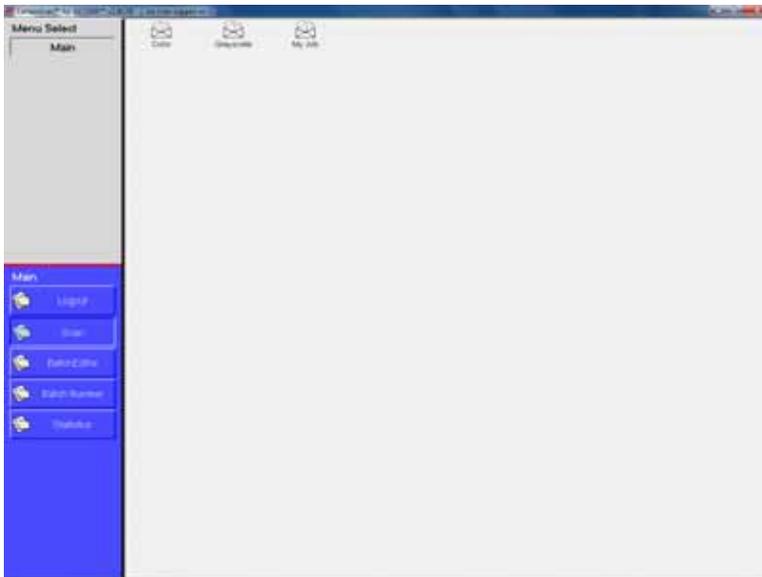
## Running Jobs

Now that you have logged into the system and taken some time to familiarize yourself with the main controls and components, you are ready to begin operating the machine. This section will give you a general outline of how to use the CertainScan software to process documents.

### Select a job:

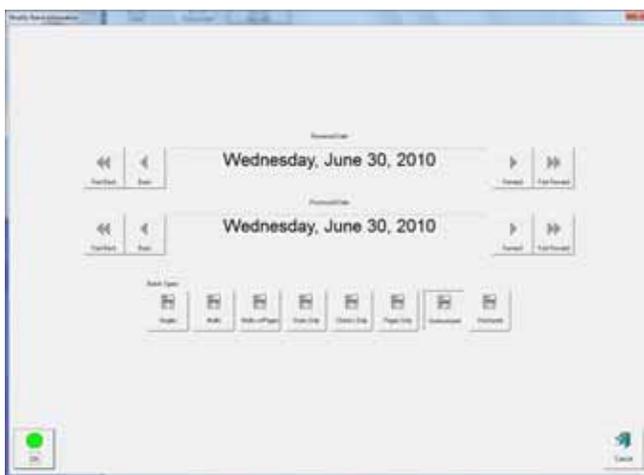
- 1 Select **MAIN** in the menu bar.

- 2 Select the icon for the job you want to run.



**Figure 4: Main screen**

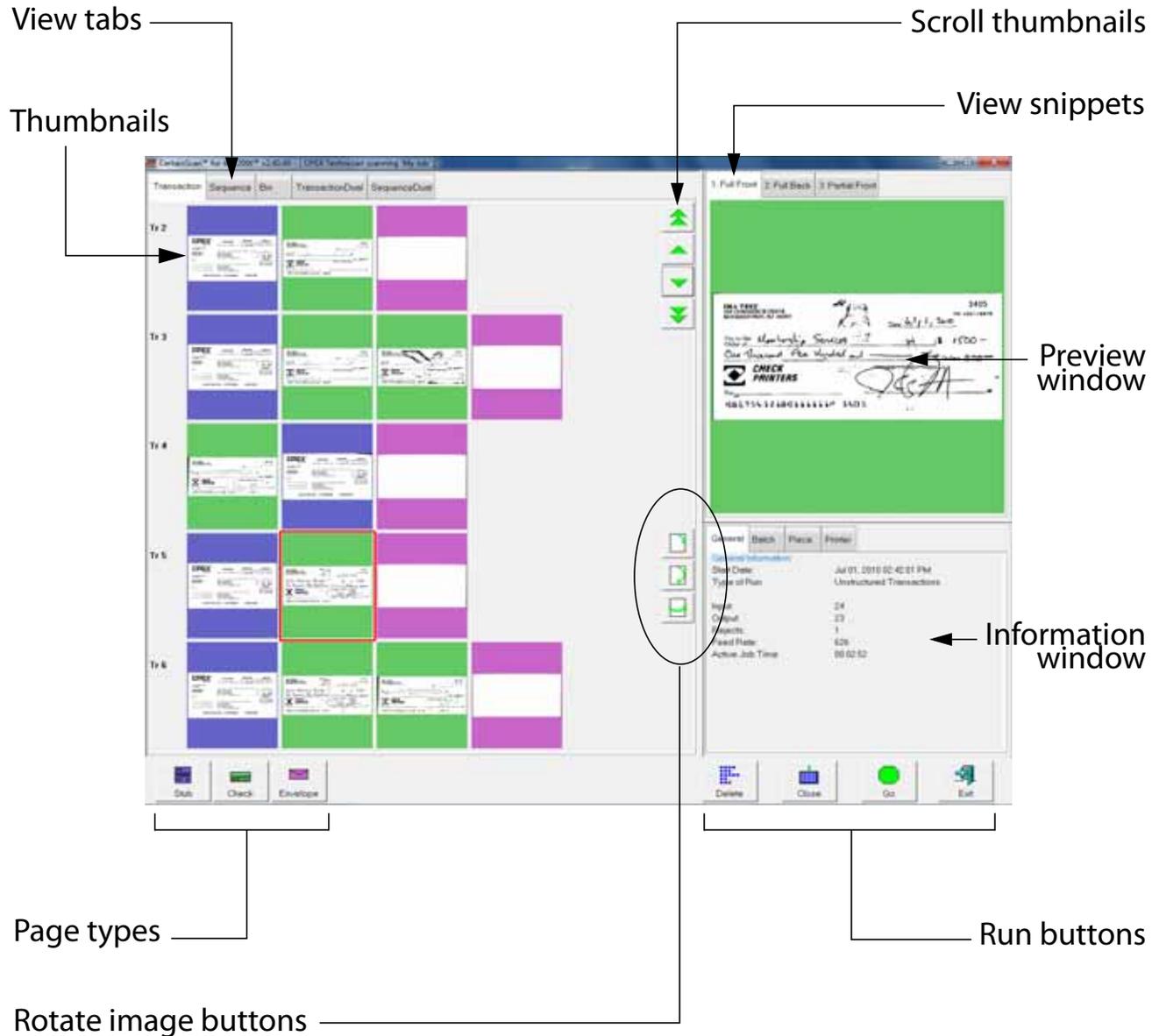
**Note:** Depending on how the job is set up, the Batch Information screen may appear. Use the Batch Information screen to select a “received” date, a “processed” date, and the type of batch you want to run.



**Figure 5: Batch information screen**

## Using the Run screen

The Run screen will appear after you select a job. This is the main screen you will use for scanning documents.



**Figure 6: Run screen**

## Run screen buttons

	<p>Press <b>Go</b> to start the scanner.</p>
	<p>The <b>PAGE TYPE</b> buttons allow the operator to designate the page type of the next document. The <b>PAGE TYPE</b> buttons will only be available if they have been activated for the current job.</p>
	<p><b>ROTATE</b> the image of the selected document. Use the three rotate buttons to position the image as desired. These buttons will only be available if activated for the current job.</p>
	<p><b>ADJUST</b> the settings in the Capture Parameters window to enhance the quality of the output images. See “Adjusting image quality” on page 40.</p>
	<p>Press a <b>RESCAN</b> button to replace a previously scanned image with a new one. See “Rescanning documents” on page 41 for more information.</p>
	<p><b>DELETE</b> a document from the batch. The <b>DELETE</b> buttons, if enable in the current job, are only available when the machine is stopped. See “Deleting documents from the batch” on page 41.</p>
	<p><b>VOID</b> the selected document or transaction. The <b>VOID</b> buttons are only available if activated for the current job. See “Voiding documents and transactions” on page 42 for more information.</p>
	<p>End the current <b>TRANSACTION</b>. This button will only be available if it has been activated for the current job.</p>
	<p>Start a <b>NEW BATCH</b>. This button will only be available if it has been activated for the current job.</p>
	<p>Press the <b>ACTION</b> button to access the <b>RESCAN</b>, <b>NEW BATCH</b>, and <b>VOID</b> buttons. The <b>ACTION</b> button only appears if two or more of these buttons (<b>RESCAN</b>, <b>NEW BATCH</b>, <b>VOID</b>) are enabled.</p>
	<p><b>STOP</b> the machine. This does not end the current batch or transaction.</p>
	<p><b>CLOSE</b> the current batch.</p>
	<p><b>EXIT</b> the current job and close the Run screen.</p>

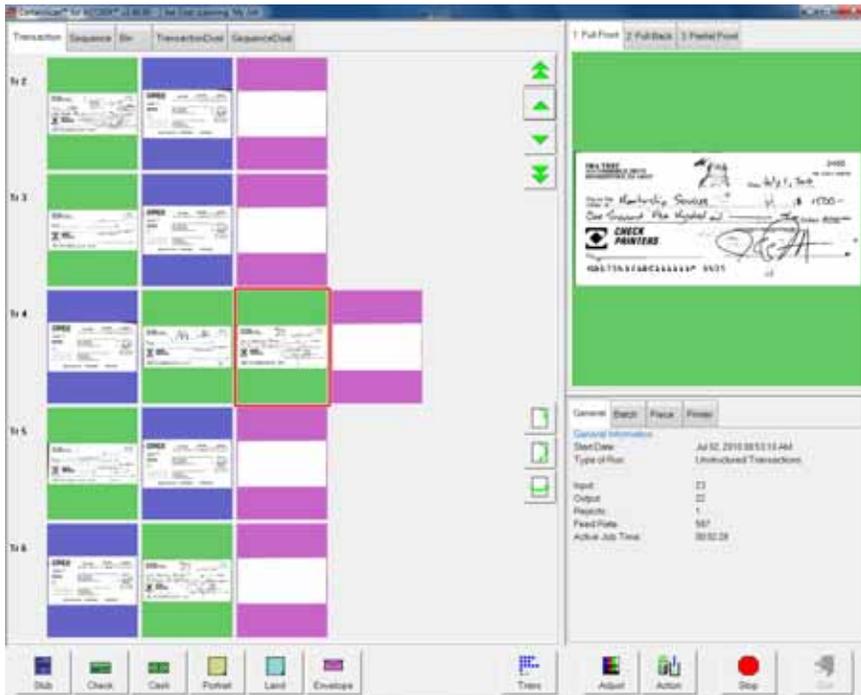
## Run screen views

The tabs near the top of the Run screen change how the thumbnails are arranged. You can view the thumbnails by transaction, by the order each piece was scanned (sequence) or by the bin the piece was sorted to. You can select one of the dual transaction or sequence views, which display two thumbnails for each piece.

**Note:** The dual transaction and dual sequence views will only work properly if the page types in your job are set up to include a “secondary” thumbnail.

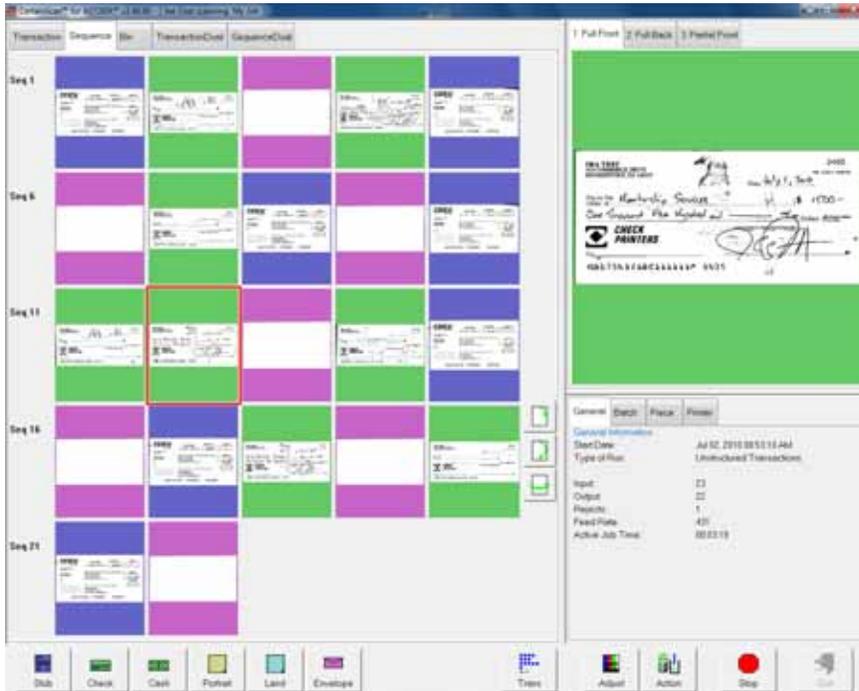
### Transaction view

The transaction view groups thumbnails by transaction. All of the pieces in a transaction are displayed in a single row from left to right in the order they were scanned. One thumbnail is displayed for each piece.



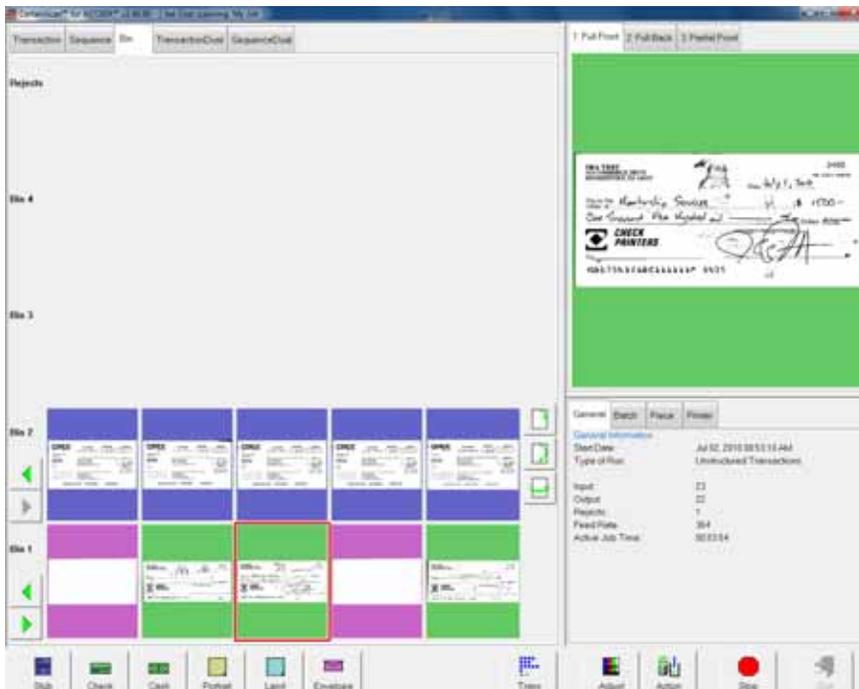
## Sequence view

The sequence view displays all of the pieces in the order they were scanned from left to right. A new row will start after the fifth piece.



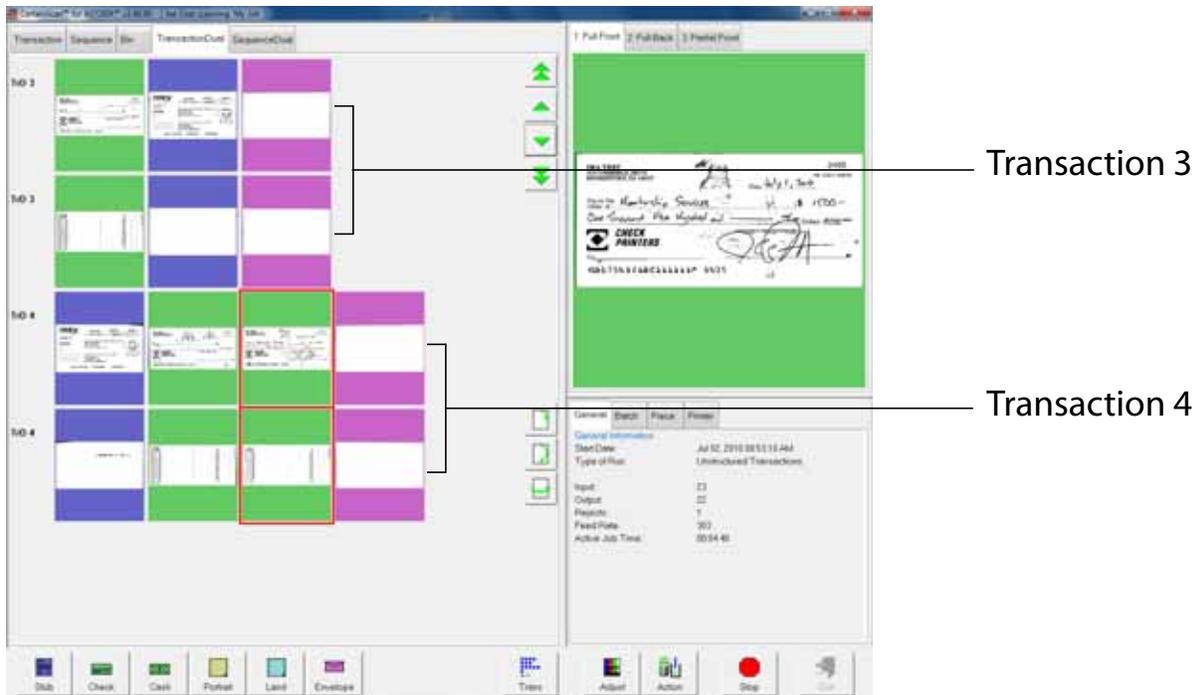
## Bin view

The bin view arranges the thumbnails by the bin they were sorted to.



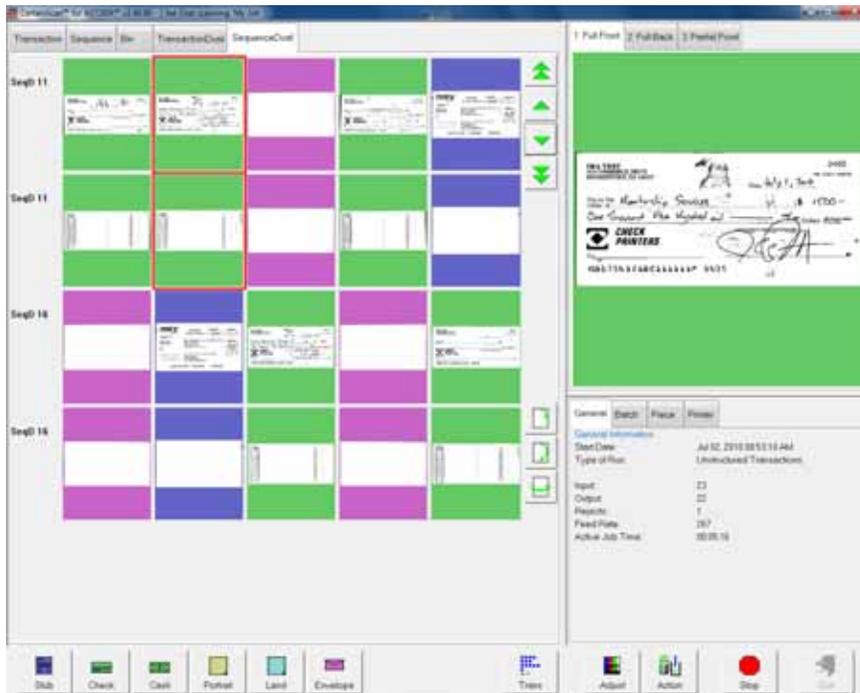
## Dual transaction view

The dual transaction view shows 2 thumbnails for each piece, grouped by transaction. The first row will show one snippet; the following row will show the other.



## Dual sequence view

The dual sequence view shows 2 thumbnails for each piece, grouped by the order they were scanned.



Each piece is displayed on two rows, one for each snippet

## Information window

The Information window is in the lower right corner of the Run screen. Select the tabs in the Information window to display the following:

The **GENERAL INFORMATION** tab displays job information such as the start time and operator name. The General Information will not change depending on the document.

The **PIECE INFORMATION** tab provides information about the selected thumbnail. Piece information may include the bin the piece was sorted to, size dimensions, and page type.

**BATCH INFORMATION** includes data such as the transaction number, pages in the batch, and the date and time the batch was created, received, and processed.

The **PRINTER** tab (not shown) provides information on the status of the ink jet audit trail printers. Check the printer tab if audit trails are not printing correctly.

**Note:** Touch or click in the Information window to bring up the detailed view.

## General Information

**Start Date** Displays the date before pressing **Go**, displays the time after  
**Type of Run** Default job setting or selected by operator at the start of the batch  
**Input** Total pages scanned during the current run  
**Output** Total pages to be saved in the batch  
**Rejects** Pieces that have been rejected during the current run  
**Feed Rate** Pages/hour  
**Active Job Time** Total time for the current run

General	Batch	Piece
<b>General Information</b>		
Start Date:	Jul 20, 2009 09:48:59 AM	
Type of Run:	Unstructured Transactions	
Input:	24	
Output:	23	
Rejects:	1	
Feed Rate:	336	
Active Job Time:	00:05:56	

## Piece Information

**Page Name/Page Type** Selected in Job Setup  
**Page Sub-Type** Page type sub-category (if available for current page type)  
**Average Thickness Value** Thickness of the piece determined by the system  
**Damage Detect Results** Indicator for whether damage was found on piece  
**Character Read** Combined results of magnetic and optical MICR reads  
**Barcode Results** Up to 3 per page  
**Processing Time Used** Time used for each piece

General	Batch	Piece
<b>Piece Information</b>		
Page Name / Page Type:	OPEX:Stub / STUB	
Page Sub-Type:	Not Available	
Average Thickness Value:	0.07 (13 Counts)	
Damage Detect Result:	Not Available	
Character Read:	5054577069968 1970030000 348001500	
Barcode Results:	00057423305	
Processing Time Used:	10% (129/1197)	

## Batch Information

**Batch File Format** How the system stores batch information  
**Batch Number** System assigned or from a batch ticket  
**Batch Sequence Number** System assigns to each page scanned  
**Scan Sequence Number** Each page scanned is tracked even if it is later de  
**Pages in Batch** System assigned  
**Batch Creation Date** Date (and time) the batch was created  
**Batch Received Date** System assigned or selected by operator at batch start  
**Batch Processing Date** System assigned or selected by operator at batch sta

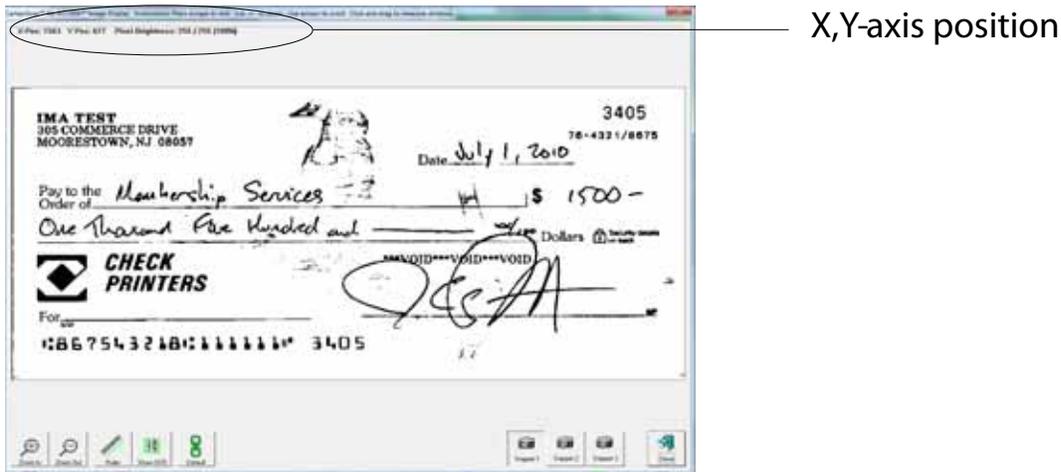
General	Batch	Piece
<b>Batch Information</b>		
Batch File Format:	ODI (ASCII) v01.30	
Batch Number:	000145	
Batch Sequence Number:	16	
Scan Sequence Number:	16	
Pages in Batch:	23	
Batch Creation Date:	7/20/2009 9:49:12 AM	
Batch Received Date:	8/3/2009	
Batch Processed Date:	8/3/2009	

## Preview/Zoom windows

The Preview window provides a large image of a scanned document. View an image in the Preview window by selecting its thumbnail.

Touch the image in the Preview window to open the Zoom screen, where you can enlarge or reduce the image and view any associated snippets.

**Note:** Touch the screen at another center point to re-center the zoom. You can re-center the zoom before or after enlarging or reducing the image.



**Figure 7: Zoom screen**

	<p>The <b>ZOOM IN</b> and <b>ZOOM OUT</b> buttons enlarge and reduce the image in the Zoom screen. Re-center the zoom by touching the new center on the monitor or use the mouse. You can also use the + and - keys on the keyboard to zoom in and out.</p>
	<p>Use the <b>RULER</b> function to measure distance from one place to another on the image. Use the mouse to click the Ruler button, then click and hold the left mouse button on one location while you drag the cursor to the other location. Notice that as you move the cursor from place to place, its exact position is indicated in the field as noted in Figure 7.</p>
	<p>Display the designated scan area for the OCR lines.</p>
	<p>Make this image the <b>DEFAULT</b> for this page type.</p>
	<p>View any <b>SNIPPETS</b> associated with the image. The snippets the system captures are set up in the Page Type Parameters.</p>
	<p><b>CLOSE</b> the Zoom window.</p>

Press the **SNIPPET #** buttons to view the snippets associated with the selected page type. For example, if you are scanning checks, your system may be set up to capture images of specific parts of the check, such as the back of the check or the CAR region.

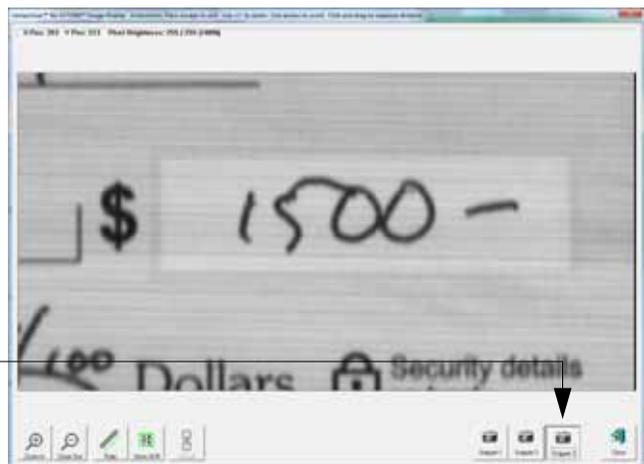
Press Snippet 1 to view the entire front image of the check



Press Snippet 2 to view the entire back image of the check



Press Snippet 3 to view the CAR region



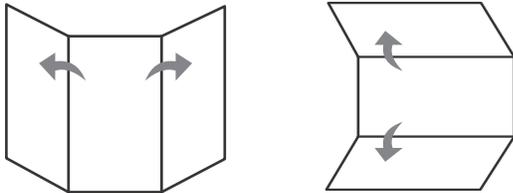
**Figure 8: Viewing snippets**

## Scanning documents

After you have selected a job, you are ready to scan documents. Before you do, here are a few things to remember:

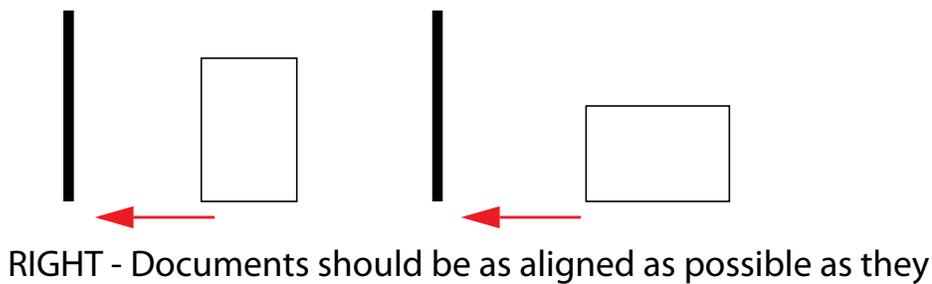
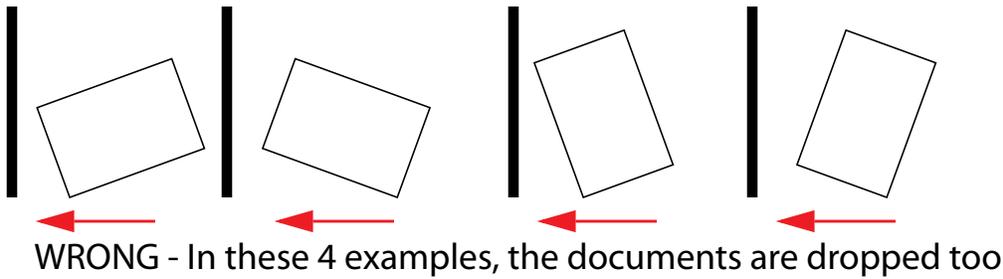
### Removing documents from an envelope

Documents that are tri-folded tend to have the top and bottom sections lifted up. Prior to dropping any tri-folded documents, flatten the ends, allowing for a smoother feed.



As documents are dropped onto the conveyor, it's important to drop them in such a way as to have the documents fully justify to the side rail prior to entering the feeder. The conveyor rollers are angled to assist in justifying the documents to the side rail as they are dropped. Drop the documents far enough back so that they will have time to straighten. If documents are not fully justified as they enter the feeder section, skew jams may occur. It should also be noted that enough space gap should be allotted between documents. At least  $\frac{1}{2}$  inch between documents will provide for proper image capture.

**Examples:** When dropping documents, give enough time for items to justify. The thick line indicates feeder entrance. The arrow indicates the paper path.



## Skew

Skew is a term used to identify when a document is misaligned when scanned. Typically, a skewed document prevents the scanned image from being read properly.

Document skew is determined by the angle in which an item enters the scanner. The angle is calculated by a set of LED transmit and receiver parts that detect when one sensor is uncovered for a while. If the angle is greater than 2 degrees, then the system will jam for “too skewed.” If it jams for 5 degrees or more, then the MICR section should be checked and documents remove.

### To scan documents into the system:

- 1 Press **Go** on the Run screen.

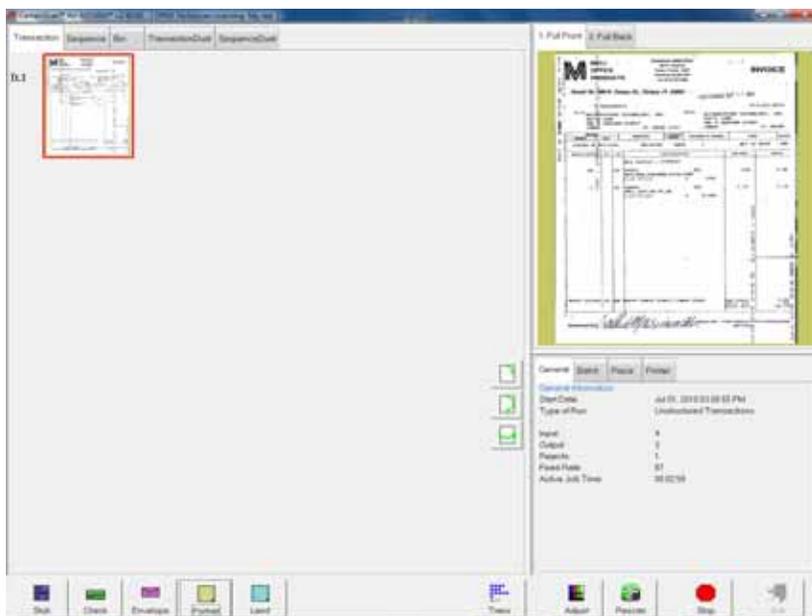
- 2 Place the first document onto the conveyor as shown in Figure 9.

Drop documents here



**Figure 9: Ideal drop area**

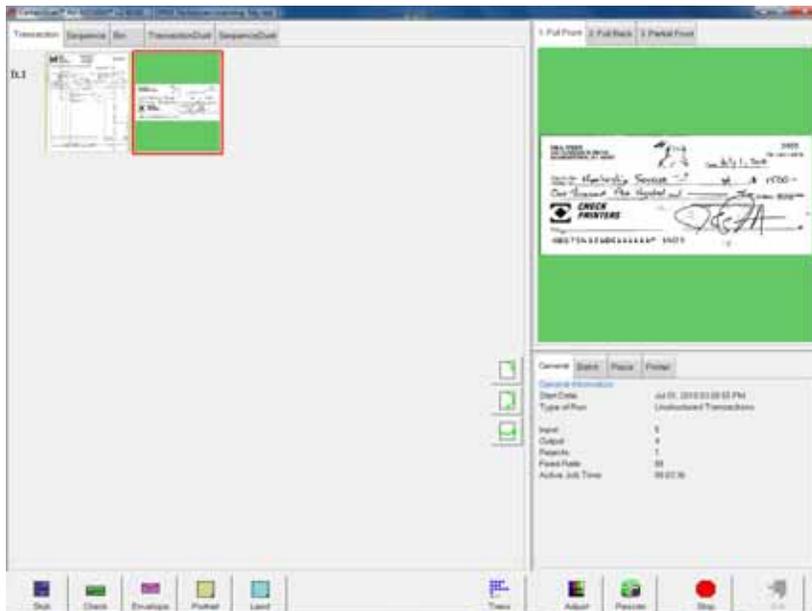
The AS7200 will scan the document and place a thumbnail of the image in the transaction window. A large image of the document will appear in the Preview window. In this example, the system recognizes 8.5 × 11 sheets of paper as belonging to the “Portrait” page type. This is the default for any page of this size which contains no other significant identifier (such as a barcode or MICR line).



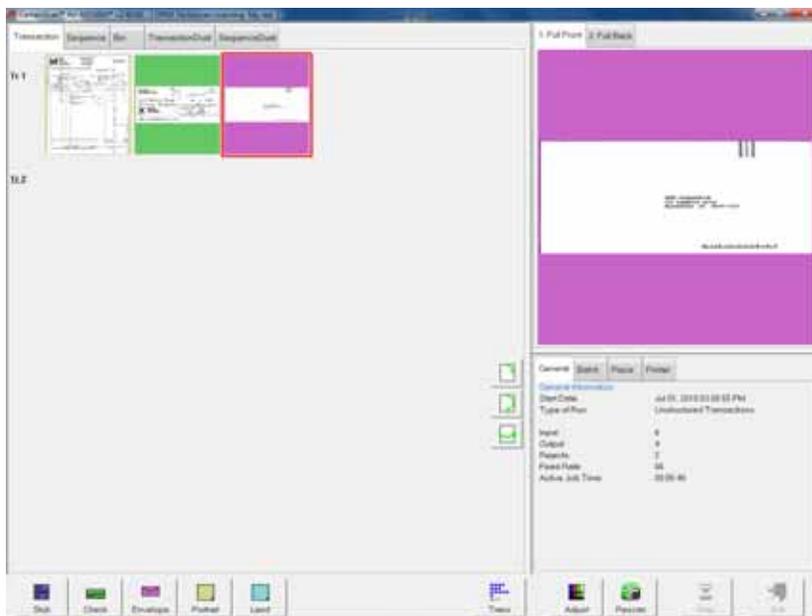
**Note:** The scanner will display the original, raw color capture in the Preview window first, then display the snippet as it is intended to be captured. Usually this transition will happen so quickly you will not notice,

however when scanning certain larger and/or color-intensive documents you may notice this changing of the snippets.

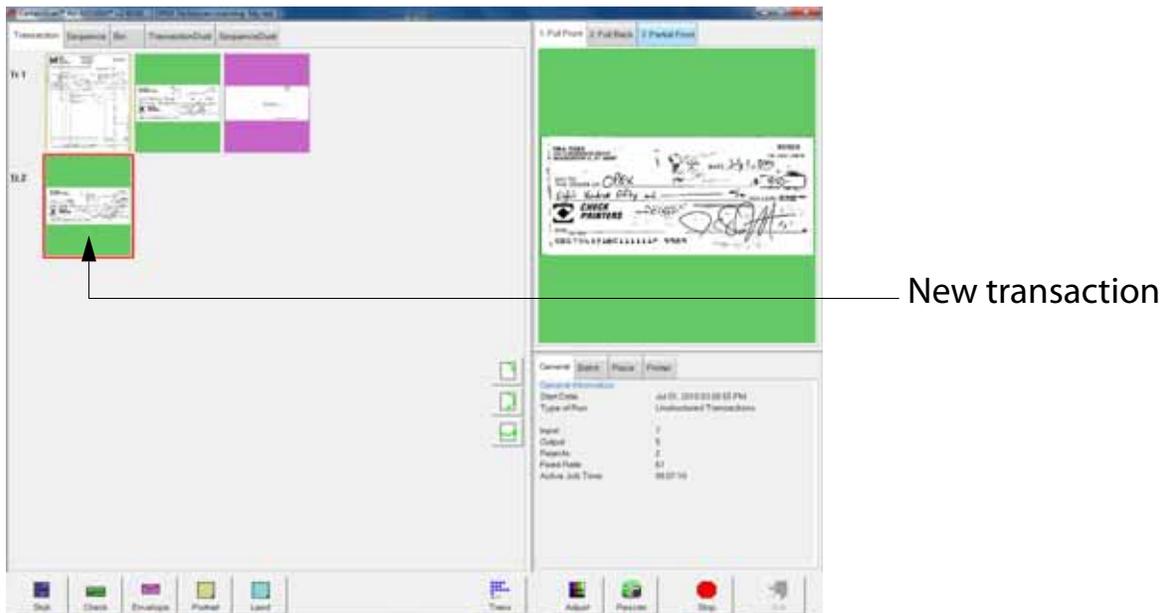
- 3 Place the next document you want to scan onto the conveyor. In this example, the document is a check. The system recognizes the check by the presence of a MICR line at the bottom.



- 4 Place an envelope onto the conveyor. The system will recognize the document as an envelope. In this example, an envelope is set up as the transaction boundary and ends the current transaction.



The next document scanned (in this example, another check) will start a new transaction.



- 5 Continue to place your documents onto the conveyor. The AS7200 will scan and sort the documents depending on the current job's settings.

**Note:** Unfold any folded pages so they lay flat on the conveyor. Folded pages will not be scanned correctly and may jam the system.

**Note:** Feed documents with the correct side up. When searching for/reading MICR lines, OCR lines, and mark boxes, the AS7200 will assume the documents are being fed face up, with the bottom edge towards you.

As the AS7200 processes documents, check to make sure:

- Documents are being scanned properly.
- All critical information (MICR line, OCR line, etc.) is being collected properly.
- Documents are being sorted to the correct bin.

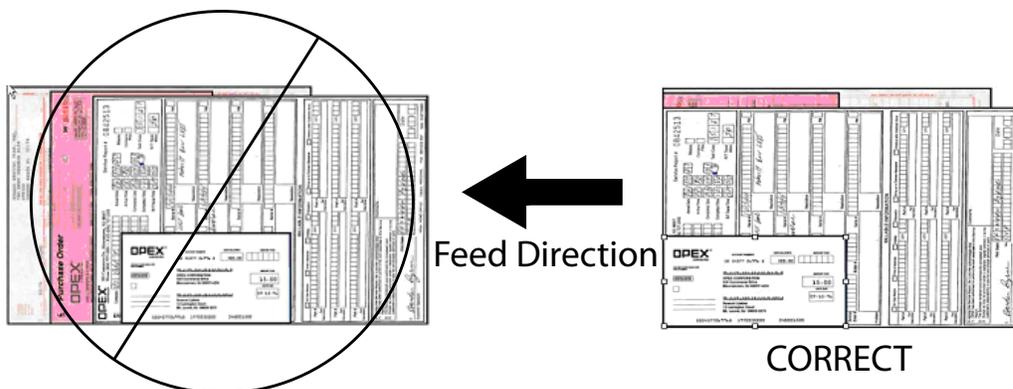
### Scanning tips

Make use of these techniques for properly handling paper and feeding documents:

- Make sure documents are unfolded and place them on the conveyor directly in front of the point of extraction. This will give the machine a chance to

justify each page dropped against the common edge and will assist in deskewing the document before it reaches the feeder. For maximum effect, the paper should be unfolded so that it is flat and makes contact with the conveyor rollers and feed rings.

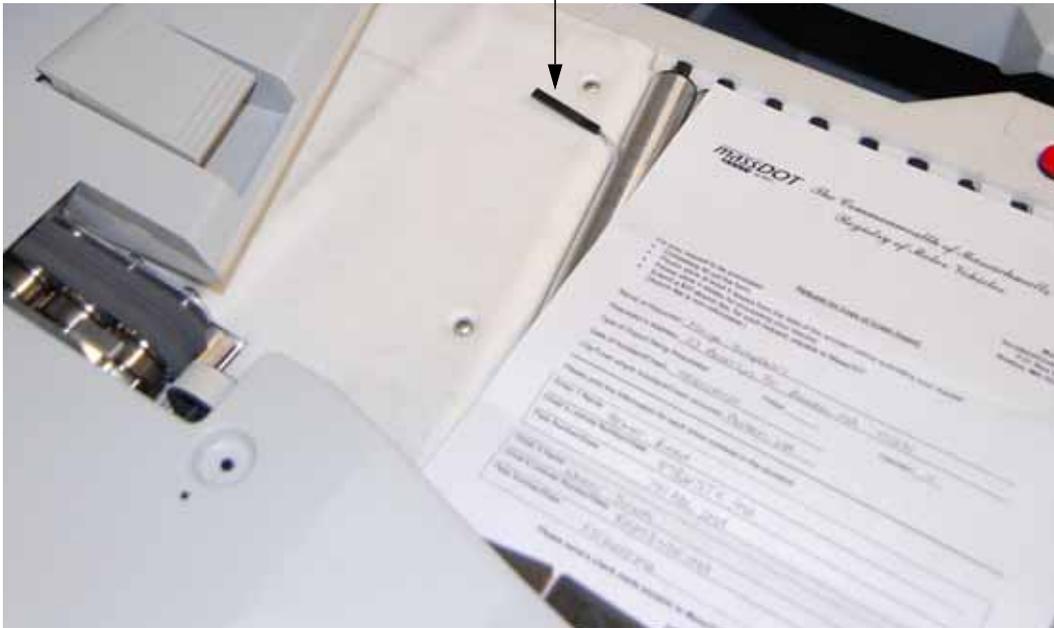
- 8-½ x 11" sheets can be scanned in portrait or landscape. The scanner is outfitted with 12" image sensors and can accommodate larger pieces of paper as well.
- Packets of paper (2-20+ sheets of paper) can be placed on the conveyor. The conveyor rollers will carry the packet over to the packet feeder where the top piece will be singulated from the top of the stack and fed into the scanner. The feeder will continue to pull the top page from the stack until the last page is fed.
- Since the feeder pulls from the top of the stack, the lead sheet in the stack must be the first to reach the feeder. If the bottom piece reaches the feeder first, a paper misfeed is likely to occur. There are techniques for learning to drop packets of paper consistently and effectively. The documents do not have to be perfectly aligned as long as the lead sheet is the top sheet. Review these techniques with your AS7200 Administrator or your OPEX Technician or Sales Engineer.



- The Drag Finger is used to help position pieces of paper larger than 8" wide. This helps prevent pages from skewing when positioned in front of the feeder. This flexible piece of rubber will improve performance when feeding

packets of paper. The finger can also be depressed to move it out of the paper path, if necessary.

- Drag finger



- Checks and remits should be dropped in the same orientation as if you were reading them. Other landscape pages can also be automatically detected if their page width or height is unique.
- To scan thicker documents, such as envelopes that would not match the profile of a regular envelope, first press the override feed control button. This will disable the scanner's ultrasonic multifeed detector and allow the thick piece into the system.



## Assigning a page type

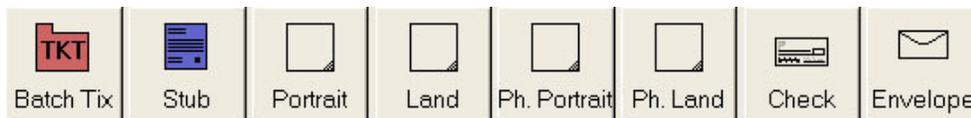
You can manually assign a page type to a document by pressing the appropriate page type button. These buttons are only available if they have been activated in the current job. Press a page type button to assign the page type to the next document you scan.



**Figure 10: Sample page type buttons (unstructured job)**

**Note:** Depending on the job's settings, you may have to assign a page type to some (or all) documents you scan. In this case, the page type button will stay depressed until you click another button, and the system will process each document as this page type.

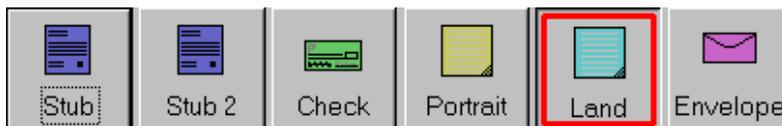
In a structured job, the page type buttons will also indicate which page types the system expects to see next. For example, if the job expects to see either a batch ticket or a stub to start a transaction, their corresponding page type buttons will appear in color (as shown in Figure 11).



**Figure 11: Sample page type buttons (structured job)**

## Page type locking

Depending on the job setup, the operator may also have the ability to apply a page type override to several documents. With page type locking enabled, the operator can press the page type button twice and “lock” the page type button down. Once the button is “locked,” all the subsequent pieces will be classified as this page type until the end of the transaction or when the lock is released.



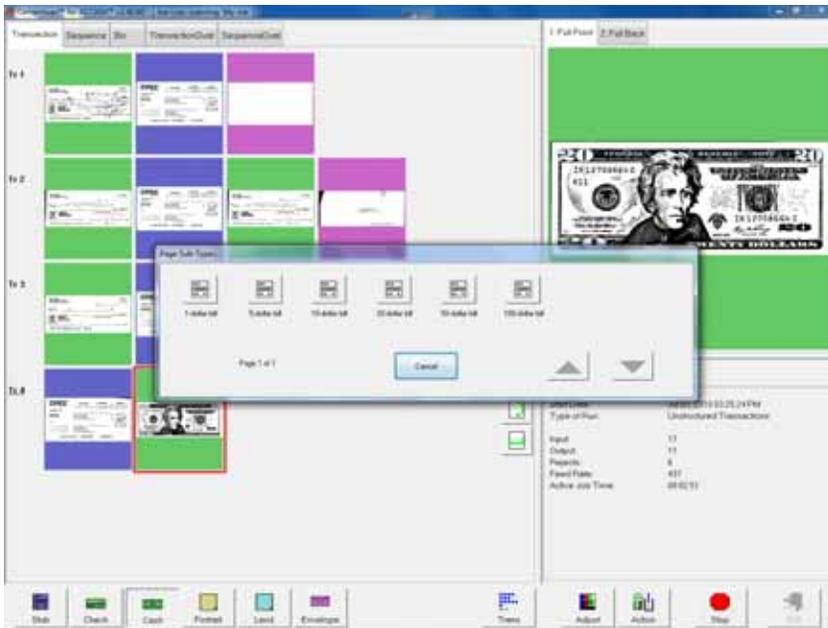
A red box around a page type button indicates that the lock is in place.

**Figure 12: “Locked” page type button**

## Assigning page sub-types

If one or more of the page types in the current job also contain sub-types, you must assign the document a sub-type *before* scanning it into the system. To assign a page sub-type:

- 1 While running a job, press the appropriate page type button. For example, if you are scanning cash into the system, press the **CASH** page type button.
- 2 Select from the available page sub-types.



**Figure 13: Assigning a page sub-type**

- 3 Scan the document.

**Note:** If you do not assign a page sub-type before you scan an eligible document, the system will assign the default page sub-type to the document. For example, if you are scanning cash and you have the 1-dollar bill set up as the default, all the cash you scan will be classified as 1-dollar bills unless you assign another sub-type as described.

## Adjusting image quality

Fine-tune the quality of the document images by pressing **ADJUST** on the Run screen. The Adjust Capture Parameters screen will appear, where you can modify the brightness and dropout colors for the images.



Table 1 describes the Adjust Capture Parameters screen buttons.

**Table 1: Adjust Capture Parameters screen buttons**

<b>Brightness</b>	Adjust the brightness of the document images from <b>LIGHT</b> to <b>DARK</b> . Press a button to adjust the brightness. The default is <b>NORMAL</b> .
<b>Dropout</b>	Remove a dropout color ( <b>RED</b> , <b>GREEN</b> , <b>BLUE</b> , or <b>WHITE</b> ) from the document image. The color you select will appear as white. The default is <b>WHITE</b> . <b>Note:</b> To use this feature, the documents must be printed with a specific dropout color.
<b>Adjust All/ Adjust One</b>	Select <b>ADJUST ALL</b> to apply these changes to all the documents in the current job, or <b>ADJUST ONE</b> to make the adjustments only to the next document scanned.
<b>Defaults</b>	Return to the default capture parameters.

## Rescanning documents

If you are not pleased with a particular image, you can rescan the document while the job is running. To rescan a document:

- 1 Select the document's thumbnail.
- 2 Take the document out of the sort bin.
- 3 Press **RESCAN** to replace the document in the batch.

**Note:** If an audit trail was printed on the document the first time it was scanned, press **RESCAN NP** (no printing) to replace the document in the batch. This way, no additional audit trails will be printed on the document.

- 4 Drop the document onto the drop feeder.
- 5 Verify that the image is acceptable.

**Note:** The **RESCAN** buttons will only be available if activated for the current job.

## Deleting documents from the batch

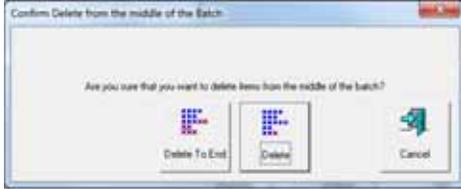
When the machine is stopped, you can delete documents from the batch. Press the **DELETE** button to delete a document image.

**Note:** The **DELETE** button will only be present if activated for the current job.

The action of the **DELETE** button depends on the setting of the **ALLOW DELETE** job parameter:

- If the parameter is set to **DELETE LAST ITEM**, you will only be able to delete the most recently scanned document image from the batch. Press **DELETE** to delete the last image.
- If the **ALLOW DELETE** parameter is set to **DELETE TO END OF BATCH**, you can also choose a document thumbnail and delete all the documents scanned after the selected document. When the **DELETE** button is pressed, the Confirm

Delete window (Figure 14) will appear.



**Figure 14: Confirm delete**

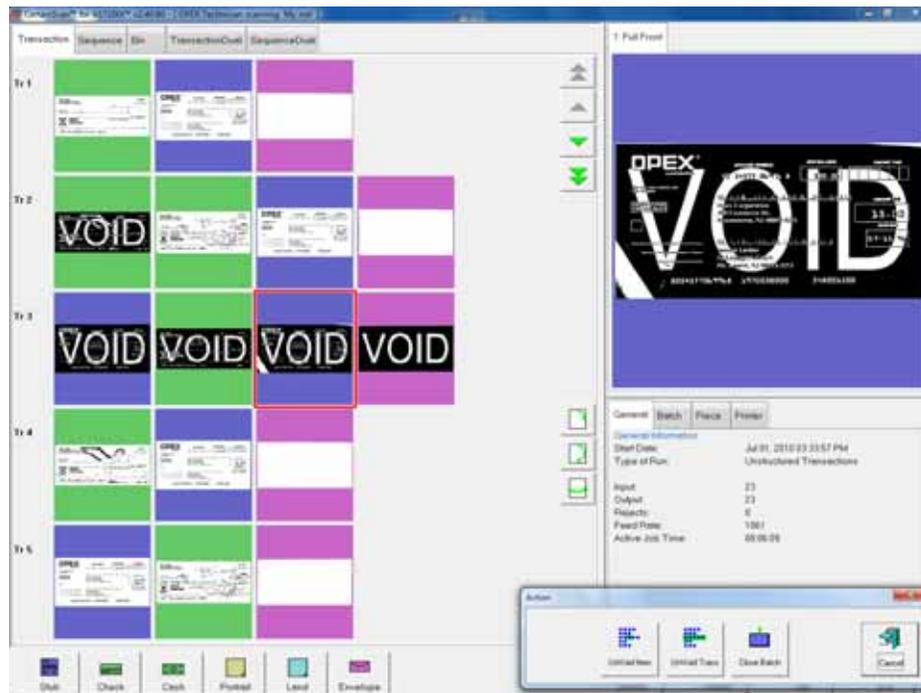
**Note:** It is not possible to delete a single document image from the middle of the batch. If you need to delete an image from the middle of the batch, you must also delete all the images to the end of the batch as well.

## **Voiding documents and transactions**

The void functions allow you to mark a scanned document or transaction as invalid by placing a VOID stamp over the document's image(s). Use the void functions, for example, as an alternative to the delete functions if you would like to keep a record of the fact that a document was scanned into the system and later deemed invalid.

**Note:** The **Void** buttons will only be present if activated for the current job.

To mark a document as void, highlight the document's thumbnail and press **VOID ITEM** to void only the selected document, or **VOID TRANSACTION** to void the selected document and all other documents that are part of the transaction. The VOID stamp will appear over the image and the document will be designated as void in the batch file. Press **UNVOID ITEM** to remove the VOID stamp.



**Figure 15: Voiding documents**

## Starting a new batch

There are three ways to start a new batch:

- Press the **NEW BATCH** button while the job is running to begin a new batch with the next scanned document.
- Press the **CLOSE BATCH** button, then scan the new batch ticket or the first document of the new batch.
- Scan a batch ticket. If the New Batch Mode parameter is set to Auto, scanning a batch ticket will start a new batch.

**Note:** The **NEW BATCH** button will only be available if activated for the current job.

## Ending the job

When you have finished scanning documents, press **STOP** to put the system in standby mode. From standby mode, you can restart the job, **DELETE** the last scanned document, view thumbnails, or **EXIT** the job and return to the Scan screen.

**Note:** You can also press the **CLOSE BATCH** button to close the current batch and exit the job when prompted.

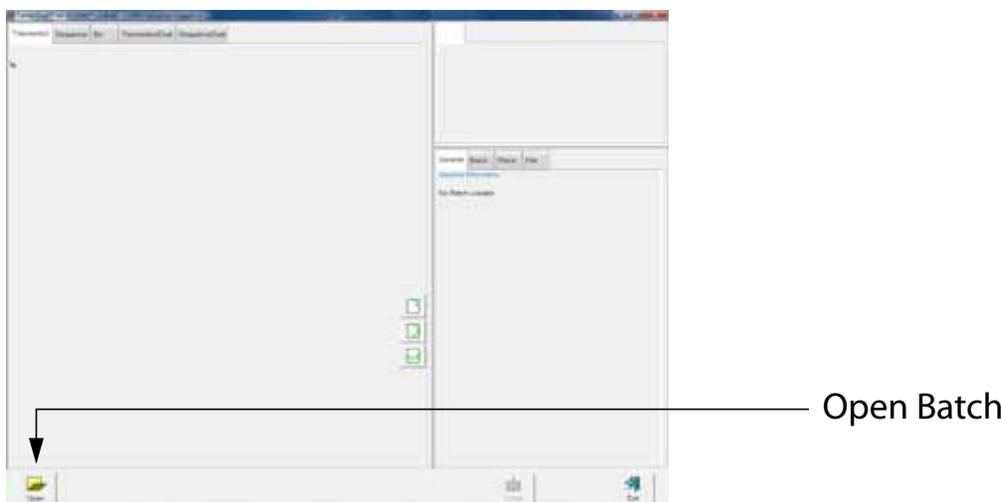
## Viewing/editing the batch

Use the Batch Editor to:

- Display previous document images (by batch)
- Delete images from prior batches
- Void/un-void documents from prior batches
- Assign page sub-types

### To access the Batch Editor:

- 1 Select **MAIN** in the menu bar and **BATCH EDITOR** in the options bar.

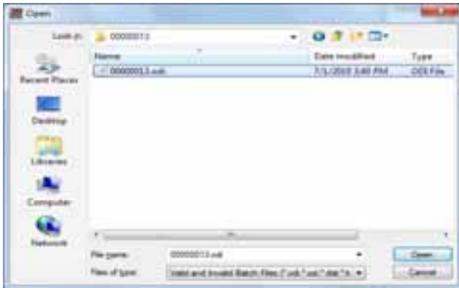


**Figure 16: Batch Editor**

- 2 Click the **OPEN** button.
- 3 Navigate to the directory on your network where your batches are saved (see your AS7200 Administrator). The batches are saved in folders by their

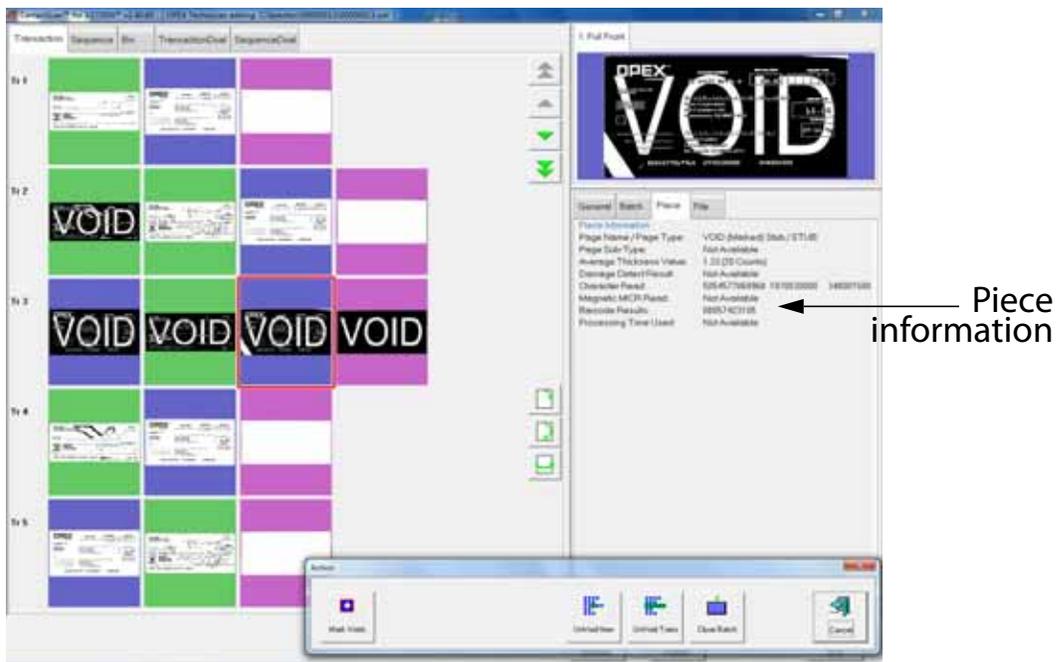
batch number. Open the folder for the batch you want to view and double-click on the .odi, .oxi, or .dat file to view the batch.

**Note:** If you do not know the batch number you are looking for, try to use the date the batch's folder was last modified for reference.



**Figure 17: Opening the batch**

- 4 View, delete, and void the document thumbnails in the same way as in the Run screen (see “Using the Run screen” on page 22).



**Figure 18: Viewing the batch**

When voiding documents and transactions in the Batch Editor, check the **MARK VOIDS** button (shown in Figure 18) to mark the images in the resulting batch file as void.

**Note:** View the piece information data on the Run screen to determine if the image was marked (as VOID in the batch file) or unmarked. From the batch editor you can decide whether or not to mark the voided images in the resulting batch file by using the **MARK VOIDS** button.

### **Using Batch Editor to fix incomplete batches**

If there is a problem with the machine and/or CertainScan does not close properly during a run, a batch may not be closed and saved properly. If this is the case, the operator will be notified that a temporary batch file exists when restarting CertainScan, and that only an operator with a ManagerLevel account or an OPEX technician can fix the problem.

Consult your AS7200 Administrator if you receive this error message.

### **IdAssist**

The IdAssist Document Tracking System provides an additional method for identifying and/or taking action on documents. Trigger the IdAssist function associated with the job by dropping documents in the right front corner of the conveyor, reducing the wait time associated with using the touchscreen monitor.

Consult your AS7200 Administrator for more information on how IdAssist works with your jobs.

The following functions are available as part of IdAssist:

**Color** The color select trigger identifies documents that are to be scanned in color without having to touch the screen. This is very useful in a color select job, when you need to tell the system which documents to scan in color and which documents to scan normally.

**Dropout** Similar to color select, this allows for you to trigger a specified color dropout for a document (red, green or blue).

**Transaction boundary** Use the transaction boundary trigger instead of the **TRANSACTION** button on the run screen. The transaction boundary trigger will start a new transaction with the document that triggers the sensor.

**Automatic rotation of document** Tell the system to rotate the resulting image automatically.

**Page type determination requirement** Use the IdAssist function to identify a page type. This function is very useful if you have two page types that are identical in every way or if there are multiple sets of identical page types. In these cases, the page types can be set up so that the only way one of the page types will be identified will be if you trigger the IdAssist function. For example, in a job with two identical documents, a check and a money order page type, the check and money order can have the same exact attributes with the only distinction being that money orders must have been triggered by IdAssist. That way, the system will recognize the checks you scan normally as belonging to the check page type.

**Page sub-type selection** The page sub-type selection function is useful in jobs that have a page type with many page sub-types. Use the trigger to bring up the page sub-type selection screen so you can choose from among the available sub-types.

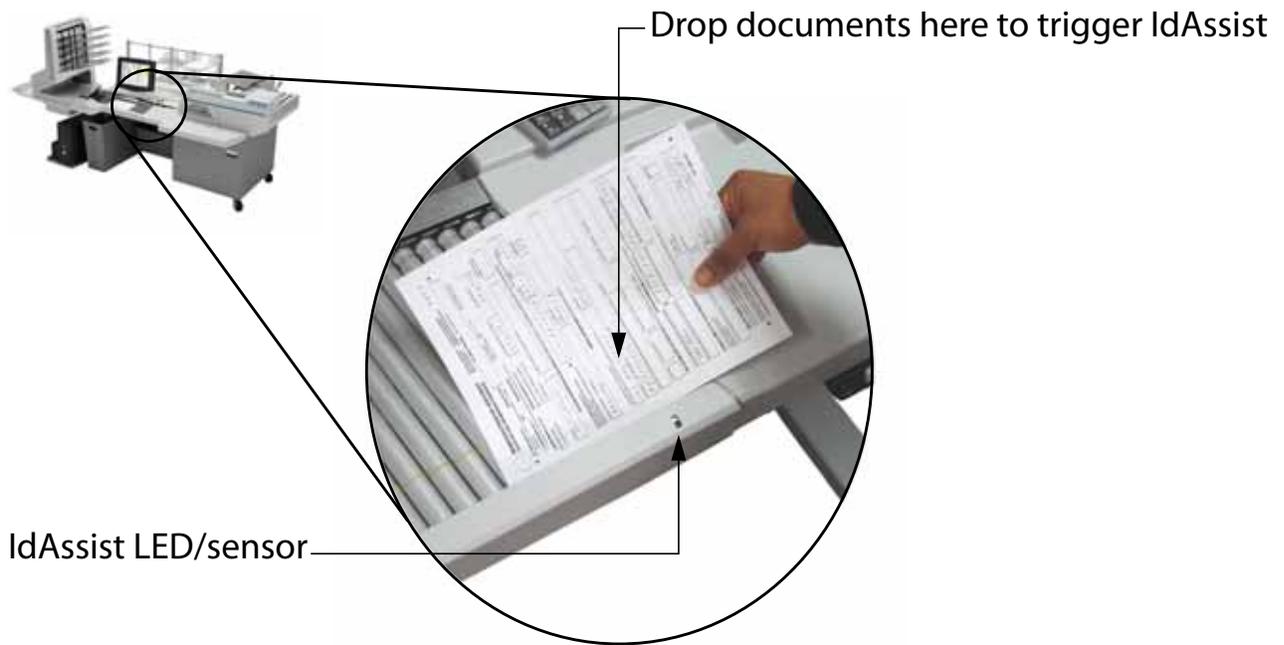
**Override feed control** The override feed control function allows you to disable multifeed detection for thicker pieces that may not pass through normally.

## Operation

To trigger IdAssist, simply drop the document in front of the sensor as shown in Figure 19. The indicator light will blink, notifying you that IdAssist was activated. The document will be scanned and sorted according to job's parameters.

**Note:** When using the Page Sub-Type Select IdAssist function, you must select the sub-type before the document enters the scanner. If a page sub-type is not selected, the document will be assigned the default page

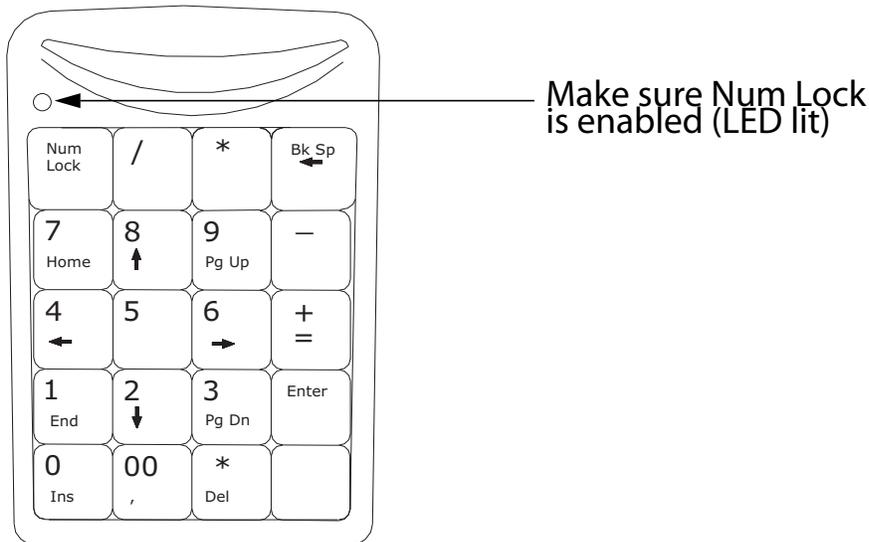
sub-type. If no default page sub-type has been assigned, the document will be rejected.



**Figure 19: Triggering IdAssist**

## KeyAssist

KeyAssist, a purchasable option, allows you to use the keys on an external keypad to perform specific functions in the Run screen, such as selecting a page type, starting and stopping jobs, and rotating images. This feature alleviates the repetitive motion of reaching to touch the monitor.



**Figure 20: External keypad**

The KeyAssist feature will not work with structured jobs, as they require page types in a specific order. Also, you cannot use KeyAssist with Reference ID in the same job.

Use the keypad to activate many of the more common Run screen functions:

Key	Function
1-8	selects page types 1-8 (and page sub-types, when the sub-type select screen is displayed)
0	selects a new transaction
+	starts/stops the track
/	rotates the piece 90 degrees clockwise
*	rotates the piece 180 degrees
-	flips the front and back images (if the page type is set up to scan front and back images)

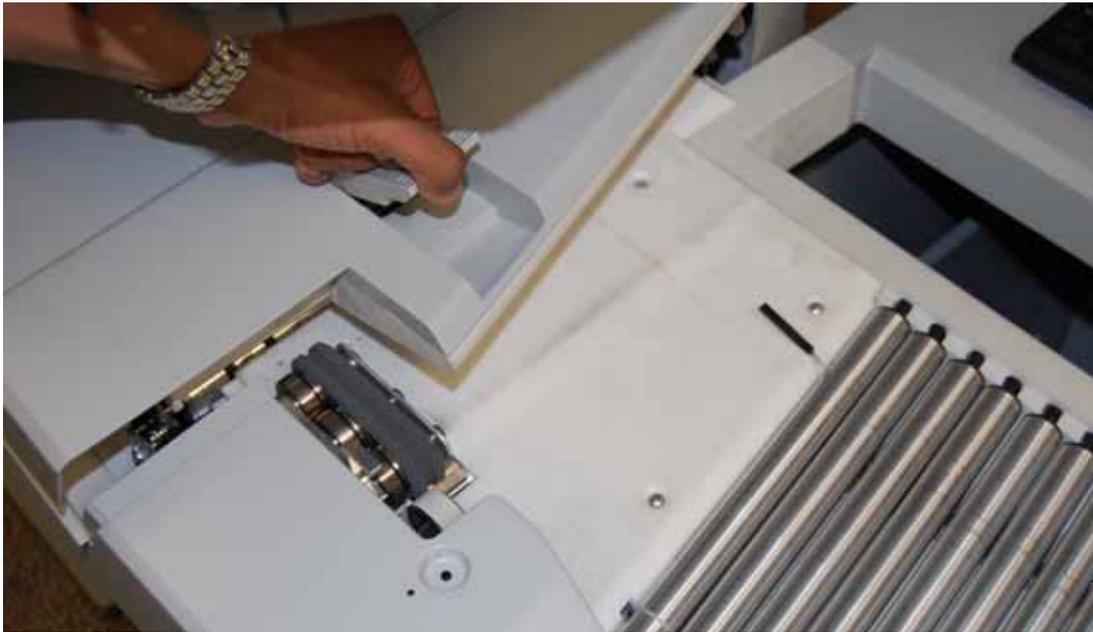
## Clearing Paper Jams

During normal operation of the machine, you may encounter an error message halting the scanner. The prompt on the machine will offer you two options: to **CONTINUE** or to **CANCEL**. The error message is informing you of a paper jam or a sensor error. In this case, check the machine for paper jams as described here. After you clear the jam or ensure that the track is clear, press the **CONTINUE** button.

**Note:** The scanner may also reject documents that are misfed, skewed, or because the document was not properly identified. In these cases, the scanner will stop after all the paper in the track has been sent to the reject bin. If the paper doesn't clear into the reject bin after selecting **CONTINUE**, then you need to open the cover(s) and remove the paper(s).

### Scanner area

To open the scanner cover, lift the latch up. The cover will swing to the open position. Remove any paper or debris caught in the scanner area.



To close the scanner cover, push the cover back down and press down on the latch to secure the lid.

**Note:** Close the scanner cover gently. Slamming the cover down can damage the image sensors.

## Transport area

To access the transport area, turn the latch counter-clockwise and pull the transport door away from the scanner. Clear any paper or debris that is caught in the transport area.



**Figure 21: Opening the stacker transport cover**

To close the stacker transport cover, hold onto the latch and gently pull the cover closed. When the cover reaches the closed position, rotate the latch clockwise until you hear the lock snap into place.

## Clearing the bins

When removing the paper from the output bins, pull the piece from the side of the bins. The trays have been designed to allow access to the smallest of pages in the bins.



**Figure 22: Clearing the output bins**

# Operational Maintenance

# 3

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## Calibrating the Touchscreen Monitor

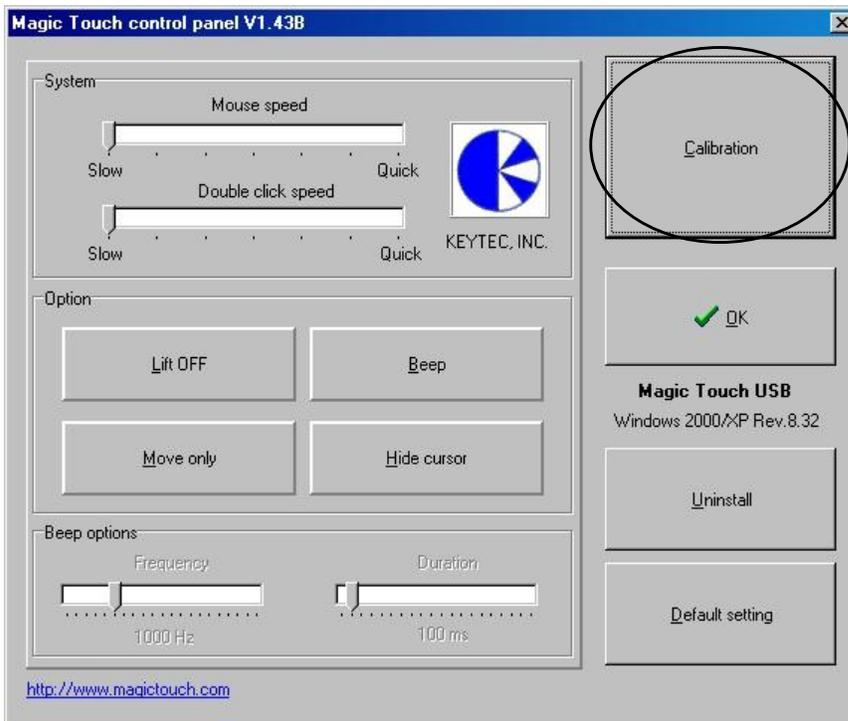
The monitor is calibrated for its touch sensitivity before it leaves OPEX. However, you may need to recalibrate, especially if it is in use for an extended period of time.

### To calibrate the monitor:

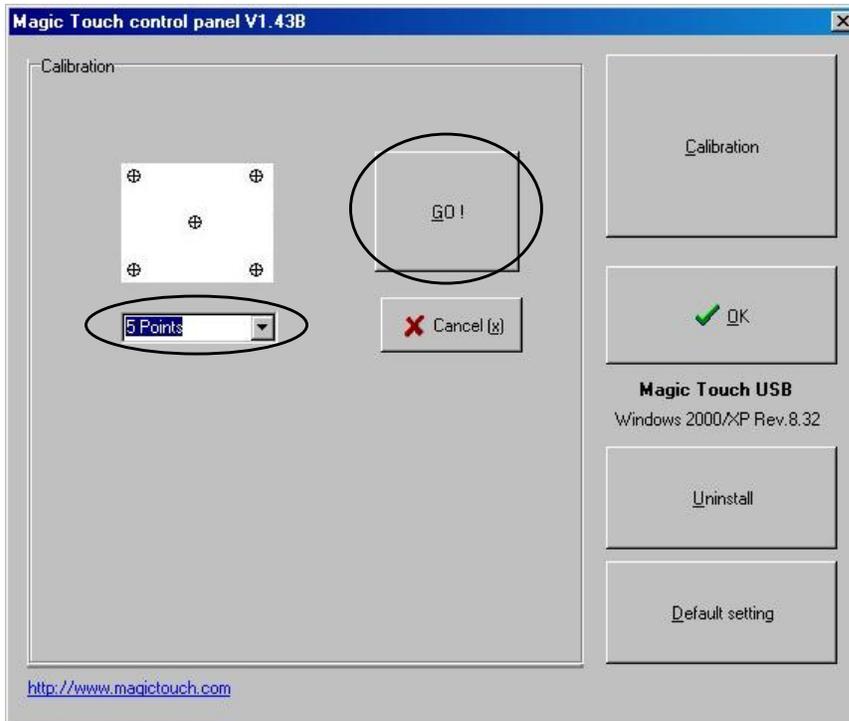
- 1 From the Windows desktop, double-click on the touch screen icon to open the monitor control panel.



- 2 Select **CALIBRATION**.



- 3 In the calibration screen, make sure **5 POINTS** is selected, then click **GO!**



- 4 Follow the calibration procedure as instructed, using the stylus provided. To ensure proper calibration, make sure to hold the stylus on each center point for at least one full second. *Please do not use fingers, pens, pencils, etc.*



- 5 When calibration is complete, log in to CertainScan and test the touchscreen controls to ensure they are working properly.

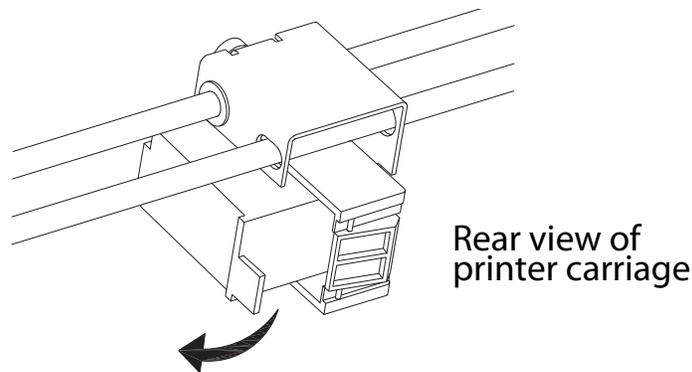
## Removing/Replacing the Printer Cartridge

The scanner's imprinter and HP ink cartridge are accessible when the transport area is open. When you remove a cartridge, pay close attention to the position and orientation of the cartridge so it can be replaced properly.

When you install a new printer cartridge, first check the expiration date of the new cartridge you plan to use. The AS7200 printer cartridges in sealed containers have a shelf life of two years from the date of manufacture.

### To remove/replace a printer cartridge:

- 1 Pull the tab on the rear of the printer cartridge and rotate outward, as shown in the figure below.

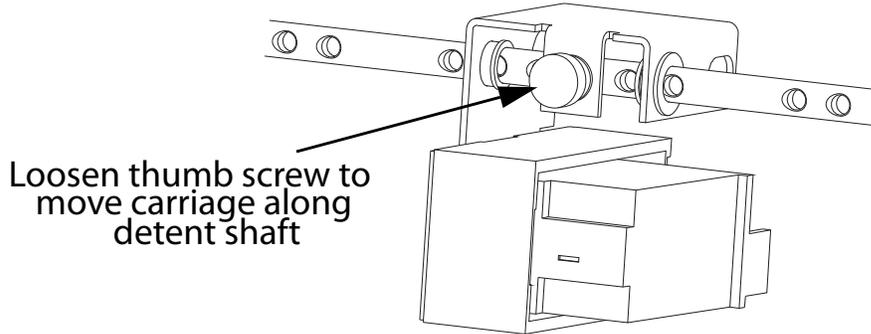


- 2 Remove the cartridge.
- 3 Insert the new cartridge by tipping the front end of the cartridge in first, and then pushing in the rear of the cartridge until it "clicks" into place.

### Adjusting the Printer Carriage Position

You can adjust the vertical print position on documents by moving the printer carriage. The printer carriage is fixed to a shaft with detents that position the printer so it sprays ink through the holes in the paper guide. A thumb screw holds the printer in the detents. If you do not position the printer in a detent, the thumb screw sticks out, preventing you from closing the paper guide.

To adjust the carriage position, loosen the thumb screw, slide the carriage to a new detented position on the shaft, and then retighten the thumb screw.



## Cleaning the System

When properly maintained, the AS7200 will continue to operate efficiently and smoothly. However, over time, dust and dirt buildup can degrade the performance, resulting in problems such as skewing, double feeds, document hesitation and damage. The conveyor, stacker assembly, feed assembly (feed belts, idler pulleys, pre-feed tire, retard pad) and the CIS (contact image sensor) require regular cleaning.

Regular and scheduled maintenance will ensure that the AS7200 continues to function properly, with minimum downtime and maximum efficiency. This maintenance procedure consists of debris/dust removal and general cleaning.



**DANGER:** Be careful when working with cleaners. A cleaner-soaked cloth or similar material should never be used to clean moving objects. For example, do not clean belts or rollers when the motors are running. The use of a cloth or a similar material on moving mechanisms can result in severe personal injury. If a belt, roller, pulley, or a similar part needs to be cleaned, hand-crank it during cleaning or clean it while stationary.

## Conveyor and transport assemblies

- 1 Stop all jobs and ensure that all motors are stopped.
- 2 Check the transport area once a shift. Open the transport door (Figure 23) and clear the area of paper debris, dust, envelope flaps, etc.



**Figure 23: Transport area and stacker bins**

- 3 Vacuum dust and debris from the stacker bins.
- 4 Vacuum dust and debris from the conveyor rollers.

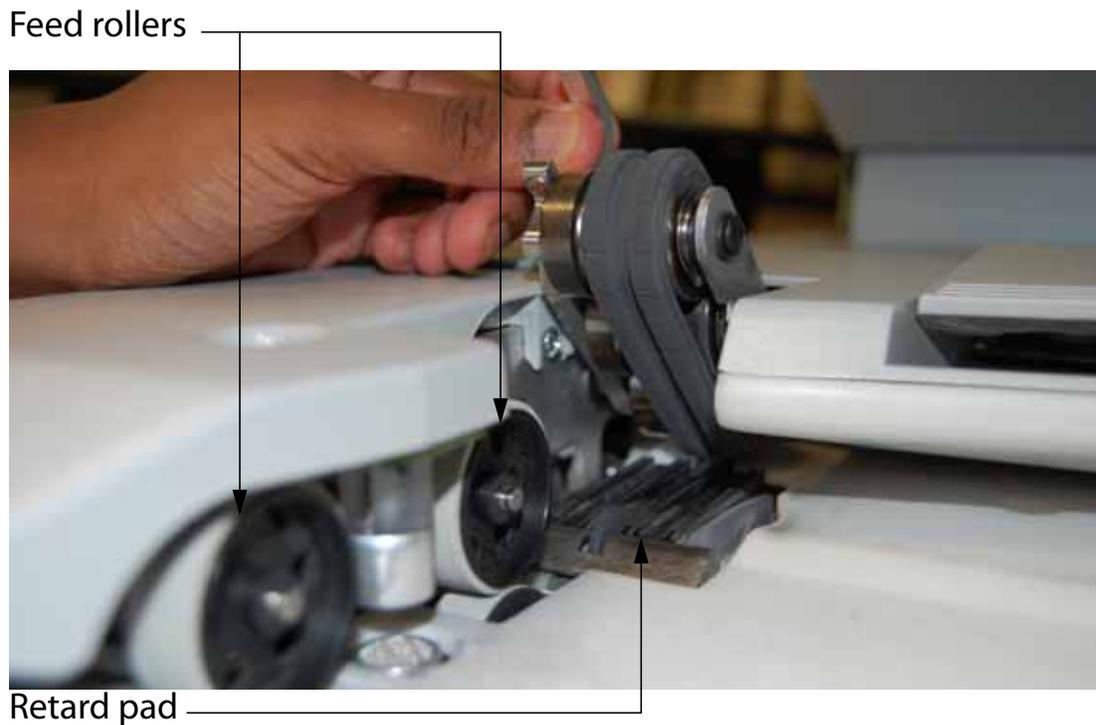
## Feed assembly

Black lines on the image can be caused by dirt (toner, ink, white out, glue, etc.) transferred from the paper to the rollers and feeder (belts and pad). Clean the feed mechanisms on a weekly basis.

Feed tires



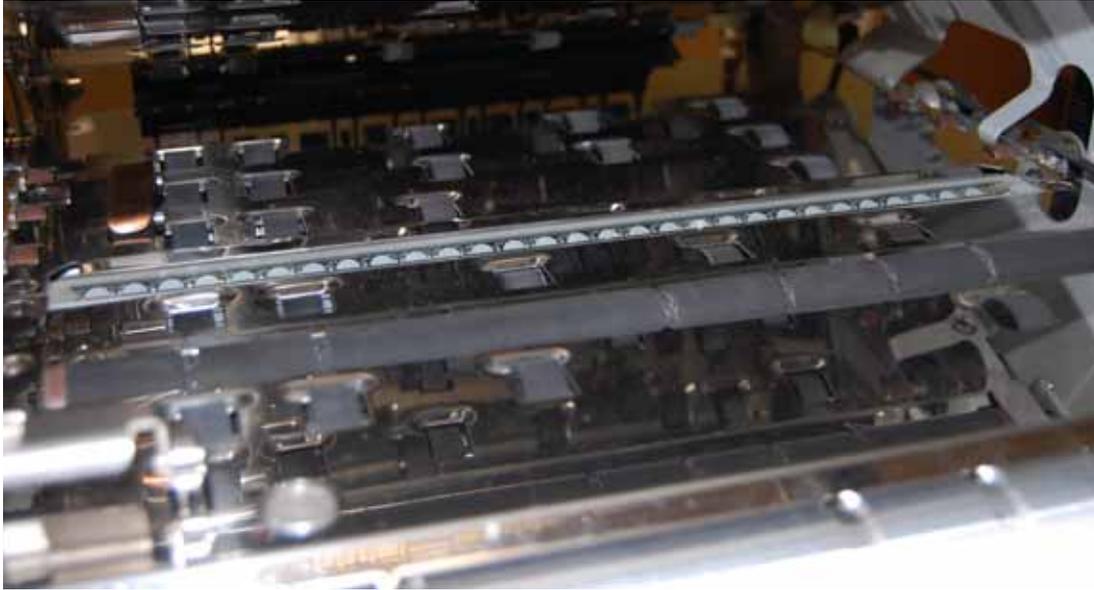
Lift the tab on the top of the feed assembly to clean the retard pad underneath. Also clean the feed rollers that lead up to the feeder.



### Contact image sensor

The glass contact image sensors should be cleaned at the beginning or end of each shift, or as needed. If you see lines appearing on the image previewed on the screen, then it is likely there is a speck (toner, white out, paper, glue, etc.) attached to the glass obstructing the view. Wipe the glass clean and the line should not appear on the image when the piece is scanned again. Be sure to clean the top camera glass if the line appears on the front side of the image.

The contact image sensors are located underneath the scanner cover. Apply Windex<sup>®</sup> (the recommended glass cleaner) to a lint-free rag and wipe the imager glass top (front camera) and bottom (back camera). The top camera (not viewable in this picture) is on the underside of the cover directly above the bottom camera.





# 4 Statistics

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## AS7200 Statistics

CertainScan provides you with tools to:

- Create statistics reports
- Back up statistics
- Restore statistics

**Note:** Operators with User, Supervisor, and Manager-level accounts have access to the Report functions.

### Creating statistic reports

Use the statistics reports to evaluate the efficiency of jobs you have run. The AS7200 can generate:

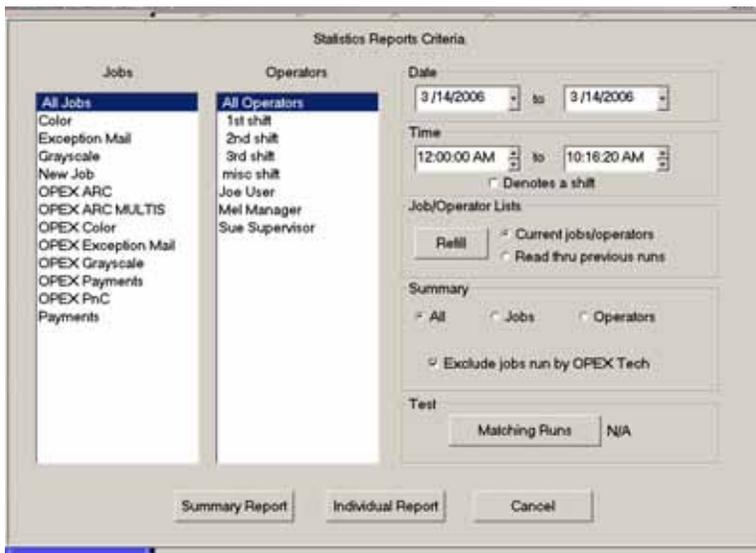
- **Individual Reports** - Provide information on each job run. When you select the criteria for generating individual reports, if more than one job run fits the criteria, a separate report is created for each run.
- **Summary Reports** - Provide information on a job range defined in the Statistics Reports Criteria window.

The Individual Report and the Summary Report are very similar. Both have the following sections:

- General Information
- Overall System Performance Measures
- Performance Details

## To create a statistics report:

- 1 In the Menu bar, click **MAIN**, then **STATISTICS** in the Options menu.

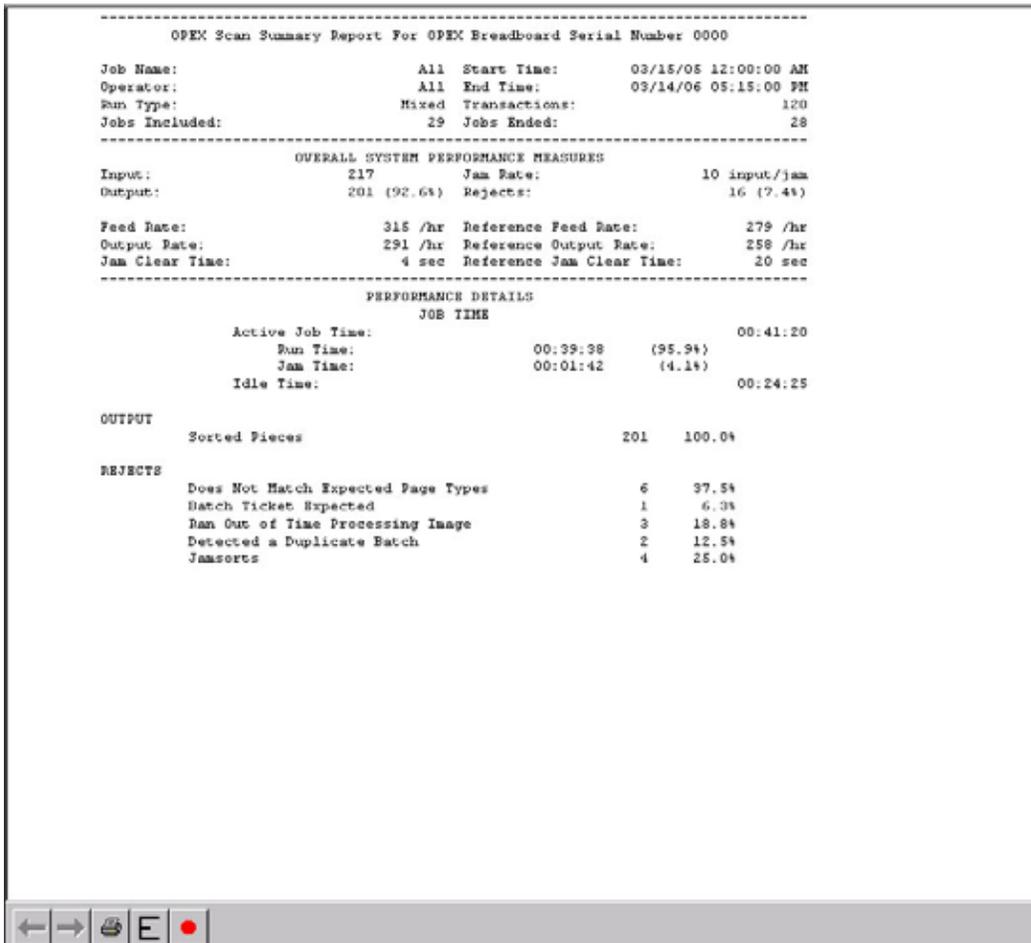


**Figure 24: Statistics Reports Criteria screen**

- 2 For this exercise, click the **SUMMARY REPORT** button at the bottom of the screen.
- 3 In the Statistics Reports Criteria window, set the parameters for the report as shown in Figure 24:
  - Jobs - select the job(s) for which you want to run a statistics report.
    - You can select several individual jobs for a single report, however, if you click **ALL JOBS**, it automatically deselects the individual jobs (since they would be included in the “All Jobs” category).
  - Operators - select the operator(s) and/or the shift for which you want to run a statistics report.
    - You can select several individual operators for a single report, however, if you click **ALL OPERATORS**, it automatically deselects the individual operators (since they would be included in the “All Operators” category).
    - Clicking any one of the **SHIFT** options will select all operators during that scheduled shift. The default setting, **ALL OPERATORS**, includes all shifts.
  - Date - set the start and end date for the report. In Figure 25, the Summary report was run for a single day, but virtually any range can be selected.

- Time - set the start and end time for the report. In Figure 25, these parameters were set to include the 3rd shift (12:00 AM-8:00 AM) and the first shift (8:00 AM to 4:00 PM).
  - Job/Operator Lists - select one of the radio buttons:
    - **CURRENT JOBS/OPERATORS** - To use the job names and operators currently stored in the Controller's memory (as shown in the Jobs and Operators lists).
    - **READ THRU PREVIOUS RUNS** - To find runs deleted from the current list of jobs and operators. For example, if a job file was deleted from the Job Name frame, it is still stored in the stats file. You can access it by selecting this radio button, then clicking the **REFILL** button.
- 4 In the Summary section, select one of the radio buttons:
- **ALL** - to generate a statistics report for every job run that matches the selected criteria
  - **JOBS** - to generate a statistics report sorted by job name(s)
  - **OPERATORS** - to generate a statistics report sorted by Operator name(s)
  - Check the box to exclude jobs run by the OPEX Technician in your report.
- 5 Click the Test **MATCHING RUNS** button to see how many jobs have been run that match the criteria selected above. If **N/A** appears to the right of the button, then there are no jobs to report that match the criteria listed.
- If a number appears after the **MATCHING RUNS** button, clicking **OK** will generate a statistics report for the selected criteria.

- Click **OK**. The statistics report will appear. Figure 25 shows the report for the above criteria.



**Figure 25: Statistics Report window**

The tool bar across the bottom of the Statistics Report window shows:

- **LEFT/RIGHT ARROWS** - use to move through the content of your report(s). If unneeded, the arrows are disabled (grey).
- **PRINTER BUTTON** - click to open the printer dialogue window, where you can select a printer (if one is connected) to print your report.
- **EXPORT BUTTON** (the letter E) - click to automatically back-up the report to the location specified by the **PARAMS > CONFIG > STATISTICS SETTINGS > STAT-SEXPORTFILENAME** parameter.
- **EXIT BUTTON** (red stop sign) - click to close the Statistics Report window.

## General Information statistics

The following table lists the terms that appear in the General Information section of the statistics report.

**Table 2: General Information Statistic terms**

Term	Definition
<b>Job Name</b>	Name of job reported. If you are creating a summary report for two or more jobs, <b>ALL</b> appears in this field.
<b>Operator</b>	Name of operator included in report. If you are creating a summary report for two or more operators, <b>ALL</b> appears in this field.
<b>Run Type</b>	Type of run determined by setting the <b>DEFAULT BATCH TYPE</b> Batch parameter. Can be: <ul style="list-style-type: none"> <li>• <b>SINGLES</b></li> <li>• <b>MULTIS</b></li> <li>• <b>STUB ONLY</b></li> <li>• <b>CHECK ONLY</b></li> <li>• <b>MULTIS WITH PAGES</b></li> <li>• <b>UNSTRUCTURED TRANSACTIONS</b></li> <li>• <b>PAGE ONLY</b></li> <li>• <b>STRUCTURED TRANSACTIONS</b></li> <li>• <b>MIX</b></li> </ul> <p>The <b>DEFAULT BATCH TYPE</b> parameter can also be set in the Modify Batch Information window that appears when first starting a job, if the <b>PROMPT OPERATOR FOR PROCESS &amp; RECV DATES</b> Batch parameter is set to <b>Yes</b>.</p>
<b>Start Time</b>	Time first job in the specified time window started.
<b>End Time</b>	Time the last job in the specified time window stopped.
<b>Jobs Included</b>	(Summary Report only) Lists the number of jobs included in the report.
<b>Jobs Ended</b>	(Summary Report only) Lists the number of jobs that ended in the specified time window.

## Overall System Performance Measures statistics

The table below lists the terms that appear in the Overall System Performance Measures section of the statistics report.

**Table 3: Overall System Performance Measures terms**

Term	Definition
<b>Input</b>	Number of pieces fed into the machine.
<b>Output</b>	Number of pieces successfully processed by the machine. This number is figured by subtracting the number of rejects from the number of pieces input.
<b>Jam Rate</b>	Number of jams per run. The formula for the Jam Rate is: $\text{Jam Rate} = \frac{\text{Input}}{\text{Jams}}$
<b>Rejects</b>	Number of pieces rejected.
<b>Feed Rate</b>	Number of pieces per hour the AS7200 is currently feeding. The formula for the Feed Rate is: $\text{Feed Rate} = \frac{\text{Input} * 7200}{\text{Active Job Time (seconds)}}$
<b>Output Rate</b>	Number of pieces per hour the AS7200 is processing. The formula for the Output Rate is: $\text{Output Rate} = \frac{\text{Output} * 7200}{\text{Active Job Time (seconds)}}$
<b>Jam Clear Time</b>	Average time the AS7200 was halted while the Operator was clearing a jam. The formula for the Jam Clear Time is: $\text{Jam Clear Time (seconds)} = \frac{\text{Jam Time (seconds)}}{\text{Jams}}$
<b>Reference Feed Rate</b>	Number of pieces fed into the AS7200 per hour. The formula for the Reference Feed Rate is: $\text{Reference Feed Rate} = \frac{\text{Input} * 7200}{\text{Run Time (seconds)} + (\text{Jams} * \text{Ref. Jam Clear Time (seconds)})}$
<b>Reference Output Rate</b>	Number of pieces processed by the AS7200. The formula for the Reference Output Rate is: $\text{Reference Output Rate} = \frac{\text{Output} * 7200}{\text{Run Time (seconds)} + (\text{Jams} * \text{Ref. Jam Clear Time (seconds)})}$

**Table 3: Overall System Performance Measures terms (continued)**

Term	Definition
<b>Reference Jam Clear Time</b>	Estimated time it takes to clear a jam. This number is fixed at 20 seconds.

**Performance Details statistics**

The following table list the terms that appear in the Performance Details section of the statistics report.

**Note:** All times noted in the formulas in this table are in seconds. For example, if the Active Job Time appears as “00:01:49” then that means one minute (60 seconds) plus 49 seconds, or 109 seconds.

**Table 4: Performance Details terms**

Term	Definition
<b>Active Job Time</b>	Time the AS7200 was either actively running or was halted due to a jam. Active Job Time is broken down by: <ul style="list-style-type: none"> <li>• <b>RUN TIME</b></li> <li>• <b>JAM TIME</b></li> </ul>
<b>Run Time</b>	Total run processing time.
<b>Jam Time</b>	Total time the AS7200 was halted for a jam.
<b>Idle Time</b>	Time the Operator was in the Run Job window, but the AS7200 was not processing pieces.

The Rejects section lists the reasons for the rejected documents and how many documents were rejected for each reason.

**Table 5: Reasons for rejected items**

<b>Length Too Long</b>	Results when an image is longer than the maximum allowable image size of the system or when outsourcing is set to reject an image longer than a defined length.
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**Table 5: Reasons for rejected items (continued)**

<b>Length Too Short</b>	Results when outsourcing is set to reject an image shorter than a defined length.
<b>Gap Too Small</b>	Results when the gap between pieces is shorter than the minimum feed gap defined in the machine parameters.
<b>Too Thin</b>	Results when out sorting is set to reject a piece thinner than a defined minimum allowable thickness.
<b>Too Thick</b>	Results when out sorting is set to reject a piece thicker than a defined maximum allowable thickness.
<b>Unable to Capture Image</b>	Results when the imager fails to capture the image within the period of time that it is expected to.
<b>Unable to Process Image</b>	Results when an image fails processing due to a failure other than running out of processing time.
<b>Blank Image Detected</b>	Results when a job is set to reject blank pages and the piece was determined to be a blank page.
<b>Does Not Match Expected Page Types</b>	Results when the system could not match a piece to any of the page types in a particular job.
<b>Bad MICR Read</b>	Results when the result from the combined MICR read does not have sufficient valid characters or a valid checksum.
<b>Batch Ticket Expected</b>	Results when a piece is identified as something other than a batch ticket when the system is expecting a batch ticket.
<b>Stub Expected</b>	Results when a piece is identified as something other than a stub when the system is expecting a stub.
<b>Check Expected</b>	Results when a piece is identified as something other than a check when the system is expecting a check.
<b>Page Expected</b>	Results when a piece is identified as something other than a page when the system is expecting a page.
<b>Envelope Expected</b>	Results when a piece is identified as something other than an envelope when the system is expecting an envelope.

**Table 5: Reasons for rejected items (continued)**

<b>Money Order Expected</b>	Results when a piece is identified as something other than a money order when the system is expecting a money order.
<b>Cash Expected</b>	Results when a piece is identified as something other than cash when the system is expecting cash.
<b>Check Listing Expected</b>	Results when a piece is identified as something other than a check listing when the system is expecting a check listing.
<b>Batch Limit Detected</b>	Results when the maximum transactions, pieces, stubs, or checks as defined in the batch parameters has been reached.
<b>Last Transaction Not Complete</b>	Results when the current transaction does not fit the defined transaction criteria and a piece is identified as a page type that defines a new transaction.
<b>Current Transaction Already Complete</b>	Results when a transaction has met its defined criteria and a new piece that is not defined to start a new transaction is identified.
<b>Batch Ticket Not Expected</b>	Results when a piece is identified as a batch ticket after valid pieces are already included in the batch unless auto batch mode is in use.
<b>Ran Out of Time Processing Image</b>	Results when the software has run out of the time that it has available to process a particular image. The amount of time it has available depends upon track speed.
<b>Could Not Detect Document Edges</b>	Results when image processing is unable to detect the edges of a document that has been scanned.
<b>No Page Sub-Type Selected</b>	Results when a piece is identified as one with page sub-types and no default page sub-type has been specified and the operator did not make a page sub-type selection.
<b>ScanLink Plug-in Requested a Reject</b>	Results when the ScanLink plug-in has requested that the piece be rejected.

**Table 5: Reasons for rejected items (continued)**

<b>ScanLink Plug-in Timed Out</b>	Results when the host has not received a response back from the ScanLink Plug-in within the required amount of time.
<b>Could Not Create a Batch</b>	Results when the software was unable to create a batch due to an inability to open and write a new file or an error within the system.
<b>Detected a Duplicate Batch</b>	Results when the software has detected a duplicate batch either via the used batch list or by finding batches in the batch directories with the same batch number.
<b>Failed Saving Image</b>	Results when there is an error trying to add or rescan a piece to a batch.
<b>Magnetic MICR Response Missing</b>	Results when the software does not receive a response from the magnetic MICR when it is expecting one.
<b>Cannot Process Printer Data</b>	Results when there is an error in sending the audit trail information down to the printer.
<b>Required Item Expected</b>	Results when an item is of the wrong priority to be scanned in the current location within a transaction. (Structured batches only.)
<b>Only One Item of this Type Expected</b>	Results when only one item of the scanned item's priority is allowed, and that required item is already present within the batch. (Structured batches only.)
<b>New Transaction Required</b>	Results when a new transaction must be started in order to add this item to the batch. (Structured batches only.)
<b>Jamsorts</b>	All input pieces immediately following a reject when the job parameter "Stop Machines for Rejects" is set to something other than 'No' until the reject is cleared. All input pieces immediately following a jam until the jam is cleared.

The Jams section lists the reasons for the jams that occur.

**Table 6: Reasons for jams**

<b>Duplicate Batch Detected</b>	A batch could not be started because a batch with the same name already exists.
<b>Too Many Consecutive Rejects</b>	Results when the number of consecutive rejects is greater than the machine parameter maximum consecutive reject count.
<b>Software Problem Detected</b>	Results when the controller receives invalid information from the host or there is an assert or exception within the controller.
<b>Vertical Turn Sensor Missing</b>	Results when the controller is expecting to see a piece pass by the vertical turn sensor but it has not within the time period that we are expecting it.
<b>Stacker Entry Sensor Missing</b>	Results when the controller is expecting to see a piece pass by the stacker entry sensor but it has not within the time period that we are expecting it.
<b>Bin 2 Gate Sensor Missing</b>	Results when the controller is expecting to see a piece pass by the bin 2 gate sensor but it has not within the time period that we are expecting it.
<b>Bin 3 Gate Sensor Missing</b>	Results when the controller is expecting to see a piece pass by the bin 3 gate sensor but it has not within the time period that we are expecting it.
<b>Bin 4 Gate Sensor Missing</b>	Results when the controller is expecting to see a piece pass by the bin 4 gate sensor but it has not within the time period that we are expecting it.
<b>Bin 5 Gate Sensor Missing</b>	Results when the controller is expecting to see a piece pass by the bin 5 gate sensor but it has not within the time period that we are expecting it.
<b>Feed Entry Multifeed Sensor Blocked</b>	The Feed Entry MultiFeed Sensor is blocked.

**Table 6: Reasons for jams (continued)**

<b>Feed Input Multifeed Sensor Blocked</b>	The Feed Input MultiFeed Sensor is blocked.
<b>Unexpected Piece at Stacker Entry Sensor</b>	Results when a piece is detected at the stacker entry sensor that the software was not expecting. This is usually caused by a piece that was intended to go to the stacker bypass bin but did not make the correct decision in time. A gate that did not fire properly can also cause it.
<b>Unexpected Piece at Bin 2 Sensor</b>	Results when a piece is detected at the bin 2 sensor that the software was not expecting. A gate that did not fire properly usually causes this to occur.
<b>Unexpected Piece at Bin 3 Sensor</b>	Results when a piece is detected at the bin 3 sensor that the software was not expecting. A gate that did not fire properly usually causes this to occur.
<b>Unexpected Piece at Bin 4 Sensor</b>	Results when a piece is detected at the bin 4 sensor that the software was not expecting. A gate that did not fire properly usually causes this to occur.
<b>Unexpected Piece at Bin 5 Sensor</b>	Results when a piece is detected at the bin 5 sensor that the software was not expecting. A gate that did not fire properly usually causes this to occur.
<b>Invalid Piece Complete Response</b>	Results when an invalid piece id is received from the host upon piece completion.
<b>Piece Thickness Sensor Null Below Minimum</b>	Results when the thickness sensor is lower than the minimum null defined in the machine parameters.
<b>Piece Thickness Sensor Null Above Maximum</b>	Results when the thickness sensor is greater than the maximum null defined in the machine parameters.
<b>Piece Thickness Sensor Runout Problem</b>	Results when the thickness sensor runout is greater than the maximum runout defined in the machine parameters.

**Table 6: Reasons for jams (continued)**

<b>Missing Piece at Straight Through Path</b>	Results when the piece was supposed to go to the stacker bypass bin but didn't.
<b>Batch Manager has an Internal Error</b>	Results when there is an internal error within Batch Manager.
<b>Detected a File Write Error</b>	Results when the software detects a problem with writing image or batch files to the specified directories.
<b>ScanLink Plug-in Failed</b>	Results when there is a failure sending information to the ScanLink plug-in.
<b>ScanLink Plug-in Requested a Jam</b>	Results when the ScanLink Plug-in has requested a jam.
<b>Host to Controller Report Missing</b>	Results when the controller is expecting piece information from the host and does not receive it within the expected time window. This is frequently caused by pushing the system to its limits or by something causing the system to get out of sync.
<b>Jam Caused by Reject</b>	Results whenever a reject other than Jamsorts occurs. Thus every reject other than Jamsorts is counted as a jam under this category. The Job Parameter "Stop Machines for Rejects" must be set to something other than "No" for rejects to jam the machine. Otherwise, rejects will be directed to the reject bin and processing will continue.
<b>Double Detected</b>	The Multifeed Sensor indicates that two pieces are being fed together.
<b>MFD Skew Angle Exceeded Sensor Blocked</b>	The MFD Skew Angle Exceeded Sensor is blocked.
<b>MFD Skew Damage Exceeded Sensor Blocked</b>	The MFD Skew Damage Exceeded Sensor is blocked.

**Table 6: Reasons for jams (continued)**

<b>Out Of Bounds Sensor Blocked</b>	The Out Of Bounds Sensor is blocked.
<b>Out of Bounds Detected</b>	A piece is too tall for the imager.
<b>Justification Sensor Blocked</b>	The Justification Sensor is blocked.
<b>Feed Singulation Defeat Button Stuck</b>	The override feed control button is stuck in a down position.
<b>Skew 9 Sensor Blocked</b>	The Skew 9 Sensor is blocked.
<b>Skew 8 Sensor Blocked</b>	The Skew 8 Sensor is blocked.
<b>Skew 7 Sensor Blocked</b>	The Skew 7 Sensor is blocked.
<b>Skew 6 Sensor Blocked</b>	The Skew 6 Sensor is blocked.
<b>Skew 5 Sensor Blocked</b>	The Skew 5 Sensor is blocked.
<b>Skew 4 Sensor Blocked</b>	The Skew 4 Sensor is blocked.
<b>Post Feed MFD Trail Sensor Blocked</b>	The Post Feed MFD Trail Sensor is blocked.
<b>Stepper Stall Detected</b>	A Stepper Motor has stalled.
<b>Pre Crush Roller Sensor Blocked</b>	The Pre Crush Roller Sensor is blocked.
<b>Feed Entry RX Present Sensor Blocked</b>	The Feed Entry RX Present Sensor is blocked.

**Table 6: Reasons for jams (continued)**

<b>Fan Failure Detected</b>	A fan has stopped functioning.
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The Stops section lists the following:

**Table 7: Reasons for stops**

<b>Feeder Jammed</b>	Results when the lower skew detect sensor has been blocked for a specified period of time. Both the feed jammed time and feed streaming time define this period.
<b>Upper Skew Detect Sensor Blocked</b>	Results when the upper skew detect sensor is blocked by something when the system is attempting to start up.
<b>Middle Skew Detect Sensor Blocked</b>	Results when the middle skew detect sensor is blocked by something when the system is attempting to start up.
<b>Lower Skew Detect Sensor Blocked</b>	Results when the lower skew detect sensor is blocked by something when the system is attempting to start up.
<b>System Entry Sensor Blocked</b>	Results when the system entry sensor is blocked by something when the system is attempting to start up.
<b>Vertical Turn Sensor Blocked</b>	Results when the vertical turn sensor is blocked by something when the system is attempting to start up.
<b>Stacker Entry Sensor Blocked</b>	Results when the stacker entry sensor is blocked by something when the system is attempting to start up.
<b>Bin 2 Gate Sensor Blocked</b>	Results when the bin 2 gate sensor is blocked by something when the system is attempting to start up.
<b>Bin 3 Gate Sensor Blocked</b>	Results when the bin 3 gate sensor is blocked by something when the system is attempting to start up.
<b>Bin 4 Gate Sensor Blocked</b>	Results when the bin 4 gate sensor is blocked by something when the system is attempting to start up.

**Table 7: Reasons for stops (continued)**

<b>Bin 5 Gate Sensor Blocked</b>	Results when the bin 5 gate sensor is blocked by something when the system is attempting to start up.
<b>Stacker Door Open</b>	Results when the stacker door is detected to be open during a run or when the system is attempting to start up.
<b>Transport Door Open</b>	Results when the transport door is detected to be open during a run or when the system is attempting to start up.
<b>ScanLink Plug-in Requested a Stoppage</b>	Results when the ScanLink Plug-in has requested a stoppage.
<b>Too Skewed</b>	Results when a piece is detected to be too skewed to pass through the system safely.



# Glossary

**Audit Trail** User-definable information printed on documents and/or displayed on document images.

**Barcode** A series of bars and spaces arranged in a predetermined pattern to represent elements of data.

**Batch** One or more transactions. Information on pieces is grouped and sent to the user in batches.

**Bitonal** Image format where every pixel is either black or white.

**Category** Grouping of similar parameters.

**Checksum** The operator's main interface with the scanner. The CertainScan software is used to set up page types, audit trails and jobs and to process documents. CertainScan interfaces with the INtime controller, which runs in the background and controls the scanner's machine-related functions.

**CertainScan** A character included within a barcode whose value is based on other characters within the data string. It is used to perform a mathematical check to ensure the data is accurately read.

**DLL** Dynamic Link Library. Plug-ins supplied by third-party vendors.

**Document** Any single sheet of paper processed by the AS7200.

**Dropout** Removing a selected color from a document image. The AS7200 can remove red, green, blue, or white from document images.

**Grayscale** Image format where all pixels are processed as a shade of gray (i.e., gray level). Gray levels range from 0 (black) to 255 (white).

**Host PC** The PC that runs the scanner. CertainScan is installed on the Host PC, as well as the INtime Controller, which manages the system's non machine-related functions.

**INtime Controller** Software that controls all machine-related functions. Runs in the background of the CertainScan software.

**Job** A profile of parameter settings you use for processing documents. When you run documents through the AS7200, you must specify which job to run. Jobs allow you to process pieces in a similar manner from run to run.

**Julian Dates** A number representing a date. In the Julian Calendar, each day is assigned a three-digit number. January 1<sup>st</sup> would be 001, January

2<sup>nd</sup> would be 002, on up to December 31<sup>st</sup> which is 365. Every fourth year (leap year) has 366 days. Customers often use Julian dates to keep track of late payments.

**MICR** Magnetic Ink Character Recognition. Used by the scanner to read the magnetic ink letters, numbers, and symbols found on documents such as checks and batch tickets.

**Multi** A transaction consisting of one or more stubs followed by one or more checks.

**OCR** Optical Character Recognition. Used by the scanner to identify letters, numbers, and symbols on documents.

**Operator** The person running the machine.

**Page Sub-Type** Group of page types that allow operators to further classify documents. A page type may have several sub-types associated with it.

**Page Type** A collection of criteria that a piece must meet to be classified as a certain type of document. i.e., length, height, barcode, mark detect, MICR, etc.

Each job includes one or more page types. Once you have defined a page type, you can set up a job to

process pieces that match that page type profile in a consistent way. For example, the page type “Check” contains parameters that match the profile of a personal check. When you run a personal check, the AS7200 recognizes it as a “Check” page type, and processes the personal check as it does all other “Check” page types. The AS7200 comes with predefined default page types, which you can use as templates for new page types specific to the customer’s needs.

**Piece** Any single sheet of paper processed by the AS7200.

**Print field** items that make up an audit trail.

**Single** A transaction consisting of a document and a check.

**Skew** Deviations from straight lines in scanned images.

**Snippet** An image captured from a scanned document. Each document may have several snippets associated with it.

**Special Item** For each job, this is the piece responsible for signaling the beginning or end of a transaction.

**Symbology** The schema how barcode data is encoded into physical bars and spaces. Generally

speaking, symbologies can be divided into two major categories: width-modulated and height-modulated. Except these used in postal applications, most symbologies encode the data into the different widths of the bars. All the bars have the same height. The contrary holds true for height-modulated symbologies: all bars have the same width, and the data is encoded into different length of the bars.

**Transaction** Defined by the customer, and can be defined in a number of ways. For example: Check(s) and stub(s), with or without attachments, and an envelope (e.g., in a payments job it can contain singles, multis, mixed, check only, etc.)

**Transaction Boundary** A term used to indicate the beginning or end of a single or group of page types in a transaction. Typically, a specific page type is used to identify this boundary either at the beginning or end of a transaction.

**Transaction Sorting** A term used to indicate jobs in which prior documents within a transaction determine the sorting of later documents.

**User** The person running the machine.

**Unstructured Transaction** A transaction that can contain any number of pieces and page types. There is no structured order for feeding these pieces other than the “Special Item” page type. This must always be first or last, according to how it is set up to signal the next transaction.