



# Installation and Operations Guide

## SmartSource® Elite Series

- > Pro Elite
- ➤ Elite
- ➢ Elite UV
- Expert Elite

## Styles released starting with serial # 918XXXXX:

SSM1 ELITEEE	SS Elite Identify with auto retract feeder flag
SSIVIT-ELITESS	and gray inner cover badge.
SSM1-ELITE55-IJ	55 DPM Elite-1-Line Ink Jet
SSM1-ELITE55-SE (Discontinued)	55 DPM Elite-SE Firmware, No Ink Jet
SSM1-ELITE55-SEIJ (Discontinued)	55 DPM Elite-SE Firmware, 1-line Ink Jet
SSM1-ELITE55-GIJ (Discontinued)	55 DPM Elite 1-Line Ink Jet + Document Security Sensor
SSP1-ELITEM55 (Discontinued)	55 DPM 4-line Inkjet
SSP1-Elite75	75 DPM Elite-4-line Ink Jet
SSP1-Elite155	155 DPM Elite-4-line Ink Jet
SSX1-ELITE-FS	SS Expert Elite, Full Speed
SSX1-ELITE	SS Expert Elite, Low Speed
SSM1-ELITEUV-IJ	100 DPM UV ELITE-1-Line Ink Jet
SSP1-ELITEUV	SS PRO ELITE-UV-4-line inkjet



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- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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Canadian Regulatory Statement for Pro Elite, Elite, and Elite UV only

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**Canadian Regulatory Statement for Expert Elite only** 

CAN ICES-3 (B)/NMB-3 (B)

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Note – for clarity, this guide may use false-color or enhanced images to highlight certain features.



# SmartSource Elite Series - Installation & Operations Guide Introduction

#### **Capabilities overview**

The SmartSource Elite series is a family of table-top document scanners that can feed, read, endorse, image and stack a wide range of financial documents, as well as rigid cards such as driver's licenses and ID cards.

All SmartSource Elite series machines include:

- An automatic document feeder, capable of holding and feeding up to 100 documents, depending on thickness and condition
- A magnetic MICR reader capable of automatically identifying and reading ANSI-standard E13B and CMC7 Magnetic Ink Character Recognition (MICR) encoding
- Optical Character Recognition (OCR)
- Front and rear image cameras
- An output pocket capable of stacking and holding up to 150 documents, depending on thickness and condition
- An alternate entry for processing and imaging both faces of a single rigid card, or a single document that is outside the normal feeder/track specification
- > Easy-opening track covers for speedy cleaning and maintenance
- > Operator-renewable, feed wheels and tires
- > One-touch power/start-stop button, with status indicator
- > Adjustable document floor and pocket limit to accommodate a wide range of document sizes

Pro Elite, Elite, and Elite UV:

▶ USB 2.0 connectivity to a host PC

#### Expert Elite:

> 10/100 Mbit Ethernet connectivity

Elite UV - In addition to all the above features, the SmartSource machine includes:

> Ultraviolet (UV) illumination for detecting UV-fluorescent features on the front of a document



# SmartSource Elite Series - Installation & Operations Guide SmartSource Pro Elite, Expert Elite, Elite, and Elite UV

SmartSource Elite family

Style	Maximum Throughput	Description	
SSP1-ELITE155	155 items per minute (grayscale)		
SSPI-ELITE75	75 items per minute (grayscale)	SmartSource Pro Elite With 4-	
SSP1-ELITEM55 (Discontinued)	55 items per minute (grayscale)	line Ink Jet	
SSM1-ELITE55	55 items per minute (grayscale)	SmartSource Elite-No Ink Jet	
SSM1-ELITE55-IJ	55 items per minute (grayscale)	SmartSource Elite 1-line Ink Jet	
SSM1-ELITE55-SE (Discontinued)	55 items per minute (grayscale)	SmartSource Elite-SE Firmware No Ink Jet	
SSM1-ELITE55-SEIJ (Discontinued)	55 items per minute (grayscale)	SmartSource Elite-SE Firmware 1-line Ink Jet	
SSM1-ELITE55-GIJ (Discontinued)	55 items per minute (grayscale)	SmartSource Elite-SE Firmware 1-line Ink Jet+ Document Security Sensor	
SSP1-ELITEUV80 items per minute (UV)155 items per minute (grayscale)		SmartSource Elite UV 4- line Ink Jet	
SSP1-ELITEUV-IJ	80 items per minute (UV) 100 items per minute (grayscale)	SmartSource Elite UV 1-line Ink Jet	
SSX1-ELITE	80 items per minute (grayscale)	SmartSource Export Elite	
SSX1-ELITE-FS	150 items per minute (grayscale)		
SSX1-ELITE-USB	80 items per minute (grayscale)	SmartSource Evport Elite	
SSX1-ELITE-FS-USB	150 items per minute (grayscale)		



The SmartSource Pro Elite, Expert Elite, Elite, and Elite UV have some functional and performance differences, as follows:

Function	Pro Elite	Expert Elite	Elite	Elite UV
Document throughput*	Up to 155 items per minute	Up to 150 items per minute (grayscale)	55 items per minute	155 items per minute (grayscale) 80 items per minute (UV)
Feed hopper flag	Automatic opening	Automatic opening	Automatic opening on Newer Model	Automatic opening

## SmartSource Elite Series - Installation & Operations Guide

4-line programmable inkjet endorser	Present	Present	Not present or 1- line Ink Jet	4-LINE-SSP1-ELITE UV 1-line SSM1-ELITE-IJ
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\*Throughput based on 6.0-inch (152mm) documents

Note – The SmartSource Elite operates in conjunction with a document-processing software application. This guide describes all the available functions of the SmartSource Elite. Different software applications may use these functions in different ways and may not implement all the functions described. This guide cannot describe all the possible function permutations which a software application may use. Your IT service or application provider should supply details of the exact operation of your software application.



## Setting up the Unit

#### Choose a Location

- > The unit is for indoor use only.
- > The location should be clean, dry, well-ventilated, and out of direct sunlight.
- Select a flat, stable location.
- Pro Elite, Elite, and Elite UV: A suitable USB port on the host PC must be within 6 feet (2 meters) of the rear of the unit.
- Expert Elite: A suitable Ethernet connection must be near the rear of the unit.
- A suitable AC outlet (100-240 VAC, 50/60 Hz) must be with 9 feet (3 meters) of the rear of the unit.
- Provide adequate clearance on all four sides of the unit to load and unload documents, insert rigid cards, open covers for cleaning, and make power and Ethernet or USB connections.

#### Power Supply

Your SmartSource Elite unit may be affected by surges or dips in the electrical power supply. These may cause the unit to pause, or stop working, or require the user to restart the unit. Such surges and dips will generally not harm the unit.

Surge and dips are usually the result of other large electrical loads on the same branch circuit, such as air-conditioners or heaters.

If such problems occur, try connecting the unit to a different branch circuit outlet that does not supply other large electrical loads. If problems persist, it may be necessary to isolate the unit from the power supply outlet using a line conditioning device or an Uninterruptible Power Supply (UPS), both of which are available from Digital Check.

#### **Need Help?**

- > Call Digital Check Support at 847-446-2285 for live customer support.
- Online, go to http://www.digitalcheck.com/support for general product information, manuals, downloads and training/support videos.
- For replacement parts and consumables, service and support parts, visit store.digitalcheck.com.



#### Opening the Box – Checking box contents

In addition to your SmartSource Elite unit, the shipping box should contain the following items:







Power supply 'brick'



Cord



Inkjet endorser cartridge (Pro Elite, Expert Elite and Elite UV only)

Also included in the package are the following documents:

Item	Description	
Box contents checklist	Ensures correct packing of box contents	
Service information/extended warranty sheet	Describes product warranty and service details and how to obtain more service and support information	
Arrival Quality Report form	Use to report arrival quality of product – please complete and return as shown	
Ink cartridge information sheet (Pro Elite, Expert Elite, and Elite UV only)	Provides ink cartridge information, including service and ordering new cartridges	

Once you have unpacked the contents of the package, **do not connect the USB cable or any power cords**. Device driver software **must** be loaded onto the host PC before connecting your SmartSource Elite to the PC.

Device driver and other application software may also be required to be loaded – consult your IT service provider or application provider to be sure that all required software is loaded before connecting and powering your SmartSource Elite unit.



Basic layout of your SmartSource Elite





#### Connecting cables and powering on the unit

- 1. Locate the power supply 'brick' and AC power cord and plug them together.
  - a. Use only the power supply 'brick' that was packed with your SmartSource Elite. Do not exchange power supply 'bricks' between units, or use non-Digital Check-supplied power supplies, even if they look similar.
- 2. Plug the power cord from the power supply 'brick' into the SmartSource Elite, then plug the AC power cord into an AC outlet.
  - a. Note the power supply cord to the (starting with serial # 900xxxxx) SmartSource Elite scanners have a special locking connector to prevent accidental disconnection. To disconnect this connector, pull back <u>only</u> on the connector housing <u>not</u> on the power cord. If you pull on the cord, the connector will not disconnect, and the cord or the unit may be damaged. The SmartSource Elite models and later (starting with serial # 918xxxxx) have a straight pull connector.



- 3. Load device driver and other application software. Consult your IT service provider or application provider to be sure that all required software is loaded before connecting and powering on your SmartSource Elite unit.
- 4. Locate the USB cable (or Ethernet cable) and connect it to the SmartSource and to a suitable USB outlet on the host PC (or Ethernet network interface).
  - a. Use only the USB cable that was supplied with the unit, or a similar USB cable, rated for USB 2.0 or better.
  - b. Do not use USB cord extenders, hubs or plug adapters, as these may degrade USB performance
  - c. Use only Category 5e (Cat5e) or better Ethernet cables for Expert Elite



#### Installing the Inkjet Cartridge-4 line (Pro Elite, Expert Elite and Elite UV Only)

- 1. Lift off the endorser cover. The endorser housing is visible.
- 2. The housing may have packing tape on it to hold it closed during shipping. Remove this tape carefully.
- 3. Open the housing by pressing on the blue latch as shown. The cover of the housing will pop open.



- 4. Open the sealed package containing the inkjet cartridge and remove the sealing tape as shown on the cartridge.
- 5. Insert the cartridge into the housing as shown. There is no need to press down on the cartridge.
- 6. Once the cartridge is in place, press the top of the housing down until the housing latches shut.

#### Installing Cartridge-1 Line Ink Jet Cartridge:

1. Open the lnk Jet pouch and remove the protective tape from the new cartridge. Make sure that the nozzles on the cartridge do not contact your fingers (or anything else)

2. Insert the cartridge at a slight angle, cartridge nozzles facing the rear of the scanner. Utilize the tab on the cartridge housing for handling. Then push straight down from the top. The cartridge will snap in.





Section 2

### **Operating the Unit**

#### Powering on the Unit

Press the power button. The blue status light within the button will illuminate. When the unit is ready for use, the light will start to blink slowly.



#### Using the power/start-stop button, and the meaning of the status light

The power/start-stop button has various functions when the machine is working. The blue status light within the button tells you the condition of the machine. Note that the exact sequence of operation and the use of the start-stop button may be configured by your application and some uses may be disabled or unused. Consult with your application provider for exact details.

Function	Operation of button	Status light condition
Power on	Press and hold the button for more than 2 seconds	Turns on continuously until the unit is ready, then blinks slowly
Power off	Press and hold the button for 6 seconds or more	Blinks slowly, then more quickly, then turns off
Start document flow	Press the button for less than 1 second	Stops blinking slowly and stays on continuously
Stop document flow	Press the button for less than 1 second	Starts blinking slowly
Clear document	Press the button for more than 1 second and less	After 1 second, light will blink more
from track –	than 6 seconds, then release the button. The track	quickly to show that 'SmartClear'
'SmartClear'	will start and eject the stopped document, then	function has been selected.
function	stop.	
Processing	Varies depending upon application – refer to IT or	Light blinks quickly until exception
exception during	application provider	is cleared
document flow		



## Below is a chart for LED power button indication/function for Front Feed ID Card Elite models starting with serial # 9197XXXX:

	LED		
LED COLOR	STATE	SCANNER STATE	OTHER STATUS
RED	SOLID	USB or Ethernet cable not connected	
	SLOWLY		
<b>RED/PURPLE</b>	BLINKING	USB or Ethernet cable not connected	Cleaning Required
	SLOWLY		
BLUE	BLINKING	Cable is connected	
	SLOWLY		
PURPLE	BLINKING	Cable is connected	Cleaning Required
BLUE	BLINKING	Application has connected	
PURPLE	BLINKING	Application has connected	Cleaning Required
	SLOWLY		
<b>BLUE/</b> PURPLE	BLINKING	Application has connected	Low Ink
<b>BLUE/</b> PURPLE	BLINKING	Application has connected	Out of Ink
BLUE	SOLID	Actively Scanning	
PURPLE	SOLID	Actively Scanning	Cleaning Required
RED	BLINKING	Scanner error	
	SLOWLY		
RED	BLINKING	Application generated error	
BLUE	SOLID	Actively Scanning	
	RAPID		
PURPLE	BLINKING	In Cleaning Mode	
DILLE	RAPID		
DLUE	BLINKING	Clearing a jam	
	RAPID		
RED/ BLUE	BLINKING	Serious Scanner error (requires reboot)	

#### Preparing for Document Flow

- 1. Adjust the floor extender and document limit to match the length of the documents to be fed by sliding them out, as shown below.
- 2. For proper feeding, the floor extender should be extended to support the documents in the feed hopper and prevent them from tipping or skewing.
- 3. The document limit should be set so that the document can fit easily in the pocket. If feeding documents of different lengths, set the document limit to match the longest document.





#### Document / card preparation

The SmartSource Elite is optimized to work with the majority of normal financial documents. However, the unit will function acceptably with a wide range of paper weights and thicknesses, from thicker tab-cards to thin multipart form stock, as well as specialty items like ATM envelopes.

If you process such documents, you may notice minor degradations in performance, such as reduced output pocket capacity, degraded stop rate, or increased noise while running.

- 1. For trouble-free operation, documents and cards should be clean, dry and free of attached objects such as staples, paper clips, sticky tape or rubber bands.
- 2. Smooth out creases, folds and dog-eared corners.
  - a. Creased and folded documents may cause shadows or other defects in document images.
  - b. Dog-eared corners may cause the machine to stop because it appears that part of the document is missing. This is not an error, but a deliberate feature to prevent the processing of incomplete documents.
- 3. Torn documents should be removed, or placed in a carrier envelope for proper processing a. A torn document may be further damaged if it is processed again.



The unit is designed to fully process documents with the following length and height limits

Condition	Minimum	Maximum
Document length	2.9 inches (74 mm)	9.25 inches (235 mm)
Document height	2.0 inches (51 mm)	4.25 inches (108 mm)

Documents longer or shorter than the specified limits should be removed. Documents which are too long or too short may cause jams or feeding problems and can cause the application to stop processing.

Documents as tall as 5.8 inches (148 mm) or A5 size can be fed and processed normally **but they will not be fully imaged. Only the lowest 4.25 inches (108mm) of the document will be imaged.** 

The SmartSource Elite will feed and image both sides of a flat, rigid card, such as a driver's license or ID card. The maximum card thickness is 0.030" (0.75 mm). Thicker cards, or credit cards with embossed characters, should not be fed – they may jam in the unit, and the image quality may be degraded

The SmartSource Elite series is designed to process documents adhering to Digital Check Document Design Guidelines 4326 6808.

#### Inserting documents and aligning them for proper flow

Documents with MICR encoding should be inserted with the MICR code line facing forward, as shown.



For best performance and fewest problems, documents should be inserted into the feed hopper with the leading and lower edges aligned as consistently as possible, and with the leading edges aligned with the line printed on the cover. Align documents by tapping lightly against a flat surface.

If leading edges are not properly aligned, the unit may feed documents out of sequence. If bottom edges are not aligned, the unit may not be able to read the MICR code line, and document images may be skewed. When inserting larger numbers of documents, an automated powered document jogger may be helpful. Suitable joggers are available from the store.digitalcheck.com, part numbers 750606909, 752008995 and 752010901.

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Insert documents into the feed hopper as shown. On Pro Elite, Expert Elite and Elite UV units, the feed hopper will open automatically. On Elite units, the feed hopper will need to be opened manually by pushing back the grey flag.

#### Processing documents

When documents are placed in the feed hopper, the unit may begin processing automatically, or you may need to press the start-stop button briefly to start processing. How this works depends on your document processing software application. Documents will be fed singly from the feed hopper and stacked in the output pocket. The unit will stop automatically when the feed hopper is empty. To continue processing, place more documents in the feed hopper. Depending upon your application, the unit may resume processing automatically, or you may need to press the start-stop button again to resume.



Processing ID cards and documents using the alternate entry



When prompted by your application, insert the ID card into the alternate entry at the rear of the unit, as shown. The direction in which the ID card faces is determined by your application. The track will start, and the ID card will be fed, imaged on both sides, and stacked in the output pocket.

The alternate entry can also be used in the same way to feed and image single paper documents which are too thick or too damaged to be fed through the normal feed hopper and track. **Note that a MICR code line on any document fed in this way will not be read.** Refer to your application for the correct direction to feed a document through the alternate entry.

## Models starting with serial # 9197XXXX have the ID card feed function moved to

**the front of the Unit:** The front side of the ID card should be positioned to the left of the operator. Retract the moving wall (Gray Color) with the ID card and insert until machine starts up and gently release grip from ID card. Do no hold on to the ID card. The card will be returned to the front pocket.





#### Removing items from pocket

Lift stacked documents out of the pocket as shown. Documents may be removed from the pocket at any time.



#### **Stopped-document conditions**

If the unit stops with a document in the track (between the feeder hopper and the output pocket) first refer to the application to determine the cause of the stoppage. Many stoppages are not the result of any problem with the unit but may be caused by application delays or other non-physical errors. Follow the instructions on the application screen to decide how to handle the stopped document.

#### Clearing stopped documents in the track using the 'SmartClear' function

To remove a stopped document from the track, first use the 'SmartClear' function (see Basic layout of your SmartSource Elite). This will cause the unit to drive the stopped document out of the track and into the output pocket.

#### Manually removing stopped documents

If the stopped document is not ejected, then open the front and image covers (see Basic layout of your SmartSource Elite) and remove the stopped document by pulling it in the direction of travel. Avoid pulling the document straight up and out of the track, if possible.



#### **Cleaning the unit**

#### General cleaning of the unit

Before performing any cleaning, turn off power to the unit and unplug the AC power cord.

For general cleaning of the outside covers of the machine, any mild water-based cleanser, used sparingly, is appropriate.

For cleaning sensors, image cameras and track walls, isopropyl alcohol may be used, preferably diluted 50% with water. Cleansing wipes pre-soaked with suitable solvent are available from Digital Check, store.digitalcheck.com, online store, SmartSource Pro Elite Consumables & Accessories, part number 751804907.

Do not use aggressive solvents such as gasoline, petrol, kerosene, paraffin, acetone or MEK, and use no abrasive cleansers at all.

As a general rule, use the least amount of the least aggressive cleanser required to clean the machine.

#### Cleaning the track

Cleaning the track generally involves two issues, which are

- General dust and dirt in the track
- > Foreign objects such as staples, paper clips and rubber bands.

How often the track should be cleaned depends on the quantity and quality of documents being processed and the amount of dust, dirt and foreign objects that accumulates. The track should be cleaned whenever dust is visible on the track walls and rollers, on the documents, or on the images.

The more frequently and more thoroughly the track is cleaned, the fewer processing problems you will experience due to dust and dirt. Excessive accumulation of dust and dirt will cause processing problems such as jams, document damage and poor image quality, and may degrade the life of the unit. It is easier to avoid these problems by cleaning the track regularly so that dust, dirt and foreign objects do not accumulate.

To clean light build-up of dust and dirt out of the track, use a Check Scanner Cleaning Card, one of which came with the machine. Follow the instructions on the packaging. Regular use of track cleaning cards will minimize the accumulation of dust and dirt.

For heavier accumulations of dust and dirt, which a cleaning card will not remove, use canned compressed air, or piped compressed air where available. Air should be regulated to no more than 30 psi (2.0 bar, 200 kPa). Open the front cover and image cover and blow the track and surrounding walls and rollers clear of dust and debris. (Canned compressed air and additional cleaning cards are available from Digital Check, store.digitalcheck.com, part numbers 750501900 and 757200995.)



If foreign objects cannot be blown out with compressed air, you can attempt to remove them using a nonmetallic tool or probe such as the Digital Check track-cleaning tool (available from Digital Check, store.digitalcheck.com, part number 750381907).

Do not use any metallic tool or probe, as damage to the track walls and other parts may result.

Do not use any magnetic tool, as damage to the MICR read head may result.

The track contains two powerful magnets which are located near the MICR read head, as shown.



Foreign objects such as staples and paper clips will often stick to these magnets, making them easier to find and remove.



#### Cleaning the image cameras

Be especially careful when cleaning around the image cameras. The image cameras have glass faces which can be easily broken if a metal probe is used.

The glass faces of the image cameras may acquire a build-up of dirt and ink from the passing documents, which affects image quality. If streaks, lines or a loss of image quality are seen, the image cameras should be cleaned.

Open the image cover to expose the glass faces of the image cameras, as shown.



Clean the glass faces using a soft cloth moistened with water. For stubborn stains isopropyl alcohol may be used. Cleansing wipes pre-soaked with suitable solvent are available from Digital Check, store.digitalcheck.com, part number 751804907. **Ensure that any cleanser or solvent has been completely wiped off or dried before closing the image cover.** 



#### **Cleaning track sensors**

The unit includes four sensors, as shown. If dirt or dust accumulates on these sensors, errors may result.



Clean these sensors using canned or compressed air, or a soft cloth (or a cotton swab) moistened with isopropyl alcohol. Cleansing wipes pre-soaked with suitable solvent are available from Digital Check, store.digitalcheck.com, part number 751804907.

#### Cleaning the endorser cartridge (Pro Elite, Expert Elite and Elite UV only)

It is possible for the nozzles of the inkjet cartridge to become blocked by dried ink, especially if the unit has been unused for a long period. If the printed endorsement is degraded (light, missing or smeared print), clean the inkjet cartridge nozzles.

If the endorsement looks like this:



Then cleaning the nozzles will make it look like this:

If cleaning the nozzles does not improve the print quality, then the ink cartridge is probably empty.

ABCD





Only use Digital Check supplied ink cartridges in you Digital Check Scanner Single line inkjet released for Smart Source Elite

## Below is the single line inkjet cartridge, Part # MS0083:







Remove the inkjet cartridge and wipe the inkjet nozzles briefly with a soft cloth moistened with water. **Use only water** – use of any other cleanser or solvent may destroy the cartridge. When cleaning the nozzles, fresh ink may appear after cleaning – this is normal.

Examine the electrical contacts on the underside of the inkjet cartridge and wipe clean if any dirt or debris is seen.

#### Cleaning the endorser station (Pro Elite, Expert Elite and Elite UV & all 55DPM Models)

After extended use, the track walls around the inkjet endorser may accumulate ink and debris from the documents, and this may lead to ink lines or smears on the face of the documents. If these are seen, clean the track walls around the endorser, as shown.



With the inkjet cartridge removed and the front cover opened, clean the track walls using a soft cloth moistened with water.

The inkjet cartridge has a 'priming' function, in which it prints into an empty track to test that the cartridge is working correctly. To catch 'priming' ink, a felt pad is built into the track wall opposite the endorser.



This felt pad is large enough to absorb all the 'priming ink' that will be used in the normal lifetime of the machine. However, if it does become saturated or dirty, it can be replaced. Open the front cover and snap out the felt assembly downwards, as shown.



The replacement felt pad assembly slides in upwards and 'snaps' into place.

Replacement felt assemblies are available from Digital Check, store.digitalcheck.com, part number 8227 4203-000 for the 4-line Inkjet. Single line Inkjet replacement felt assembly part number is 82275914-000. Both assemblies are replaceable as in the above description on the swing-out right cover.



## Section 4

#### Solving problems

#### Jams in track

Documents jamming in the track are usually the result of

- > Poor document quality documents with tears, creases, folds or dog-ears
- ➢ Foreign objects attached to the documents tape, staples, adhesives, etc.
- Documents which are stapled or taped together
- ➢ Foreign objects in the track staples, paper clips, rubber bands etc.
- > Documents that are too big, or too small see document size limits above.
- > Too many documents stacked in the output pocket.

#### Poor feeding, double feeds

Most feeding problems (poor feeding, no-feeds, double-feeds, skewed documents) are caused by poor document quality or preparation. See Section 2 above for details on proper document preparation. Poor feeding can also be caused by over-filling the feed hopper. The capacity of the feed hopper is up to 100 documents, depending on condition, but thick or crumpled documents may reduce the number that can be loaded into the feed hopper.

Other causes of feed problems

- > Feeder sensor requires cleaning see section 3, above
- > Foreign objects attached to the documents tape, staples, adhesives, etc.
- > Documents which are stapled or taped together
- > Foreign objects in the track staples, paper clips, rubber bands etc.
- Documents which are poorly-aligned see Inserting documents and aligning them for proper flow, above
- > Documents that are too big, or too small see document/card preparation above

If these causes are eliminated, then most remaining feeding issues are caused by worn, soiled or damaged feeder consumables. These are the rollers and tires which feed and separate the documents. During normal use, these parts become worn from rubbing on the documents, or they become soiled with ink and dirt from the documents. There are two consumable items:

- 1. 2 feed rollers (tan color)
- 2. 1 separator (blue color).
- Poor feeding documents do not feed out of the feed hopper, or feed slowly or intermittently. This is usually due to worn, soiled or damaged feed rollers. See below for details on how to replace feed rollers.
- Double feeds feeding more than one document at a time. This is usually due to a worn, soiled or damaged separator tire. See below for details on how to refresh or replace the separator.

Worn or soiled feed consumables are a normal result of operating the unit. How quickly the feed consumables degrade depends on the condition of the documents being fed. If poor feeding persists, even with improved document preparation, then the consumables should be replaced or refreshed.



To ensure continued trouble-free operation, users should be aware that consumables may need to be replaced and be prepared with replacement parts when necessary. The unit is designed for quick and easy replacement of feeder consumables by the operator. No tools are required, and the unit does not need to be taken out of service or returned to a service facility.

#### To replace the feed rollers:

- 1. Open the front cover and locate the two feed rollers, which have a black body with a tan-colored rubber tire
- 2. To remove, lift straight up. The roller will 'snap' off the guide post.
- 3. To install a new roller, press straight down onto guide post the roller will 'snap' into place.



There are several options for feed roller renewal, see section 5 for details. Feed rollers should always be replaced as a pair.

#### To refresh or replace the separator:

Because a worn or soiled separator tire is a leading cause of feed problems, the separator has a special design which allows it to be refreshed instantly, so that processing can continue immediately.

The separator has a triangular shape, which provides 3 separate working faces. When one of the three faces has become worn or soiled, it can be instantly repositioned to replace the worn face with a fresh face. This allows work to continue without the need to immediately locate and install a new part and provides time to order a new part if one is not immediately available.

Once all 3 faces of a separator have been used, it can be replaced with a new separator, which provides a further 3 new working faces.



To remove and examine the separator:

- 1. Open the front cover, lift off the endorser cover and locate the triangular separator it has a blue top cap and a blue rubber tire.
- 2. Lift straight up, the separator will 'snap' off its guide post.



3. Examine the surface of the blue rubber tire which was facing the documents – if it shows a dark, glossy area or a dirt build-up, as shown; rotate the separator to a clean, new face, as shown.



4. Re-install by pressing the separator back down onto the guide post, it will 'snap' into place.

There are several options for separator renewal, see section 5.



#### Poor stacking in pocket

Poor stacking of documents in the output pocket is usually caused by

- > Poor document quality documents with tears, creases, folds or dog-ears.
- > Foreign objects attached to the documents tape, staples, adhesives, etc.
- > Documents which are stapled or taped together
- > Foreign objects in the track staples, paper clips, rubber bands etc.
- > Too many documents accumulated in the pocket
- > Document limit set too short for documents being fed

#### Poor quality images

Poor-quality images are usually caused by

- > Poor document quality documents with tears, creases, folds or dog-ears.
- > Foreign objects attached to the documents tape, staples, adhesives, etc.
- > Dirt build-up on image cameras see Cleaning the image cameras, above

#### Poor quality endorsement (Pro Elite, Expert Elite and Elite UV only) Poor-quality

endorsement is usually caused by

- > An empty endorser cartridge
- > Buildup of dirt or debris on the endorser cartridge see Cleaning the endorser cartridge, above.
- Light print or poor contrast may also be caused by print quality settings contained in your application. If problems persist, consult with your application provider.



#### Detailed troubleshooting chart

For more-detailed descriptions of how to resolve operating errors, please refer to the following troubleshooting chart. For **Elite models starting with 9197XXXX** refer to chart on <u>page 15</u> for LED functions & indications.

Problem Topic	Condition/Problem	Possible Cause	Corrective Action
Power Supply	Scanner will not power	Not plugged into AC	Plug into a known-good AC outlet and/or connect
	up. Blue LED in	outlet, or AC cord not	AC cord with power 'brick'.
	function switch is not	plugged into power	
		Non-functioning AC	Verify AC outlet is OK try a different AC outlet
		outlet	
		Defective power supply	Replace power supply 'brick'
		'brick' – green LED on	
	Groop LED on power	power supply is not lit.	If the newer supply 'brick' works correctly with a
	supply 'brick' is lit, but	scanner	different scanner, the original scanner requires
	scanner will not power		ASP service or replacement.
	up		
USB Issues	Host PCB does not	Incorrect or defective	Check USB cable for damage. Cable should be to
(Pro Elite, Elite	recognize the scanner	USB cable	USB 2.0 standard or better – replace if in doubt.
DPM Elites)		Excessive cable length	15 feet (5 meters). The use of USB extension
,			cables and/or USB hubs and/or plug/cable
			adapters may cause USB failures.
		PC has lost or failed to	Re-initialize the USB system by shutting down the
		maintain the USB	PC will not complete this process: the PC must be
		Connection	shut down entirely )
			This should be an isolated event – if this
			correction is required repeatedly, there may be a
			defect in the host PC.
	Unit is not recognized	Unit was connected to	Disconnect unit, then install SmartSource Elite
	SmartSource Elite	software was loaded	
		SmartSource	In Device Manager, ensure "SmartSource
		Pro/Value driver may	Pro/Value" appears/disappears from Jungo folder
		not be installed/loaded	when unit is turned on/off. Update or reinstall
Ethernet Issues	Unit does not connect	Network connection	Verify that two lights near the Ethernet connector
(Expert Elite only)	to local network	problem.	(back of unit) indicate normal network activity.
			One light on indicates a good connection. The
			other blinks when data is transmitted/received.
		Unit's Internet Protocol	Use the Elite Configuration Utility to check and/or
		match network	Configuration Utility can be downloaded from the
		settings.	Digital Check website, www.digitalcheck.com
		-	
		PC firowall is blocking	The factory default IP address is 192.168.1.101
		the network	
		connection.	
Unusual Noises	Noises while feeding	Worn/soiled/damaged	Replace
		feed wheels	
	Clicking or ticking	Obstruction in	Inspect track, remove debris.
	travels in track		
Indicators / Controls	Power light does not	Multiple causes	See 'Power Supply' conditions, above. Also, refer
	come on		to 'Using the power/stop-start button'
	Items do not feed when	Switch is not being	Refer to 'Power Switch Function' Using the
	switch is pressed	operated correctly	power/start-stop button / meaning of the status
		Application is not readv	Consult application documentation



Frequent Jams or Stops	Track stops frequently with the same error message	Error message (in Update Monitor) will indicate the cause of the repeated problem	Use error message to identify the appropriate problem area
	Track stops/fails to start with a 'document in track' message	Document or debris is stopped in track and blocking track sensor	Inspect and clear as required.
		Several different jams are "mapped" into this single message, a "decoding" effort will reveal what area of the track reported the jam	Consult with your IT or application provider to analyze error codes.
	Items do not feed correctly	Multiple causes	See "Feeder" conditions below
	Items feed into the track but then stop suddenly and have leading edge damage	Debris/obstruction in paper path	Examine paper path to locate small bits of paper, tape, staples, etc. Remove debris gently using the spatula tool.
	Item stops in curved portion of track	Item is too thick or too stiff	Card stock, envelopes, carriers will not travel correctly if they are too thick or too stiff.
	False Double Document stops	Unusual dark marks, borders, or bands on document	Try running document upside down (image can be "flipped" later in process)
Feeder	Items do not feed correctly	Feeder motor runs but one or both feeder rollers don't turn (possible bad clutch within the roller)	Interchange the two feeder rollers, replace one or both if problem follows roller or persists
		Feeder motor runs, and feeder rollers turn but items will not move out of the feeder	Feeder roller tires or the documents are worn or soiled. Clean / replace the tires and retry. Ensure documents do not have a glossy coating.
		Feeder motor runs but orange document belt is not moving	Examine belt path to ensure belt has not come off a roller or is jammed by debris. Return for service if belt is broken or cannot be moved by hand.
		Feeder motor does not run	Verify no documents or debris in track
			Verify Digital Check-branded Endorser Cartridge is installed. Error messages indicating "Wrong Cartridge Type" (or similar) are a clue. Unit will not feed if non-Digital Check cartridge is installed.
			Verify endorser cartridge is firmly seated. Unit won't feed if cartridge is not making good contact in its housing.
			If problem exists using other applications the unit requires repair
	More than one document is fed (doubles, multiple	Inadequate work preparation	Ensure work is properly jogged, aligned, and loaded correctly in the feeder
	feeds, "piggy-backs")	Worn separator	or torn off
	Items skew as they are	Inadequate work	Ensure work is properly logged aligned and
	fed	preparation Worn separator tire	loaded correctly in the feeder
	False "Honner Empty"	Items not properly	Items should be logged then logded into feeder
	messages	loaded in feeder hopper	hopper with leading edge of deck touching front feeder wall
		Dirty hopper sensor	Clean the hopper sensor
		Defective hopper sensor	Return unit for service



Feeder (cont'd)	Flow will not restart after a jam	Application is not checking to ensure its messages are being accepted by the	Refer problem to application provider
		Application does not send "stop flow" then "start flow" for each start command	Refer problem to application provider
	Flow will not restart after a jam	Operator or application is not allowing enough time after error recovery before attempting to flow	After error recovery operator should wait at least 4 seconds before attempting to flow. "Feeder Jams" require operator to slide documents back or out of the feeder then reinsert them before a restart. Application provider can verify that application has sufficient restart delay.
	Feeder flag does not open automatically (Pro Elite, Expert Elite, and Elite UV only)	Auto-opening is not enabled	Refer to your IT or application provider. If auto-opening flag is still not operational, return unit for service.
	Feeder flag is open and will not close automatically (Pro Elite, Expert Elite, and Elite UV only)		If the feeder flag is in an open position and will not close, it can be manually closed by opening the front cover and rotating the feeder flag drive belt until the flag is fully closed. If error continues, return unit for service
Readers	MICR reader has an excessive reject rate	Items have poor MICR print quality, or are worn/soiled	Frequently-reused items (like cash tickets or batch headers) should be replaced with a fresh supply. If possible, ask document provider to correct print quality problems.
		Inadequate work preparation	Ensure work is properly jogged, aligned, and loaded correctly in the feeder so it is presented properly to the MICR read head
		Staple/Debris near reader	Inspect reader area for staple on magnet or debris lodged at MICR head, remove if found.
		Read head is dirty	Clean the head by gently rubbing a business card or a piece of heavy paper back and forth over the face of the head
		Incorrect track speed	Depot service required
		Reader affected by electrical "noise"	Depot service required
	OCR reader has an excessive reject rate	Items have poor OCR print quality	May be a document type or work source. If other documents read well suspect print quality issues with the problem documents.



Readers (cont'd) OCR reader has an excessive reject rate (cont'd)		Inadequate work preparation	Ensure work is properly jogged, aligned, and loaded correctly in the feeder to reduce skew as documents pass the image cameras
		OCR scan band incorrectly defined, reader is not looking at correct area of the document	Application issue – refer to your IT or application provider
		Reader may be using an incorrect font	Application issue - refer to your IT or application provider
Image	Documents in images are skewed	Multiple causes	See "Feeder" conditions for skewed items
	Front or Rear or Both images missing for every document	Imaging is not enabled or is not configured correctly	Refer to your IT or application provider
Endorser (Pro Elite, Expert Elite, and Elite UV only)	No print – Error messages indicate "Wrong Cartridge Type"	Non-Digital Check cartridge installed	Remove the cartridge; install a Digital Check- branded cartridge. If problem persists the cartridge may be defective.
	No print – Error messages indicate "Missing Cartridge"	Ink cartridge is not installed or is not fully inserted	Install the ink cartridge if it is missing. If a cartridge is present, remove it, re-insert it fully and ensure that the cartridge latch is secured.
	No print at all or very light print	Empty/defective ink cartridge	Replace ink cartridge
		Incorrect print quality setting	Refer to your IT or application provider
	Characters present but poorly formed	Cartridge not fully seated against contacts	Remove/reinsert cartridge. Re-insert it firmly.
		Dirty/blocked cartridge nozzles	Clean cartridge with a damp cloth and retry
		Cartridge nearly out of ink	Install fresh cartridge
	Docs stop at endorser	Cartridge not fully seated or wrong cartridge type	Ensure Digital Check cartridge type, reseat cartridge.
	All documents stop at endorser, error code = 00 01 63 00 30	Cartridge not fully inserted	Insert cartridge firmly and ensure top latch is secured.
		Over current condition in cartridge or in the scanner's endorser driver circuits	Replace the cartridge; If problem persists the scanner requires service
	Cartridge does not work in any scanner	Defective or damaged cartridge	Ensure cartridge is being fully inserted into the endorser assembly. If a cartridge is properly installed in more than one scanner and still fails it must be replaced with a new cartridge.



## **Replacement parts / consumables**

To obtain replacement parts, call 847-446-2285 or visit Digital Check, customerservice@digitalcheck.com

The following <u>consumable</u> parts are available:

ltem	Part Number	Description
Endorser felt ,4- line Endorser Felt-single line	8227 4203-000 8227 5914-000	Felt and holder assembly-4 line Felt and holder assembly-single line
Feed roller and separator kit	750850920	Complete feed roller and separator set for 1 machine.
Endorser cartridge	822120984	4-line endorser cartridge
	MS0083	Single line endorser cartridge (55 DPM-built after 2017)
Feed/separator tire kit	750306904	Tires ONLY for 1 machine - 2 tan-colored feed tires, one blue separator tire. Lower-cost option for users who are comfortable replacing tires only.
Separator tire kit	750489908	Blue separator tires ONLY – kit of 25. Lower-cost option for users who are comfortable replacing tires only.

The following replacement parts are available:

Item	Part Number	Description		
FRU-Power Supply, Locking connector	82156761- 000	Elite models -for models starting with serial # 900xxxxx-Identify with locking, re-tractable connector to PCBA		
FRU, Power Supply 24V 36W 5.5x2.5mm -for all 1- line Ink Jet (or no ink jet) Elite models, Starting with serial # 918xxxxxx	82275943- 000	Power Supply with US line cord. Power supplies are not interchangeable! FRU-48-watt power supply (82276028-000) appearance is identical to 82275943-000 (FRU-36-Watt Power Supply). Use caution when ordering! B2275943-000 POWER SUPPLY- CONNECTOR PLUG Incorporated in 2018 Power Supply - CONNECTOR CONNECTOR PLUG Incorporated in 2018		
		SSM1-ELITE55	SS Elite-Identify with auto retract feeder flag and gray inner cover badge.	
		SSM1-ELITE55-IJ	55 DPM Elite-1-Line Ink Jet	
		SSM1-ELITE55-SE	55 DPM Elite-SE Firmware, No Ink Jet	
		SSM1-ELITE55- SEIJ	55 DPM Elite-SE Firmware, 1-line Ink Jet	



		SSM1-ELITE55- GIJ	55 DPM Elite 1-Line Ink Jet + Document Security Sensor	
		SSP1-ELITEM55	55 DPM 4- line Inkjet	
		SSM1-ELITEUV-IJ	100 DPM UV ELITE-1-Line Ink Jet	
FRU-Power Supply 24V 48W		Straight 2.5 MM lap top style power supply to PCBA connector. 48-watt power supply with US line cord.		
5.5x2.5mm		Elite models with 4-line Ink Jets for the following styles:		
-all 4-line Ink Jet 8227607 Elite 000 models- starting with serial #		SSP1-Elite55	55 DPM Elite, 4-line Ink Jet	
	82276078- 000	SSP1-Elite75	75 DPM Elite, 4- line Ink Jet	
		SSP1-Elite155	155 DPM Elite, 4-line Ink Jet	
		SSX1-ELITE-FS	SS Expert Elite, Full Speed, 4- line Ink Jet	
		SSX1-ELITE	SS Expert Elite, Low Speed, 4- line Ink Jet	
		SSP1-ELITEUV	SS PRO ELITE-UV, 4- line inkjet	
918XXXXX				
USB 2.0 cable	CA0049	10 foot / 3 meters A male to B male USB Cable		
AC line cord		Order by contacting the Digital Check at 847-446-2285 and specifying style B25-LC. A representative will assist you in specifying the correct style of line cord connector for your geographic region.		
Return shipping carton ASM	82275926- 000	Approved shipping packing for return shipment of complete unit		

The following cleaning supplies are available:

Item	Part Number	Description
Canned compressed air	750501900	Carton of 4 cans
Track cleaning spatula	750381907	Pack of 5
Track cleaning card	757200995	Package of 15
Track cleaning wipes	751804907	Package of 80