

# EC9100i and EC9600i Series Scanners User Guide

October 2019



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

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All units covered by this manual have no user-serviceable parts inside. In the event repairs are ever needed to any RDM product, they should be performed by RDM Corporation or an authorized representative of RDM Corporation. For information please contact RDM Corporation,

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# Introduction

The RDM EC9100i and EC9600i series scanners provide affordable functionality in a compact, efficient design. Featuring RDM's industry leading Progressive MICR Method and imaging technology, the EC9100i and EC9600i series scanners deliver optimum MICR read rates and image quality.

With several models and feature options to choose from, the RDM EC9100i and EC9600i series scanners are an ideal fit for payment applications such as remote deposit capture, check cashing, teller capture, healthcare POS, retail POS, and walk-in bill payments. Scanners are available in single-feed and auto-feed models, with speeds up to 90 documents per minute on some models.

Additionally, the EC9600i series network scanners provide IP addressability and increased connectivity options. Embedded software enables easy one-touch, web-based configuration, eliminating the need for installation on a PC. The EC9600i network scanner can be used as a shared resource that works with workstations, terminals, or tablets; can be used with Windows, Mac OS X, and Linux operating systems; and is compatible with Citrix and other thin client environments.

## About this guide

This guide describes the EC9100i and EC9600i series scanners, some basic operations, and how to maintain your scanner. For instructions on how to use your scanner to scan documents with your computer, contact your solution provider.

## Requirements

The scanner is for indoor use only. Keep the scanner dry; avoid areas of high humidity.

Do not remove any parts from areas that are not described in this guide. Removing parts from areas not described in this guide will void the warranty.

When you are working inside the scanner, such as when you are replacing the franker cartridge, make sure the scanner's power is disconnected.

## Recommendations

Record all distributor contact information for future reference.

Save the original box and packing material. Reuse them if the unit must be shipped to a new location or returned for service.

Position the unit so that the operator has easy access to the document path and a clear view of the LED. Do not put the unit close to a heat source, in direct sunlight, or close to any device that can emit electromagnetic interference, such as a computer monitor or power adapter.

# Models and features

The RDM EC9100i and EC9600i series scanners are available in several optional model configurations. All models include an integrated ID card imager.

All scanner models can also be licensed to perform optical character recognition (OCR) on documents with machine printed text (remittances, pay stubs). This can be used with different applications such as walk-in bill payment. You can tell if your scanner is licensed for OCR by the label on the bottom or back of the scanner.

EC9100i auto-feed 30 dpm models can be field upgraded to 90 dpm by purchasing a license from your software solution provider, scanner dealer, or RDM Corporation.

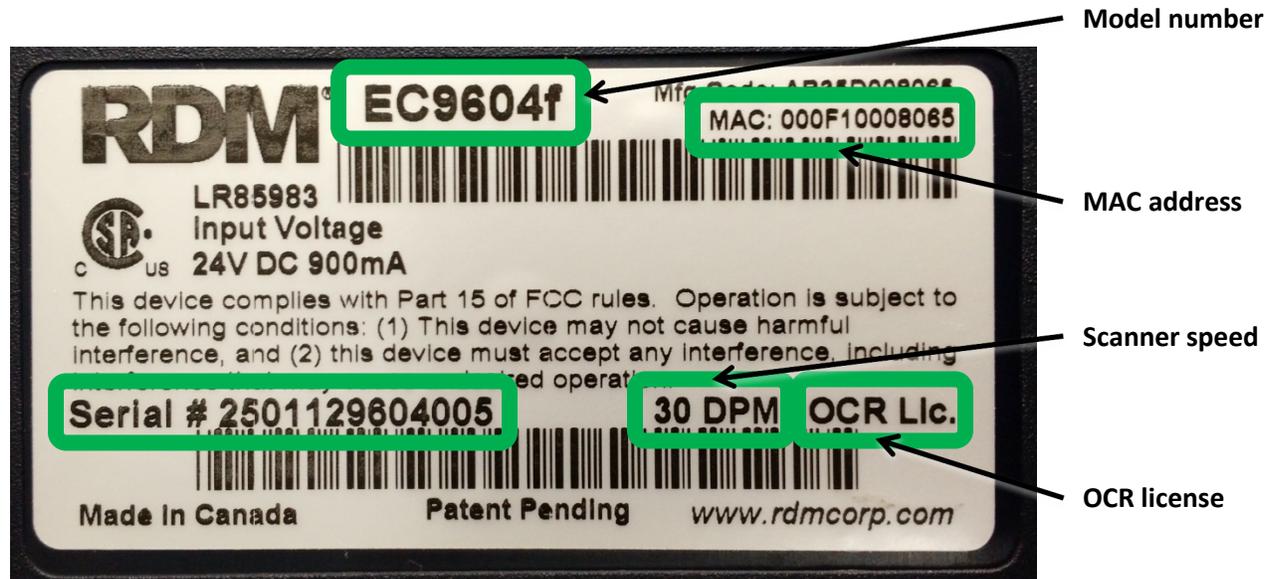
The following table lists the available EC9100i and EC9600i models.

Model	Description
EC9103f AF30X / AF90X	Auto-feed scanner with franker and inkjet endorser. (30dpm and 90dpm models available)
EC9104f AF30X / AF90X	Auto-feed scanner with franker, inkjet endorser and MSR. (30dpm and 90dpm models available)
EC9107f AF30X / AF90X	Auto-feed scanner with franker, inkjet endorser and receipt printer. (30dpm and 90dpm models available)
EC9108f AF30X / AF90X	Auto-feed scanner with franker, inkjet endorser, MSR, and receipt printer. (30dpm and 90dpm models available)
EC9111f SF	Single-feed scanner with franker.
EC9112f SF	Single-feed scanner with franker and MSR.
EC9113f SF	Single-feed scanner with franker and inkjet endorser
EC9114f SF	Single-feed scanner with franker, inkjet endorser and MSR.
EC9603f AF30X	Auto-feed network scanner with franker and inkjet endorser. (30dpm)
EC9604f AF30X	Auto-feed network scanner with franker, inkjet endorser and MSR. (30dpm)
EC9607f AF30X	Auto-feed network scanner with franker, inkjet endorser and receipt printer. (30dpm)
EC9608f AF30X	Auto-feed network scanner with endorser, MSR, and receipt printer. (30dpm)
EC9611 SMB	Single-feed network scanner.
EC9611f SF	Single-feed network scanner with franker.
EC9612f SF	Single-feed network scanner with franker and MSR.
EC9613f SF	Single-feed network scanner with franker, inkjet endorser.
EC9614f SF	Single-feed network scanner with franker, inkjet endorser and MSR.

## Your scanner

There is a label on your scanner that includes the following details about your scanner:

- The scanner's model number
- MAC address (EC9600i models only)
- The scanner's serial number
- The speed of your scanner (30 documents per minute in the example below)
- Whether the scanner is licensed for OCR (the example below is licensed for OCR scanning)



You can locate your scanner's label on the bottom or back of your scanner.

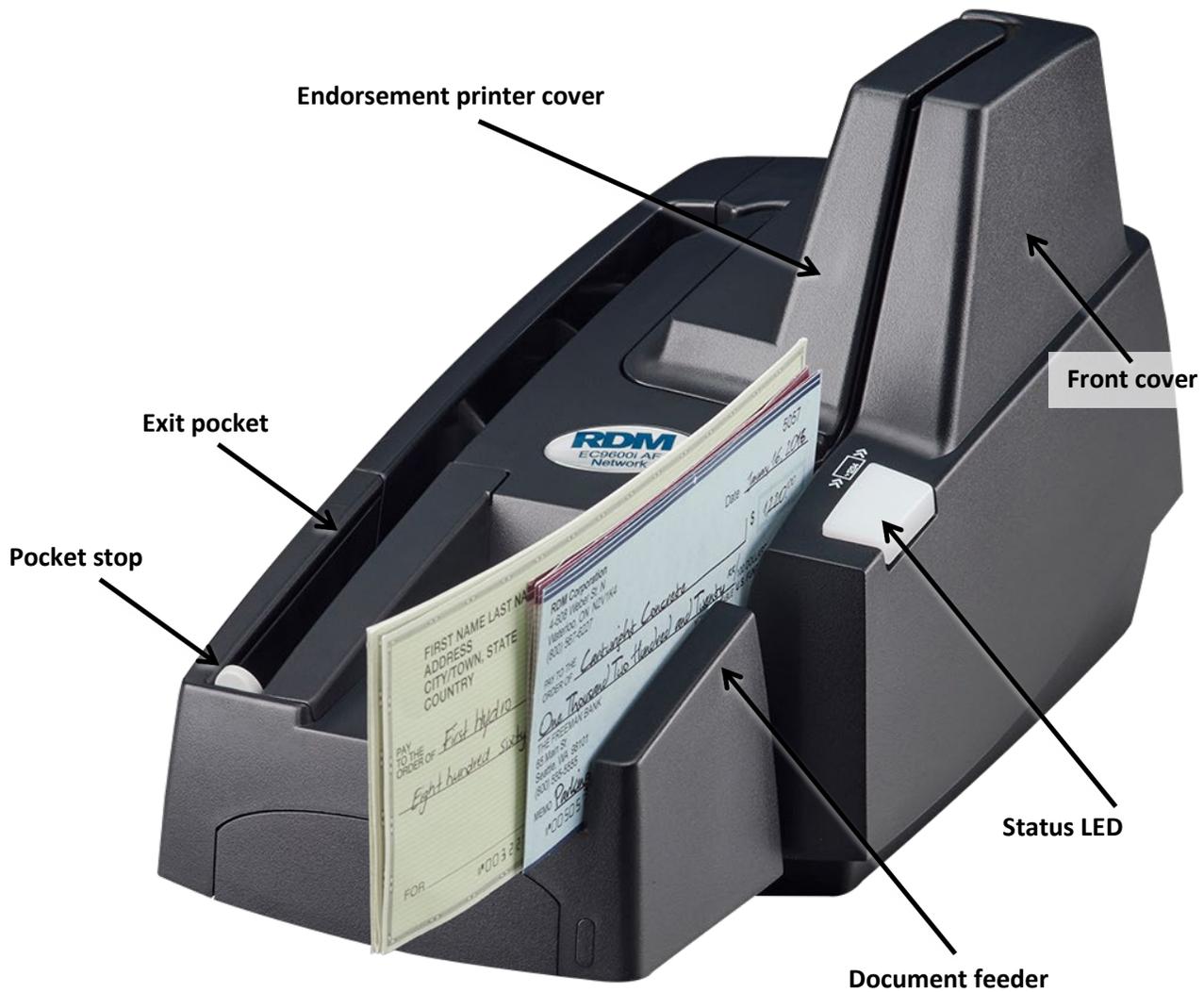
## Status LED

This status L.E.D. (Light Emitting Diode) is located on the front right of the scanner. The light indicates the status of the scanner. For more information, see *Light signals and beeps on page 24*.





## Auto-feed (AF30X and AF90X) models

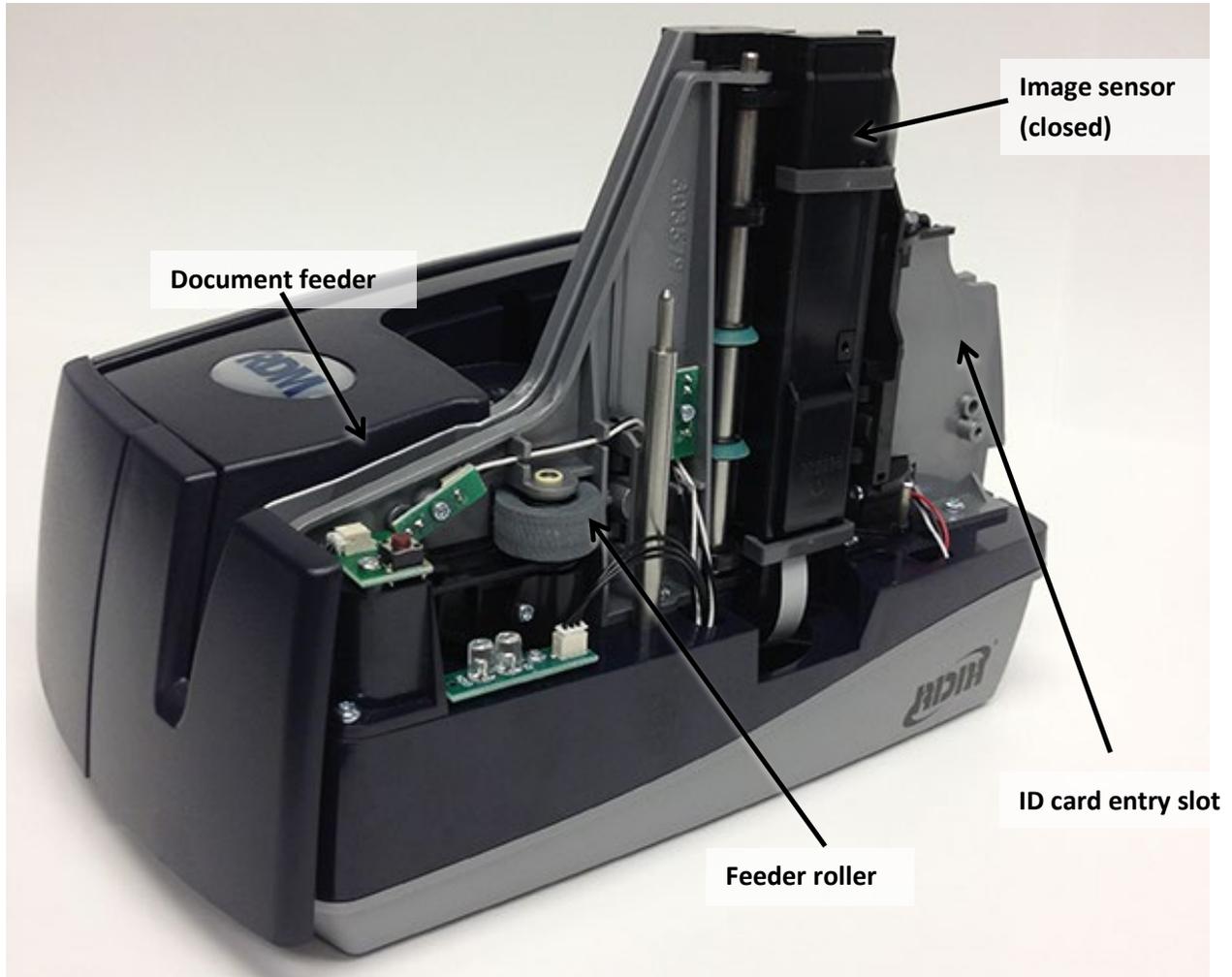


## Auto-feed (AF30X and AF90X) printer models

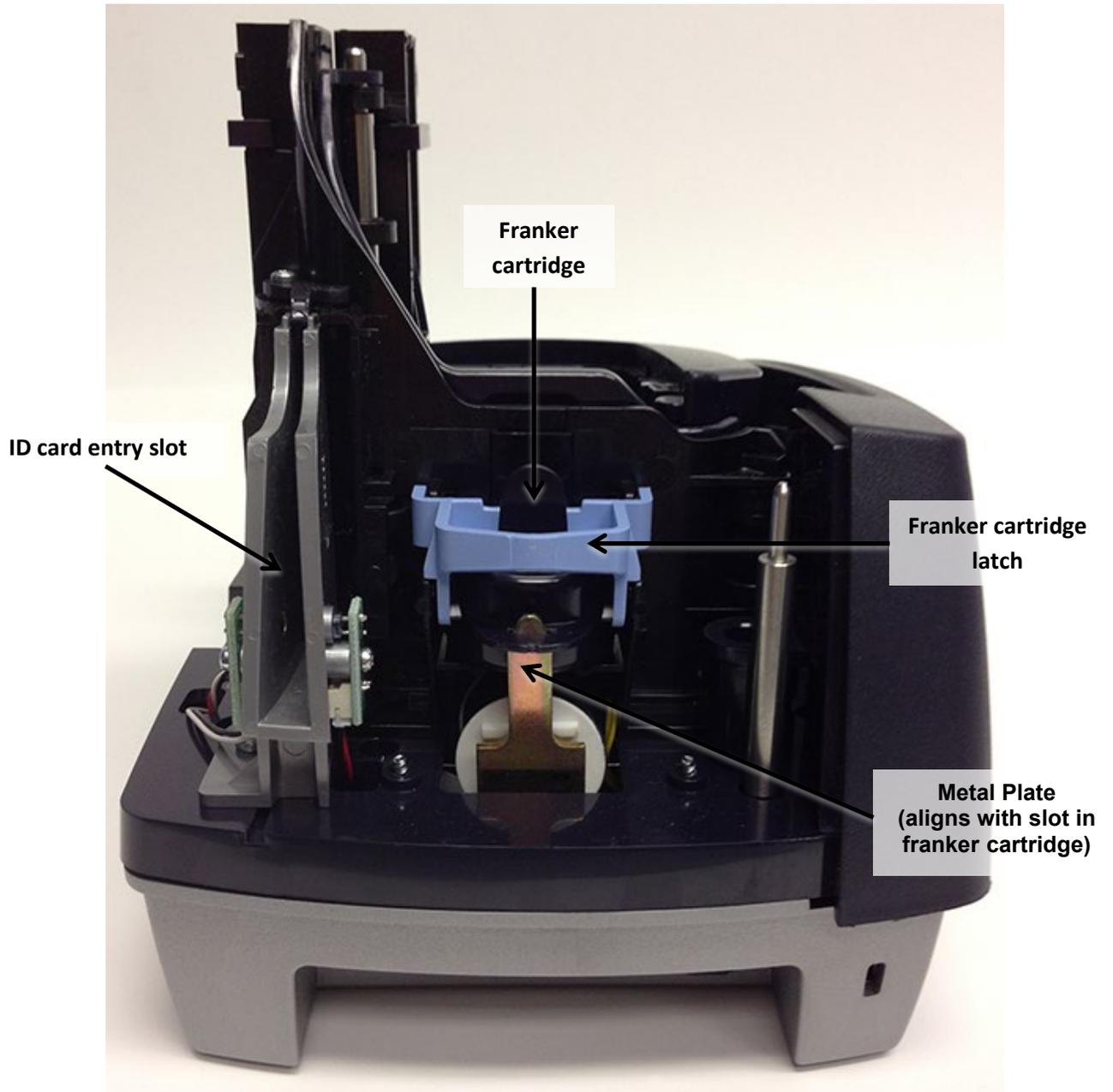


## Internal components

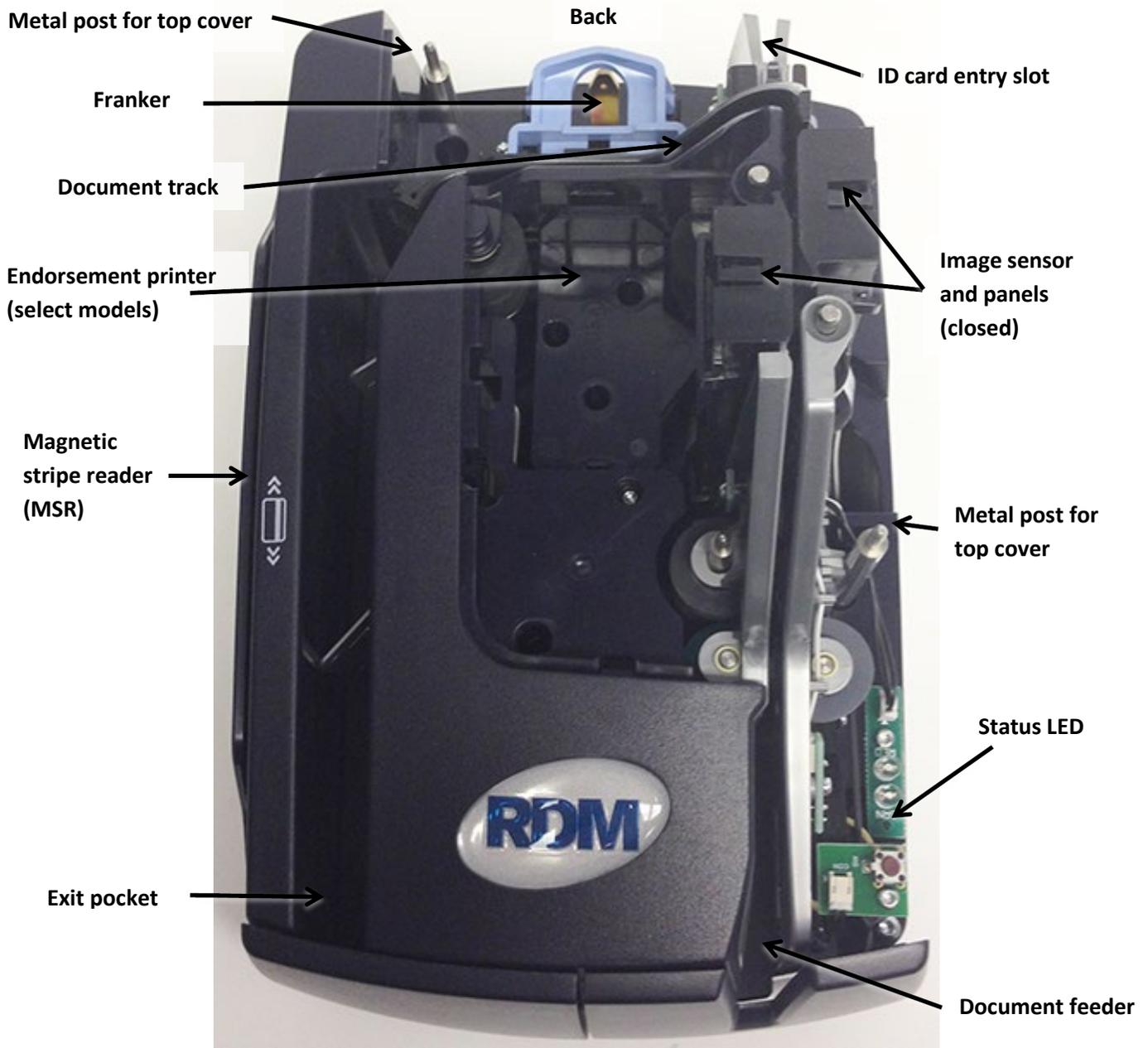
### Inside the front cover - side view



### Inside the front cover - back view



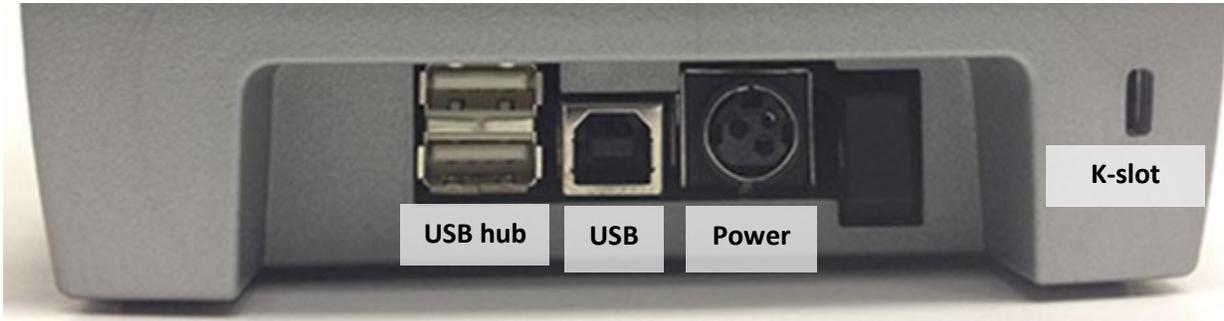
### Inside the front cover and endorsement printer cover - top view



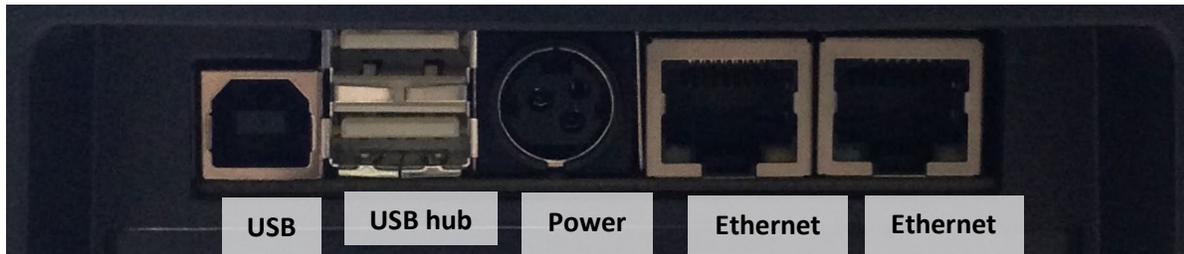
Front (extensions retracted)

## Connection ports

### EC9100i



### EC9600i



\* **Note:** Not all scanner models include every item shown in the diagrams.

Connector	Description
* USB hub (select AF models only)	You can use these ports to connect peripheral devices. <b>Note:</b> You cannot connect the scanner to your computer with these ports.
USB	High-speed 2.0 (480 mbps). Use this port to connect to a computer. You must use the USB A to B cable.
Power	Connect the power adapter to this port.
K-Slot	The K-Slot or Kensington® Security Lock lets you secure the unit with a cable (not provided) that locks into the slot. Cables can be purchased from your local computer supply store.
Ethernet (EC9600i only)	Use these ports to connect the scanner to your network with an Ethernet cable. EC9603f, EC9604f, EC9607f, and EC9608f models include a two-port Ethernet hub. EC9611f/12f/13f/14f models scanners have one Ethernet port. EC9611 SMB models do not have an Ethernet port.

# Setting up your scanner

To set up your scanner:

- Choose a location.
- Unpack the shipping box.
- Inspect the scanner's features.
- Insert the franker cartridge (sold separately).
- Insert the inkjet endorser printer cartridge (sold separately).
- Insert the receipt paper roll, if one is included with your scanner.

## Choosing a location

Locate your scanner in a place that:

- Has a flat surface, such as a counter top or table.
- Is convenient for the scanner operator.
- Offers adequate ventilation and protection from elements such as heat, dust, oil, or moisture.
- Is close to the application computer. Depending on your scanner model, a USB 2.0 high speed or Ethernet connection is required.
- Is close to an electrical outlet.

## Unpacking the shipping box

1. Open the top of the box.
2. Remove and unwrap the items. Lift the scanner out of the box from the bottom of the scanner.
3. Save the box and packing material for future use.

The shipping box includes the following items:

- Scanner
- USB cable (A to B)
- Ethernet cable (network models except EC9611 SMB)
- Power adapter
- 5-pack inkjet blotter (models with inkjet endorsement printer)
- 3" thermal receipt paper roll (models with receipt printer)

## Connecting the power cord

1. Align the flat side of the power connector so that it is facing up.
2. Insert the round end of the power cord into the power port on the back of the scanner until it clicks into place.  
Note: Although the status light on the scanner might illuminate without the power cord being fully connected to the scanner, **you must push the power cord until it clicks into place for the scanner to function correctly.**
3. With the power cord connected to the power adapter, plug the other end of cord into an electrical outlet.
4. If your power cord has an on/off switch, make sure the switch is in the “on” position.

## Disconnecting the power cord

**Caution:** Disconnecting the scanner from a power source while the scanner is processing a transaction might cause data loss.

The power cord has a sleeve on it that secures it to the unit. The security sleeve prevents the power cord from being pulled out of the unit accidentally.

1. Hold the unit in place with one hand to prevent the unit from falling.
2. With your other hand, slide the power cord security sleeve back and pull the power cord free of the scanner.

## Installing cartridges and paper roll

For installing the franker cartridge, see *Replacing the franker cartridge on page 28*.

For installing the endorser inkjet cartridge, see *Replacing the endorser inkjet cartridge on page 28*.

For installing the paper roll, see *Replacing the paper roll for the printer on page 30*.

## Drivers and applications

There are many applications that support the RDM EC9100i and EC9600i scanners. Most are available from third-party vendors. If you are not sure where to acquire your check scanning application, check with whoever provided your scanner.

The drivers for RDM EC9100i series scanners are installed on your computer when you install your check scanning application.

## EC9600i scanning application requirements

The EC9600i series network scanners do not require that you install any drivers on your computer. However, depending on your scanning application, there might be some additional setup required for the application to connect to the scanner. For example, you might need to:

- Install a security certificate on your computer.
- Make changes to your browser's security settings.
- Configure or select your scanner in the check scanning application.

For more information about EC9600i setup requirements, see your scanning application's documentation.

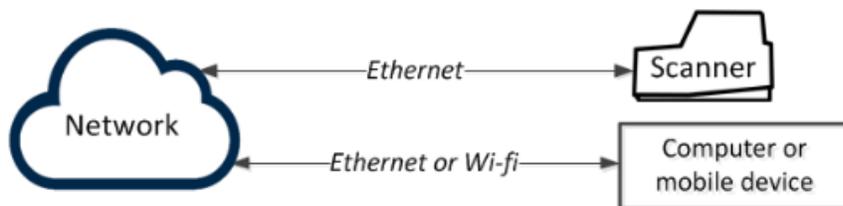
## Connecting the EC9600i network scanner

The EC9600i network scanner can connect to your computer via a USB cable or over the network. There are three ways to hook up the scanner:

- Scanner and computer have separate connections to the network.
- Computer is connected to the network through the scanner. (EC9603f, EC9604f, EC9607f, and EC9608f only.)
- Scanner is connected to the computer using USB.

### Option 1: Scanner and computer have separate connections to the network

In this setup, you connect the scanner to the network. Your computer retains whatever network connection it had previously.

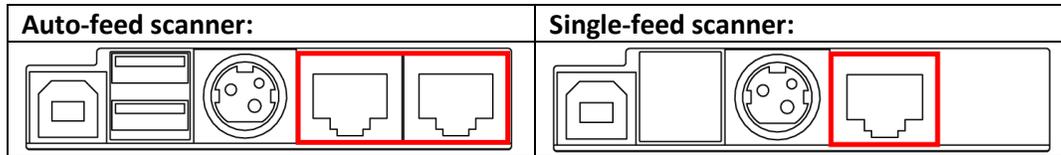


Considerations:

- All workstations on the same network can connect to the scanner.
- Requires a dedicated Ethernet connection for the scanner.
- Can be used by both auto-feed and single-feed network scanners.

To hook up:

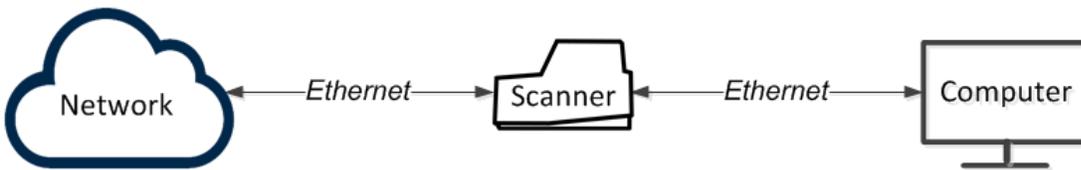
1. Plug an Ethernet cable into one of the Ethernet ports on the back of the scanner (marked in red below).



2. Plug the other end into an Ethernet network jack.

**Option 2: Computer is connected to the network through the scanner (auto-feed scanner only)**

In this setup, you connect the scanner to the network. You then connect your computer to the network through the scanner.

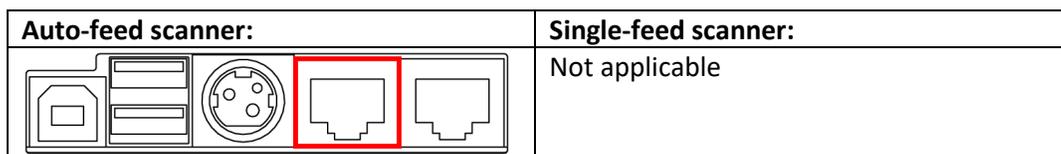


Considerations:

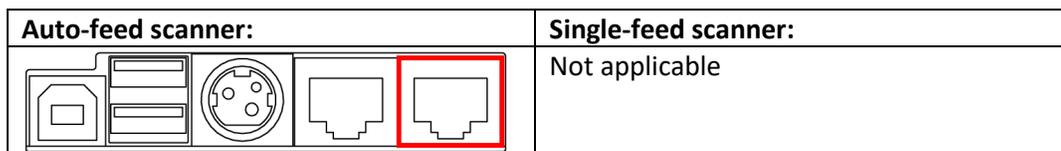
- All workstations on the same network can connect to the scanner.
- Does not require a dedicated Ethernet connection for the scanner.
- The computer that connects to the network through the scanner is limited to a 100 MB/s connection.
- Requires two Ethernet ports and so is only supported on EC9603f, EC9604f, EC9607f, and EC9608f scanners.

To hook up:

1. Disconnect the Ethernet cable that is plugged into your computer and connect it to the scanner in one of the two Ethernet ports (marked in red below).



2. Using the Ethernet cable that is included in your scanner box, connect one end to the Ethernet port on the back of your scanner (marked in red below) and the other end into the Ethernet port on your computer.

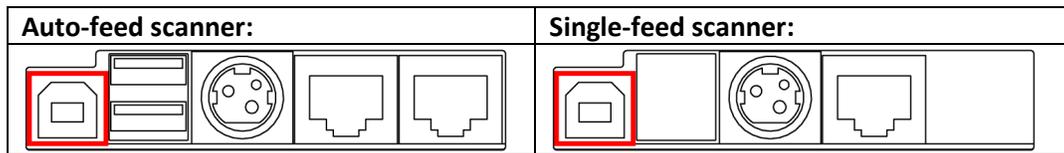


**Option 3: Scanner is connected to the computer using USB****Considerations:**

- The only workstation that can use the scanner is the one it is connected to.
- Does not require a dedicated Ethernet connection for the scanner.
- Can be used by both auto-feed and single-feed network scanners.

**To hook up:**

1. Plug the USB cable (included) into the square USB port on the back of the scanner (marked in red below).



2. Plug the other end into a USB port on your computer.

**Adding the scanner to the network**

Depending on your network's security settings, an administrator might need to add the scanner to the network. The administrator will need the scanner's MAC address and device name:

- The MAC address is printed on the bottom or back of the scanner.
- The scanner's device name is `rd<scannerserialnumber>`. For example, `rd2501129604008`. The serial number is printed on the bottom or back of your scanner.

# Operating the scanner

**Caution:** Do not open the cover or try to access the inside of the scanner while it scans a document.

## Preparing documents

To reduce the possibility of errors and damage to the unit:

- Remove all folds and creases in the document.
- Remove any paper clips and staples from the document.
- Make sure that documents are not stuck together.
- Make sure that documents are dry.

## Feeding documents

The scanner unit is ready to accept documents when the LED is flashing green. Insert the documents either one at a time with single-feed (SF) models, or in a batch with auto-feed (AF) models.

Make sure that you place the documents into the feeder with the MICR line at the bottom and facing towards the outside of the scanner.

**Caution:** Adjust the exit extension or the pocket stop to fit the documents that you are scanning. Documents can be damaged or jam in the scanner if the exit extension or pocket stop is not fitted to the documents.

### Single-feed (SF) models

1. Start the scanning process. For example, click Scan on your scanning application.
2. Hand-feed a document into the feeder until the scanner pulls the document through the transport.



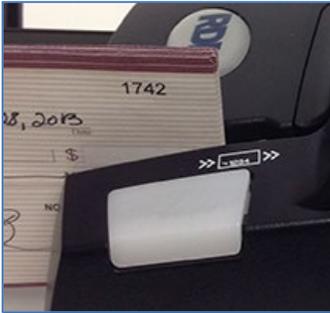
The document is scanned and processed.

3. Repeat steps 1 and 2 until you have scanned all of your documents.

### Auto-feed (AF) models

1. Place up to 30 documents into the document feeder.

Note: Do not push documents past the check icon on the right side of the document feeder.



2. If you are required to do so, start the scanning process. For example, click Scan on your scanning application.

### Swiping magnetic stripe cards (optional)

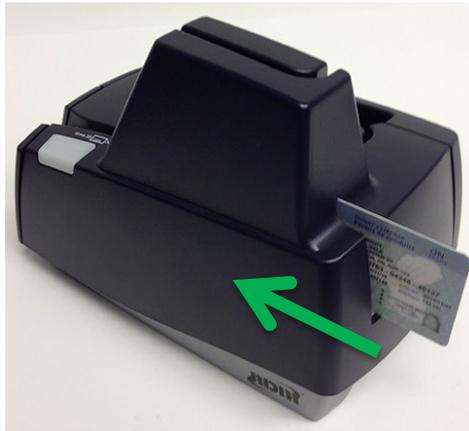
1. Place the card in the slot on the side of the scanner with the stripe down and facing towards the body of the scanner.
2. Swipe the card from front to back.



## Imaging identification cards

The ID imager uses the same track as the document scanner, but you insert ID cards at the back of the scanner. Insert the card into the scanner so that the front of the ID card faces away from the scanner. The ID imager scans both the front and back of the identification card.

1. Insert the identification card into the back of the scanner track until you feel the scanner pinch the card.  
The scanner pulls the card through the track.
2. Remove the card from the front of the scanner track.



## Understanding light signals

The scanner's status is shown through a single, multistate LED (light-emitting diode), which is the light on the top, front, right-hand side of the unit. The tables below describe typical status signals and their meanings.

### EC9100i series signals

Signals	Meaning
<i>After starting the scanner:</i> Red and green flashing cycle	The scanner is being configured by the scanning application.
Green solid	The scanner is ready and idle.
<i>When scanning:</i> Green flashing	The scanner is waiting for the user to insert a document into the feeder.
<i>When scanning:</i> Green and red flashing cycle	The scanner is processing the documents. Wait for the scanner to finish.
<i>When scanning:</i> Red flashing	An error occurred while the scanner was processing the document. Check your PC application for instructions or refer to your local procedures. If you need more help, contact your distributor (reseller).

**Signals in a typical document processing cycle**

1. The LED is Green (Solid): The unit is idle.
2. The LED is Green (Flashing): The scanner is waiting for a document to be inserted for scanning.
3. The LED is Green/Red (Flashing): The scanning operation is in progress.
4. The LED is Green (Solid): The scanning operation is complete. The scanner has returned to its idle state.

**EC9600i series signals**

Signals	Meaning
<i>Immediately after starting the scanner:</i> Solid red	The scanner is starting.
Long-red and two short-green flashing cycle	
Long-green and short-red flashing cycle	The scanner does not detect an Ethernet or USB connection.
Long-green and short-green flashing cycle	The scanner is ready and idle. <i>Note: The idle signal depends on your scanning application.</i>
Solid green	
<i>When scanning:</i> Green flashing	The scanner is waiting for the user to insert a document into the feeder.
<i>When scanning:</i> Solid green	The scanner is waiting for the user to take action on the PC application.
<i>When scanning:</i> Green and red flashing cycle	The scanner is processing the documents. Wait for the scanner to finish.
<i>When scanning:</i> Red flashing	An error occurred while the scanner was processing the document. Check your PC application for instructions or refer to your local procedures. If you need more help, contact your distributor (reseller).

# Maintaining your scanner

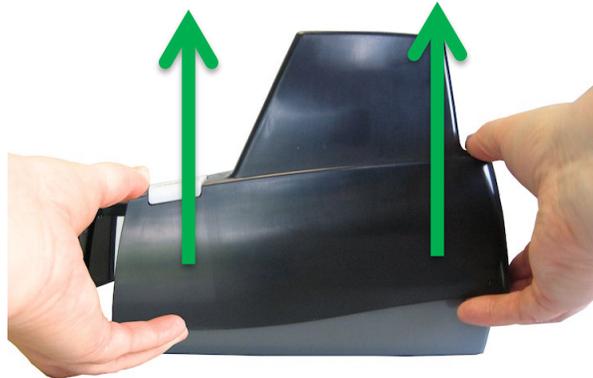
## Removing the covers

RDM EC9100i and EC9600i scanners have two covers that can be removed in order to clean the image sensor, replace cartridges, or clear paper jams.

### Front cover

Remove the front cover when you need to clear paper jams, replace the franker cartridge, or clean the image sensor.

1. Disconnect the power cord from the scanner.
2. Pull the insertion extensions forward.
3. Grasp the front and the back end of the front cover.
4. Gently pull the cover upwards until it detaches from the scanner.



### To replace the front cover:

**Caution:** Before you replace the front cover, make sure the insertion extensions are pulled forward. Otherwise, you might damage the front cover.

1. Carefully place the front cover over the scanner assembly. Make sure that the cover overlaps the assembly correctly by lining it up with the metal posts.
2. Gently push the cover down until it snaps into place.

### Endorsement printer cover

Remove the endorsement printer cover when you need to clear paper jams, to insert or replace the endorser inkjet printer cartridge, or to clean the image sensor.

1. Grasp the top of the endorsement printer cover.
2. Gently pull the cover upwards until it detaches from the scanner.

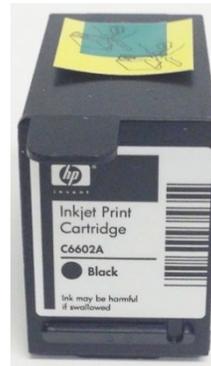
**To replace the endorsement printer cover:**

1. Carefully place the endorsement printer cover over the scanner assembly; make sure that the cover overlaps the assembly correctly.
2. Gently push the cover down until it snaps into place.

## Franker and endorser inkjet cartridges



**Franker cartridge**



**Inkjet cartridge**

The franker cartridge creates a red ink stamp that defaces the front of each check with a message that says “Electronically Presented”. Auto-feed (AF) EC9100i and EC9600i scanners come with a franker cartridge.

Certain EC9100i and EC9600i scanners are capable of endorsing checks but the cartridges are not included with scanners. With your scanning application, the endorser inkjet printer places user-defined text on the rear of the check.

Franker or inkjet cartridges can be purchased by contacting your solution provider or reseller. See Consumables and Accessories on page 45.

Follow the directions below to insert the cartridges into the scanner unit.

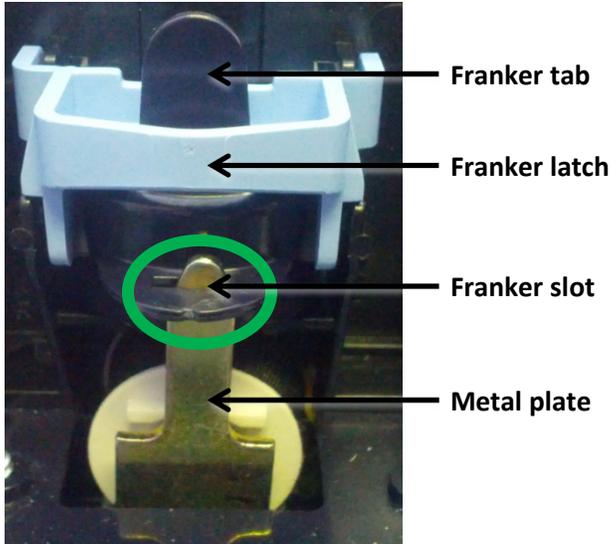
**Caution:**

- Ink might be harmful if swallowed.
- Avoid contact with eyes.
- Damage to the unit or the cartridge which results from modifying the inkjet cartridge is not the responsibility of RDM.
- The inkjet cartridge is not refillable.
- Inkjet cartridges are not licensed for modifications.
- RDM may change product designs, features, or specifications at any time.

## Installing the franker cartridge

1. Remove the front cover of the scanner.

At the back of the scanner, the franker cartridge is held in place by a blue franker latch and a metal plate.



2. Lift the blue franker latch.
3. Pull the franker cartridge out of the scanner by the franker tab.
4. Insert the new franker cartridge. Make sure the top of the metal plate fits into the slot in franker cartridge (as pictured).
5. Secure the franker cartridge:
  - a. Push the metal plate towards the body of the scanner (pushing in the franker cartridge).
  - b. Lowering the blue latch over the franker cartridge until it snaps closed.
6. Replace the scanner cover.

## Installing the endorser inkjet cartridge

When you place the new inkjet cartridge into the holder, make sure that you insert it at the angle described in the following steps. If you do not insert the cartridge properly, it might not make contact with the document when it is scanned.

1. Remove the endorsement printer cover.
2. Pull the inkjet latch away from the inkjet cartridge (as pictured).



3. Pull the inkjet cartridge out of the scanner.
4. To insert the new inkjet cartridge, pull the inkjet latch back and place the inkjet cartridge into the holder. The cartridge needs to be at an angle so that the back of the cartridge is lower than the front of the cartridge.



5. Push the cartridge down into the holder until the cartridge snaps into place. Once installed, the inkjet cartridge sits on a slight angle with the back of the cartridge lower than the front.
6. Make sure there is no gap between the inkjet cartridge and the endorsement channel.
7. Replace the endorsement printer cover.

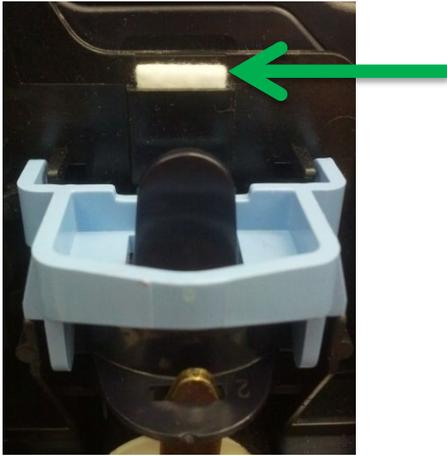
## Replacing the inkjet blotter

Scanners with endorsement printers include an inkjet blotter that absorbs excess ink from the endorsement process. Over time, the blotter might stop absorbing ink effectively and so should be replaced. Scanners with endorsement printers come with five replacement blotters.

To replace the inkjet blotter:

1. Remove the front cover of the scanner.

At the back of the scanner, above the franker cartridge, you can see the top of the inkjet blotter, as shown below:



2. With your finger or tweezers, remove the inkjet blotter from its slot.
3. Dispose of the used blotter.
4. Insert the replacement inkjet blotter into the slot.

## Replacing the paper roll for the printer

If your scanner has a printer, the following steps describe how to replace the paper roll.

1. Press the printer door release button and completely open the printer door.
2. Remove the empty paper roll from the paper compartment.
3. Insert the new paper roll into the compartment, with the end of the paper roll rolling from the top.
4. Pull the paper out of the compartment and close the printer door so that the end of the paper sticks out of the compartment (as pictured). Push the door closed in the center of the printer door.



Make sure the cover is completely closed. If you push the cover from the sides, the cover might not close completely. When closed correctly, both sides of the printer cover are flush with the scanner.

5. Rip off any access paper sticking out of the printer cover.

## Cleaning your scanner

RDM recommends that you periodically clean the scanner to remove dust, ink and debris build-up to ensure optimal performance and extended scanner life.

Please follow the cleaning methods provided below.

There are two ways to clean your RDM scanner.

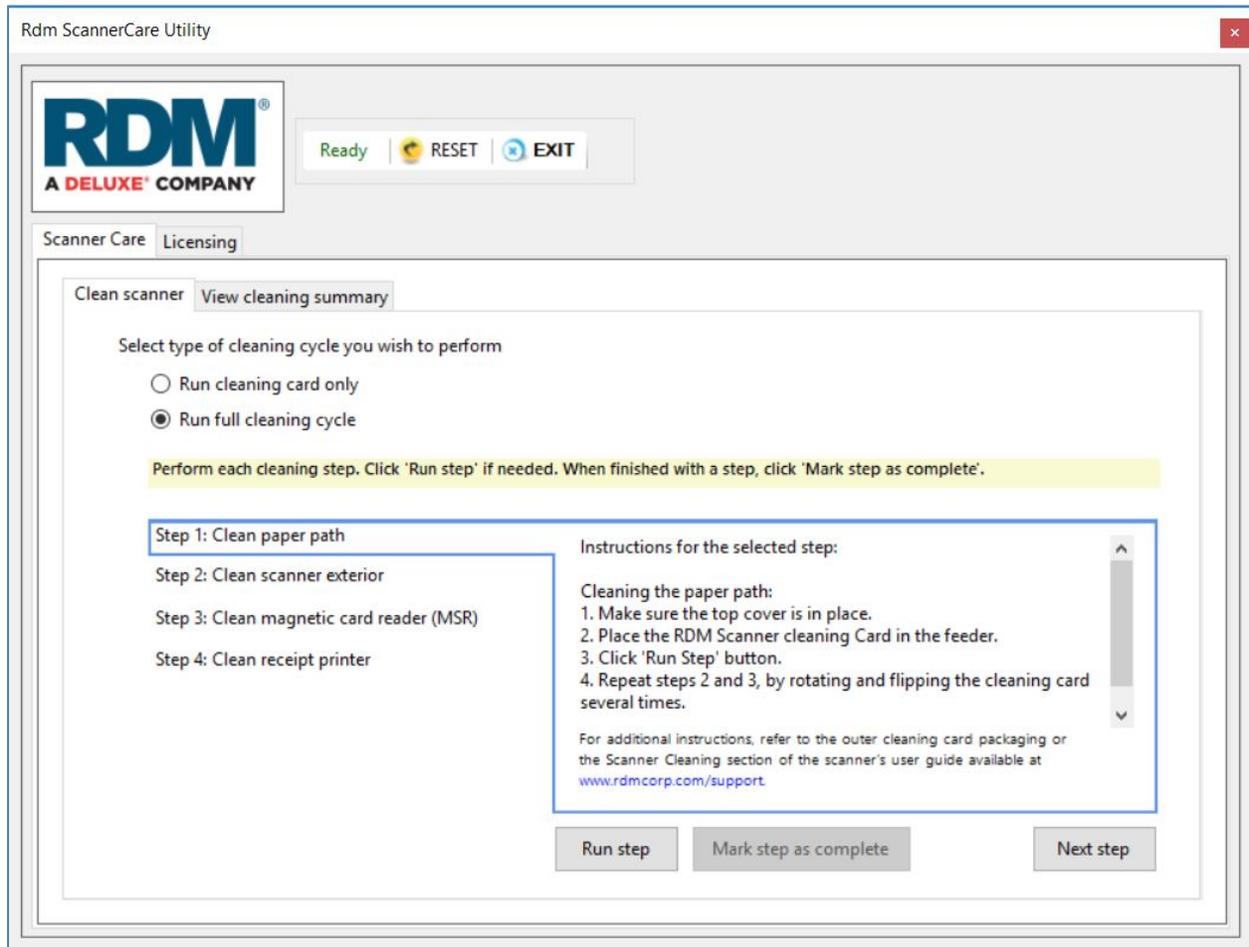
- Use the RDM ScannerCare application installed on your computer, or within the scanner itself in the case of the EC9600i.
- Follow instructions provided in *Manual cleaning* on page 34.

### Cleaning the scanner with the RDM ScannerCare application

If you cannot find the ScannerCare program, you can clean your scanner manually. See *Manual cleaning* on page 34.

1. Run the ScannerCare program:
  - For EC9100i, search your computer for “ScannerCare”, and run the ScannerCare application.
  - For the EC9600i, go to the EC9600i Dashboard from within your browser.  
ScannerCare will automatically connect to your scanner.
2. Select the “ScannerCare” tab.
3. Select the “Clean scanner” sub-tab.

Here is the “Clean scanner” sub-tab for the EC9100i:



Here is the “Clean scanner” sub-tab for the EC9600i:

**RDM EC9600i Network Scanner Dashboard**

Properties Configuration Administration **RDM ScannerCare** Scanner Test Help

Clean scanner View cleaning summary

Select type of cleaning cycle you wish to perform

Run cleaning card only  
 Run full cleaning cycle

Perform each cleaning step. Click "Run step" if needed. When finished with a step, click "Mark step as complete".

Step 1: Clean paper path  
 Step 2: Clean scanner exterior  
 Step 3: Clean magnetic card reader (MSR)  
 Step 4: Clean thermal receipt printer

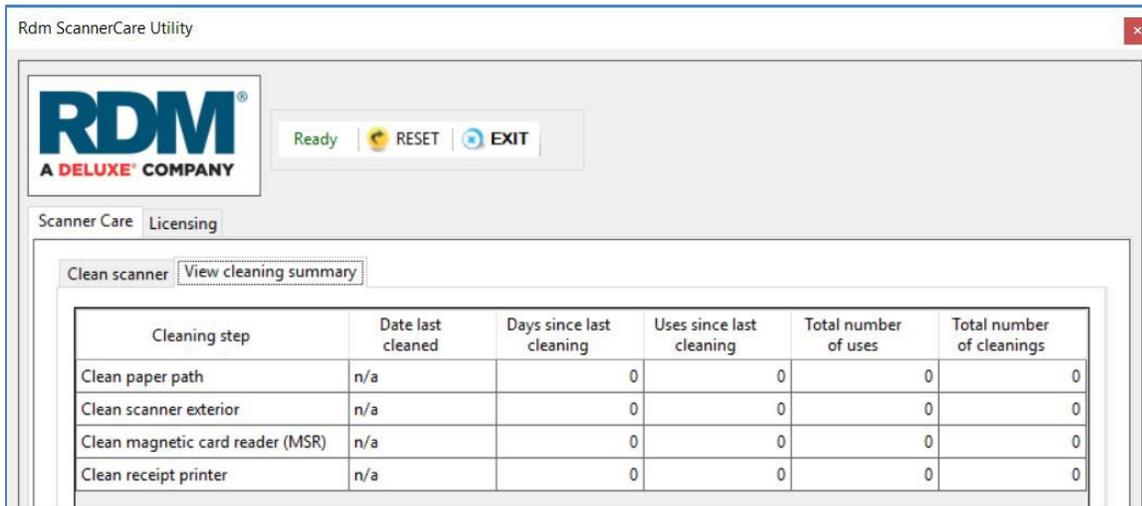
⇒ Instructions for the selected step:  
 Cleaning the paper path:  
 1. Make sure the top cover is in place.  
 2. Place the RDM Scanner Cleaning Card in the feeder.  
 3. Click the 'Run Step' button.  
 4. Repeat steps 2 and 3, by rotating and flipping the cleaning card several items.

For additional instructions, refer to the outer cleaning product packaging or Scanner Cleaning section of the scanner's user guide available at [www.rdmcorp.com/support](http://www.rdmcorp.com/support).

Run step Mark step as complete Next step

4. Choose to run either the cleaning card only, or run a full cleaning cycle.
5. Perform each step. Click on each step as needed, and follow the instructions.
  - a. Click the “Run step” button to begin the step.
  - b. When the step is completed, click the “Mark step as complete” button.
  - c. Click on either the next step, or the “Next Step” button to advance to the next step.
  - d. Continue until all steps are completed.
6. Select the “View cleaning summary” sub-tab.
7. View the cleaning summary for the scanner. The summary shows various information related to each scanner cleaning step.

Here is the “View cleaning summary” tab for the EC9100i:



Here is the “View cleaning summary” tab for the EC9600i:



## Manual cleaning

Scanners perform best when all working surfaces are clean and free of foreign material.

### Caution:

- Always disconnect the scanner from its power source before manual cleaning.
- Solvents or harsh cleaners might damage or discolor the cabinetry.

### *Cleaning the outside cabinetry*

Use a damp cloth and mild soap.

### *Cleaning the inside of the scanner unit*

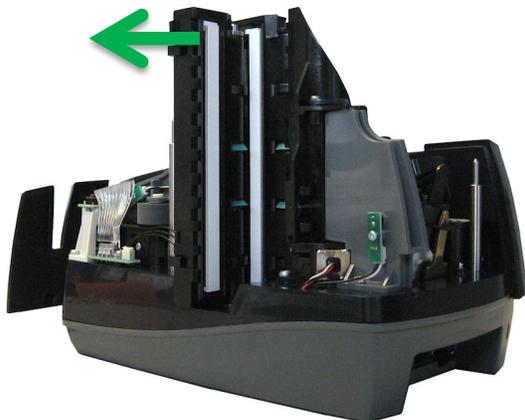
1. Remove the front cover and the endorsement printer cover.

2. Use a dusting brush designed for use with electronic equipment or a compressed air duster to clean inside the scanner.
3. Replace the covers.

### *Cleaning the image sensor*

**Caution:** Always disconnect the unit from its power source before cleaning the image sensor.

1. Remove the front cover and the endorsement printer cover.
2. Open both the front and back panels that cover the image sensor.  
The front panel can open up to 90°. The back panel opens only a few degrees.
3. Use any of the following to gently remove any ink or dust from the image sensor.
  - A lens cleaning tissue.
  - A damp lint-free cloth.
  - A cotton swab dampened with rubbing alcohol.
4. Clean the glass on each panel thoroughly.
5. Replace each of the covers.



# Troubleshooting

In the course of everyday operations, you might encounter minor malfunctions with RDM EC9100i and EC9600i series scanners. Before calling for service, review the troubleshooting steps below.

## Scanner does not respond

1. Ensure the cable that connects your scanner to your computer is properly connected to the correct port on the back of the scanner and computer (according to instructions provided by your distributor).
2. Make sure that the correct power cord is connected to the unit. If your power cord has an on/off switch, make sure the switch is in the “on” position. Change or replace the cord, if necessary.
3. If the problem persists, contact your solution provider or help desk.

## Card transactions do not function properly

1. Ensure that you are swiping the card properly.  
The black magnetic stripe on the back of the card must face downward and towards the body of the scanner.
2. Try using another card to ensure the first card was not defective.
3. If the problem persists, contact your solution provider or help desk.

## Printer does not print

1. Ensure that the printer has not jammed.
2. Ensure that the end of the paper rolls from the top of the roll.
3. Ensure that the printer door is completely closed.
4. If the problem persists, contact your solution provider or help desk.

## Can't connect to EC9600i network scanner

If your scanning application cannot connect to the network scanner, try the following troubleshooting steps:

- Make sure the scanner is connected to a power source and to the network (or to your computer via USB). The light should be solid green.
- Your scanning application might require that you install security certificates to use the scanner. Make sure that you have installed these certificates. See your scanning application's documentation for how to install the certificates.

- If your scanning application uses your internet browser, it might require that you make changes to the browser's security settings. See your scanning application's documentation for how to configure your browser.
- If you're using a network connection and there are multiple network connections in your work area (for example, Ethernet cables or Ethernet wall jacks), try connecting the scanner to another connection.
- Try to access the network scanner dashboard:

If you can open the scanner dashboard, then your computer can connect to the scanner but something is preventing your scanning application from connecting to it. This situation typically indicates that you need to install security certificates or configure your browser's security settings. To confirm that you have installed certificates and configured your browser, see the documentation for your scanning application.

To access the network scanner dashboard:

1. Find out your scanner's serial number. The serial number is printed on the bottom or back of the scanner.
2. Open a browser.
3. In the URL bar, enter the scanner dashboard address:
  - On Windows, enter: `https://rd<scannerserialnumber>`
  - On Macintosh, enter: `https://rd<scannerserialnumber>.local/`

If you can't open the dashboard, then a network administrator might need to add the scanner to the network. The administrator will need the scanner's MAC address and device name:

- The MAC address is printed on the bottom or back of the scanner.
- The scanner's device name is `rd<scannerserialnumber>`. For example, `rd2501129604008`. The serial number is printed on the bottom or back of your scanner.

# EC9600i network scanner dashboard

You can use the network scanner dashboard to configure and troubleshoot the scanner.

To access the network scanner dashboard:

1. Open a browser.
2. In the URL bar, enter the scanner dashboard address:
  - On Windows, enter: `https://rd<scannerserialnumber>`  
For example, `https://rd1234567890123`
  - On Macintosh, enter: `https://rd<scannerserialnumber>.local/`  
For example, `https://rd1234567890123.local`

Here is an example of the dashboard:

## RDM EC9600i Network Scanner Dashboard

Properties	Configuration	Administration <span style="color: red; font-weight: bold;">●</span>	RDM ScannerCare	Scanner Test	Help
------------	---------------	--	-----------------	--------------	------

Model	EC9608 [+]
S/N	2404019608010
Scanner Firmware Version	1.2.0.223 [+]
Operation Status	Not Claimed
<b>System</b>	
Time	Wed January 10 09:39:17 2018
Uptime	4 days, 17 hours, 22 minutes, 7 seconds
CPU Usage (user/ sys/ idle/ wait)	0.03/ 0.02/ 99.94/ 0.00
Total/Free RAM Memory	120452K/ 71512K
Total/Free Flash Memory	102300K/ 44484K
<b>Network</b>	
MAC Address	00:0f:10:00:80:0a
Link Status	Up
IP Type	Assigned by a DHCP Server
IP Address	10.41.54.90
Subnet Mask	255.255.254.0
Gateway	10.41.54.1
DNS	10.41.10.21 10.41.10.22
MTU	1500
<b>Statistics</b>	
Document Count	1979
Endorsement Dot Count	001
<b>Printer</b>	
Status	Running
Jobs	None

The dashboard is broken up into multiple pages that allow you to view information about the network scanner and modify its settings:

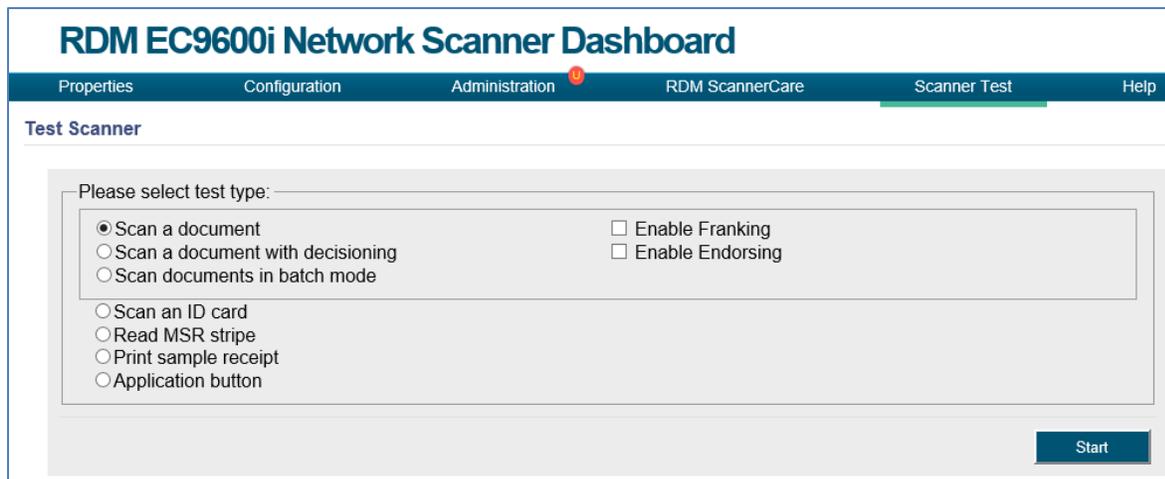
- **Properties:** Lists information about the scanner and its network configuration. This page is useful when troubleshooting the scanner.
- **Configuration:** Allows you to adjust the scanner's date and time and network settings.
- **Administration:** Allows you to upgrade the scanner's firmware, reboot the scanner, and change the administrator password.
- **RDM ScannerCare:** Instructs you on how to clean your scanner using the RDM ScannerCare Cleaning Kit.
- **Test Scanner:** Allows you to test the features of the network scanner. These tests can be useful if you need to troubleshoot the scanner or a specific feature of the scanner.
- **Help:** Lists detailed information about the other pages and their options.

The Configuration and Administration pages require a username and password to access. The defaults are:

- **Username:** administrator
- **Password:** rdm123

## Testing the EC9600i network scanner

The Test Scanner page of the network scanner dashboard allows you to test the features of the EC9600i network scanner. The available tests depend on your model of scanner.



The screenshot shows the 'RDM EC9600i Network Scanner Dashboard' with a navigation bar containing 'Properties', 'Configuration', 'Administration', 'RDM ScannerCare', 'Scanner Test', and 'Help'. The 'Scanner Test' page is active, displaying a 'Test Scanner' section with the prompt 'Please select test type:'. The available test options are:

- Scan a document
- Scan a document with decisioning
- Scan documents in batch mode
- Scan an ID card
- Read MSR stripe
- Print sample receipt
- Application button
- Enable Franking
- Enable Endorsing

A 'Start' button is located at the bottom right of the test selection area.

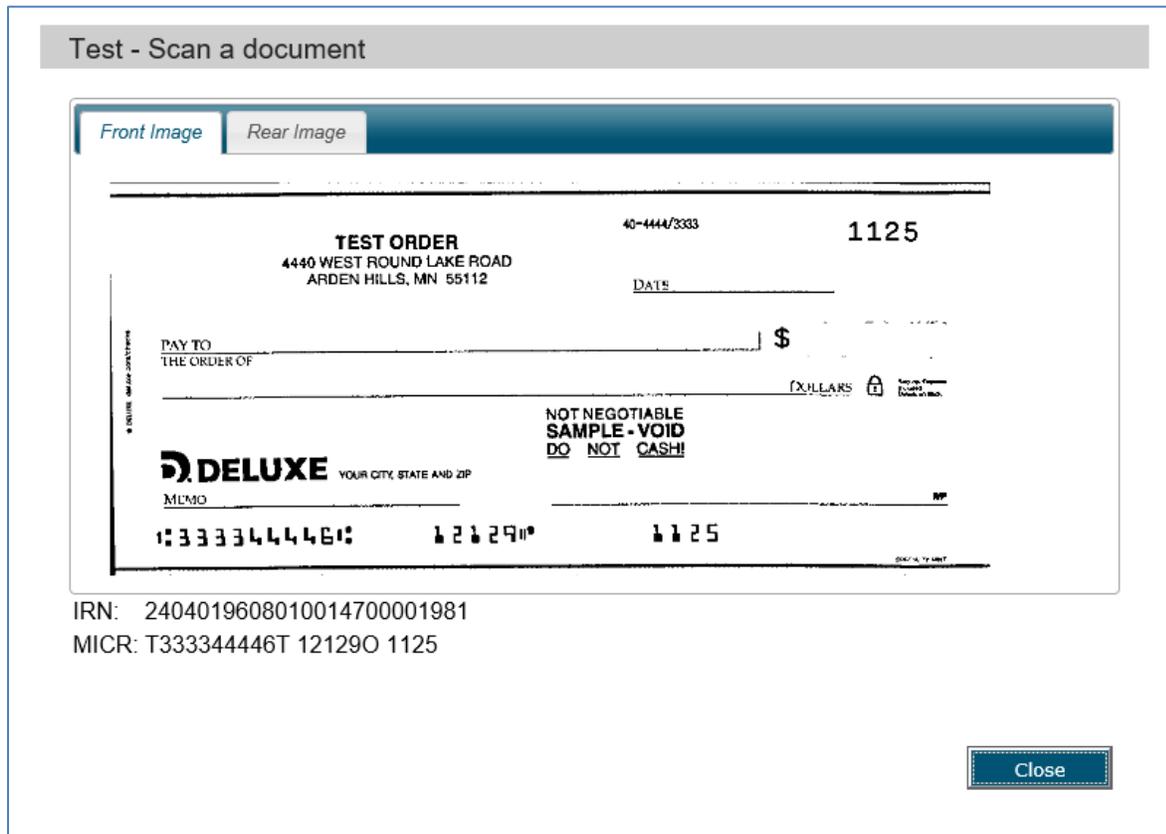
The tests can include:

- **Scan a document:** Tests the scanner's ability to scan an item in single feed mode, capture the front and back of the item, and read the MICR line. To test

- **Scan a document with decisioning:** Tests the scanner's ability to scan an item in single feed mode, capture the front and back of the item, and read the MICR line. You are also prompted to accept or reject the item.
- **Scan documents in batch mode:** Tests the scanner's ability to scan a batch of items in an auto-feed scanning mode, capture the front and back of the items, and read the MICR lines.
- **Scan an ID card:** Tests the scanner's ability to scan and read ID cards, such as a driver's license.
- **Read MSR stripe:** Tests the scanner's ability to read a card with a magnetic stripe. After the test, the information contained in the magnetic stripe displays.
- **Print sample receipt:** Tests the scanner's ability to print receipts.

After scanning a document, ID card, or MSR stripe, a dialog appears with information about what was scanned.

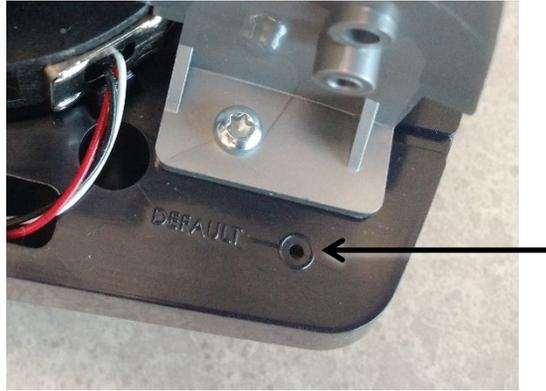
For example, after scanning a check, the following dialog appears:



This dialog includes front and back images of the document, an IRN, and the MICR number.

## Restoring factory default settings

The EC9600i series network scanners have a reset button in the back-right corner of the scanner. The reset button restores the dashboard settings to their factory default. The reset button does not affect the firmware installed on the scanner.



### To restore the scanner's default settings:

1. Unplug the scanner.
2. Use a pin to hold down the reset button and plug in the scanner.  
The scanner starts with the factory default dashboard settings.

### After you restore the scanner's default settings:

- If you made changes to the dashboard settings to allow the scanner to work on your network, you will need to make these changes again.
- The password used to access the Configuration, Administration, and Test Scanner pages is reset to its default (rdm123).

# Specifications

<b>Model details</b>	
Physical dimensions	<p>Depth:</p> <ul style="list-style-type: none"> <li>• Minimum: 237mm (9.3") with retracted extensions</li> <li>• Maximum: 311mm (12.25")</li> </ul> <p>Width:</p> <ul style="list-style-type: none"> <li>• Non-MSR Units: 154mm [6.0"]</li> <li>• MSR Units: 157mm [6.2"]</li> </ul> <p>Height:</p> <ul style="list-style-type: none"> <li>• Non-Printer Units: 175mm [6.9"]</li> <li>• Printer Units: 245mm [9.65"]</li> </ul>
<b>Document feed capacities</b>	
Document size	<p>Height:</p> <ul style="list-style-type: none"> <li>• Minimum: 50.8mm [2"]</li> <li>• Maximum: 101.6mm [4"]</li> </ul> <p>Length:</p> <ul style="list-style-type: none"> <li>• Minimum: 101.6mm [4"]</li> <li>• Maximum: 228.60mm [9"]</li> </ul> <p>Preferred Paper Weight: 20 to 32 lb</p>
Single feeder capacity <i>EC911/12/13/14f</i> <i>EC9611 SMB/11/12/13/14f</i>	Single document.
Auto feeder capacity	Auto-feeder with double-feed detection. Supports single feed or batches up to 30 items. [Depends on document thickness and condition].
Document collection pocket	Up to 60 documents. [Depends on document thickness and condition]. Maintains the integrity of the order of the original source documents.
<b>Technical features</b>	
MICR reader	E13B or CMC7 MICR Fonts. Uses RDM's Progressive MICR Method for optimum MICR read accuracy ( <i>except EC9611 SMB models which use optical recognition only</i> ). OCR E13B MICR Assist available.

Image capture	<p>Duplex Document Imaging.</p> <p>Tiff 6.0 file format.</p> <p>100 or 200 DPI.</p> <p>Grayscale with JPEG (or no) compression.</p> <p>Bi-level with CCITT Group 4 (ITU T.6) (or no) compression.</p> <p>Tiff 6.0 images contain MICR line and transaction information in header description tags of check images and optionally OCR line and transaction information in header description tags of bill stubs.</p> <p>Image size varies according to document characteristics, file format, DPI and compression, typically 10 kB or less for Tiff 6.0 bi-level with CCITT Group 4 compression.</p>
Image Quality Assurance (IQA)	IQA includes: too light/too dark /skew (Bi-Level Images Only).
Magnetic Stripe Reader (MSR) (optional)	<p>3-track, bi-directional, alphanumeric.</p> <p>EC9100i/EC9600i models include encryption capable MSR.</p>
Identification (ID) card imager	<p>Duplex Imager.</p> <p>54mm [2.13"] (V) x 86mm [3.39"] (H) with 200DPI or 400DPI image format. (Vertical scan captured at 200DPI)</p>
OCR Font Recognition (optional license)	Under application control Alphanumeric OCR A and B font recognition of OCR code-lines for applications such as bill payment.
Franker	Under application control a fixed text message "Electronically Presented" can be stamped on the front of a document, in red ink.
Endorsement printer	Under application control, a single line 1/8" high text message can be printed on the rear of a document.
Scanner status LED	Provides the unit's status via illuminated LED.
USB ports	High Speed USB 2.0 (480 mbps) on all models.
Ethernet ports (EC9600i only)	<p>2 port 10/100 Ethernet switch (Auto-feed models only).</p> <p>10/100 Ethernet port (Single-feed models except EC9611 SMB).</p> <p>Note: Ethernet ports have a maximum network speed of 10/100 mbps.</p>
Receipt Printer ( <i>select models</i> )	<p>Front-mounted, 3" thermal receipt printer.</p> <p>Clamshell paper load.</p> <p>Paper width 80mm (3.15").</p> <p>Print width 71mm (2.8").</p> <p>Maximum print speed of 170mm/sec (6.7"/sec).</p> <p>Uses power from scanner's power supply.</p> <p>Connects to PC using the scanners USB cable connection (for EC9107/08).</p>

<b>Software and support</b>	
Supported operating systems (EC9100i only)	Windows 7 (32/64-bit), Windows 8.1 (32/64-bit), Windows 10 (32/64-bit).
Supported browsers (Ethernet connected, EC9600i series network scanners)	Internet Explorer 11. Currently released version of Google Chrome, Mozilla Firefox, Safari.
System environments (Ethernet connected, EC9600i series network scanners)	CITRIX and other thin clients.
Development software	RDM EC Scanner Application Development Kit (ADK) includes RDM SCI API components, USB driver, Redistributable Installation Packages and Sample Applications.
3 <sup>rd</sup> Party Certifications / Licenses	Silver Bullet Technologies: Ranger Plug-in (EC9100i/9000i/7500i/7000i series scanners) Embedded Ranger Remote (EC9600i Ranger network scanner models)

<b>Environment</b>	
Operating temperature	10 to 40 Degrees C (50 to 104 Degrees F).
Operating humidity	10 to 85% relative humidity (non-condensing).

<b>Power Rating</b>	
Unit input (24VDC)	Non Printer Models: 900mA. Printer Models: 2.5A.
Power supply input range	100–240V, 50/60 Hz.

Certifications	Industry certifications including. WHQL driver certification (USB Drivers). CSA (Safety) <ul style="list-style-type: none"> <li>• For use with model no GFP241DA-2410M-2 or 3A-242DA24.</li> <li>• Pour utiliser avec modèle GFP241DA-2410M-2 or 3A-242DA24.</li> </ul> FCC (EMI)
Warranty	2 year standard warranty.
Life expectancy	5 years under normal usage.

## Consumables and Accessories

Options and accessories	RDM Part number
Replacement franker cartridge – “Electronically Presented” red ink (sold separately)	6000-6065
Replacement HP inkjet printer cartridge black ink (sold separately)	6000-6060 (HP C6602A)
Ink Jet Blotter (14mm x 11mm x 2mm) - 5 Pack	302987
Paper Roll, Thermal, 3.125" W x 225' (3.125" maximum diameter)	Standard thermal roll paper available from office supply stores
Replacement Power Adapter	Non-printer models: 302843 / 303985 Printer models: 303811 / 303986
USB 2.0 cable, A to B male, shielded, 2m (black)	6000-6106
Ethernet cable, Cat5E RJ45 350MHZ, 1.5m (black)	6000-6114

# Warranty Information

## LIMITED WARRANTY:

RDM EC9100i and EC9600i are warranted against defects in materials and workmanship under normal use and service for a period of two years after the date of receipt by you. This warranty is extended only to the original purchaser. Extended warranty programs might be offered by your solution provider.

The entire liability of RDM Corporation (the Corporation), distributors of the RDM EC9100i and EC9600i scanner and manufacturers of auxiliary equipment used with the RDM EC9100i and EC9600i and your exclusive remedy shall be, at the Corporation's option either (a) return of the price paid, or (b) repair or replacement of the RDM EC9100i and EC9600i scanner that does not meet the limited warranty and which is returned to the Corporation with a purchase receipt or other proof of date of original purchase which will be required in order to exercise your rights under this warranty.

The limited warranty is void if failure of the RDM EC9100i and EC9600i has resulted from accident, abuse or misapplication. Any replacement RDM EC9100i and EC9600i will be warranted for the remainder of the original warranty period.

The equipment is sold with the understanding that neither the Corporation, such distributors nor such manufacturers will be liable for any damages whatsoever (include, without limitation, direct or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use the RDM EC9100i and EC9600i, even if the Corporation, such distributors and/or such manufacturers have been advised of the possibility of such damages.

In any case, the entire liability of the Corporation, such distributors and such manufacturers with respect to the RDM EC9100i and EC9600i shall be limited to the amount actually paid by you for the RDM EC9100i and EC9600i. The Corporation, such distributors and such manufacturers disclaim all other warranties, express or implied, including, without limitation, implied warranties of merchantability and fitness for a particular purpose with regard to the RDM EC9100i and EC9600i and the accompanying written materials.

## WARRANTY SPECIFICS:

This warranty only covers failures due to defects in materials or workmanship, which occur during normal use.

It does not cover the following:

- Damage, which occurs in shipment;
- Failures which are caused by products not supplied by RDM;
- Failures which result from accident, misuse, abuse, neglect, excessive dirt or dust cause by lack or preventative maintenance measures, mishandling, misapplication, alteration or modification;
- Service by anyone other than RDM;
- Damage that is attributable to acts of nature including but not limited to:
  - Flood, lightning, power surge or static electricity, water damage, fall, theft, or vandalism;
  - Spillage of liquid or objects that have fallen into the equipment;
  - Equipment that has been exposed to excessive heat or unstable environmental conditions;
  - Consumables such as Franker Roller or Franker Assembly, or other RDM EC9100i and EC9600i consumables or accessories such as cables.

RDM scanner units with problems found to be caused by incorrectly set configuration parameters (IRN#, Owner Code, Merchant ID, etc.) are not considered defective and will not be serviced under warranty. Warranty is void if any of the external case of the unit has been opened or removed or the unit has, in RDM's opinion, been damaged through misuse or improper care.

Units returned to RDM for warranty repair will be reconfigured with factory defaults and returned to customers.