pitney bowes

Shipping & Mailing
Inserting

DI950 with File Based Processing Software

Operator Guide

US English Edition
SV63079 RevA
April 1, 2015

This operator guide includes instructions for running the DI950 inserter with file based processing software. The software uses a three-dimensional display and is used to interface with the DI950 tabletop inserter.The information contained in this guide applies to file based processing software code versions 172.116 and up.

Version History

Document Part Number	Release Date	Comments
SV63079 RevA	April 1, 2015	Initial release

Related Documentation

- DI900/DI950 FastPac™ Document Inserting System Operator Guide (SV61311)
- DI900/DI950 FastPac™ Document Inserting System Operator Guide Addendum (SV62081)

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1 - Product Overview

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DI950 with File Based Processing

Product Overview

Mail stream integrity is the ability to ensure our clients deliver envelopes to their customers with only the intended enclosures.

The DI950 with file based processing software is a solution that processes mail with a high degree of mail run and mailpiece integrity. The file based software works with the DI950 inserter to ensure that every mailpiece is completed with the correct contents.

This software provides centralized control that allows the file based software PC to control operational areas on the inserter. The software can detect inserter problems. When material jams or inserter problems occur, the software pinpoints them swiftly to minimize machine downtime.

The solution uses bar coded documents that enable a dedicated computer to keep track of the piece during the process and tell the inserter how to build each mailpiece to the specified completion. This is known as file based processing, which provides mail piece integrity to the mail operation. This solution uses Planet Press, a software suite with powerful document creation and work flow management capabilities, to produce the documents that are processed by the inserter and file based software.

Reporting Feature

This solution also provides robust reporting about the inserter, operators, jobs, and mail runs. Reports can be viewed and printed from the system or data can be exported for external processing.

Additional Features

This software solution provides a number of other useful features, including mailpiece reconciliation and an Account Pull tool that allows operators to divert pieces by identifying accounts prior to running a job.

The DI950 with file based processing supports many additional features provided by the tabletop inserter, such as edge marking for auditing or postal sortation; select feeds, which allow additional pages or inserts to be included based on conditional data; and envelope select, which allows an alternate envelope to be used.

How it Works

The file based processing software runs locally on the PC supplied with the system. When Planet Press produces the printed pieces for the mail run, it also creates a Mail Run Data File (MRDF). The MRDF includes specific customer information for all of the mailpieces in the run. When the MRDF is created it is sent to the file based software PC.

When the operator opens the MRDF for the first time, two more files are created to help support mailpiece integrity during processing - the Interlock and Output files.

- **Interlock file**- contains one record for each mailpiece and is used to record status (good, bad or unknown).
- **Output file** - contains one record for each mailpiece and is used to record everything that happens to that mailpiece while it is on the inserter

Each page in the job has a bar code that contains instructions for each assembled mailpiece. That bar code also contains a piece ID that identifies which assembled mailpiece the page belongs to. For example, a monthly statement with a bar code is fed into the inserter. The system reads and decodes the bar code, and the decoded information is used to retrieve the instructions from the MRDF for assembling the mailpiece.

As the inserter feeds the pages it reads the bar codes, and reports to the software the piece ID of the page being processed.The software then matches the piece ID to a record in the MRDF, and it provides further instructions to the inserter on how to process that specific page or assembled mailpiece. When the mailpiece is finished, the inserter reports success to back to the software.

Once all the material in the job is run the Output file creates an additional file called the **Select file**. The Select file is used to create reprints for damaged mailpieces that need to be reprinted. This file is sent to the Planet Press PC and once the reprints are produced, they are run using the Select file.
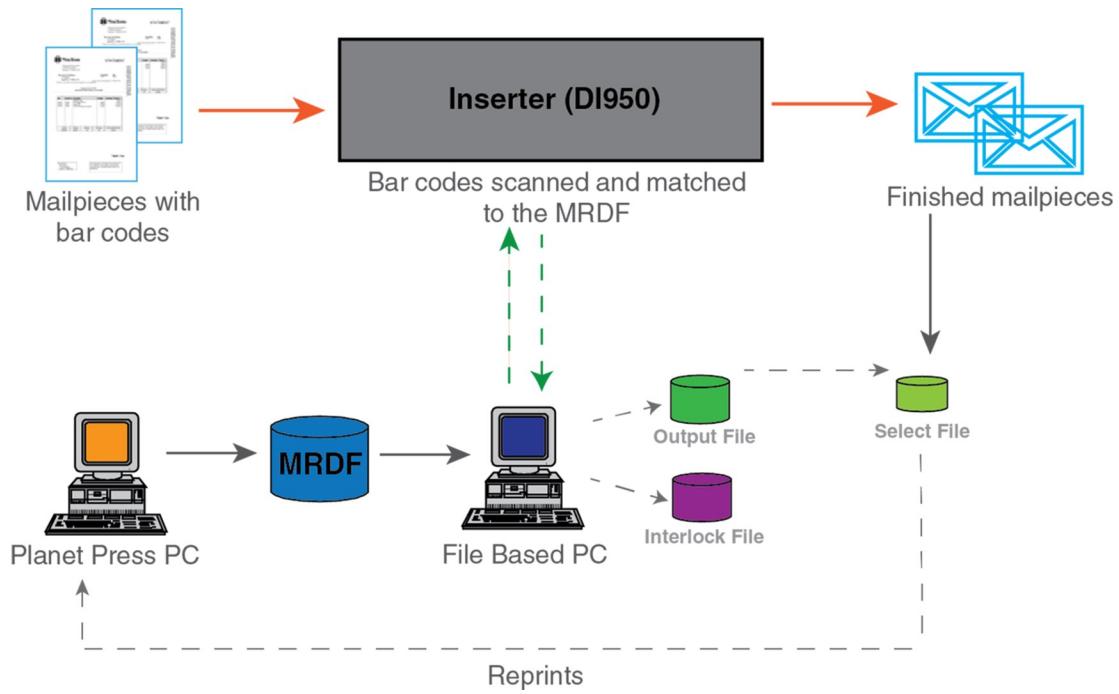
DI950 with File Based Processing Software - Flow Diagram

File Based Processing Terms

To assist in your understanding of file based processing, here is a list of common terms.

Common File Based Terms

Term	Definition
Piece ID	Each page has a barcode containing the piece ID and this piece ID connects each page to a data record containing the same piece ID in the MRDF file. The piece IDs in a mail run are sequential.
Barcode	The file based process uses a barcode to identify each page scanned on the inserter. The barcode is scanned and the decoded data is used to find the control information in the MRDF file and to determine how to collate the incoming pages.
File Based Processing PC	All of the MRDF files are stored on the file based processing PC. This PC usually interfaces with the Planet Press computer so that the MRDF and Select files (used for reprints) can be transferred between both computers.
Mailpiece	This refers to a finished collation comprised of one or multiple assembled pages.
MRDF (Mail Run Data File)	The MRDF contains one record for each page. The data from this file is used to control the assembly of each mailpiece, such as number of pages to be accumulated, which feeders should feed, selective outsorting, etc.
Interlock File	The Interlock tracks the status (good, bad, unknown) of each assembled mailpiece as it travels through the inserter. An Interlock file is automatically created the first time the MRDF is opened on the inserter.
Output File	The Output file contains the details for each finished mailpiece within a job. For example, it can include whether the mailpiece reaches the output stacker, was out sorted by the system, is lost due to a material jam, was removed by the operator and more.
Select File	The Select file is automatically created by the Output file. It contains one record for each mailpiece that may have been damaged or outsorted and needs to be reprinted. This file is sent to Planet Press for creating the pieces that need to be reprinted..

File Based Software - Main Screen

The main file based software screen consists of machine operation buttons and animated objects designed to match components on your actual machine. You can interface with certain operations of the system and software through this screen.

The main screen displays objects that represent system elements, features, and software capabilities.
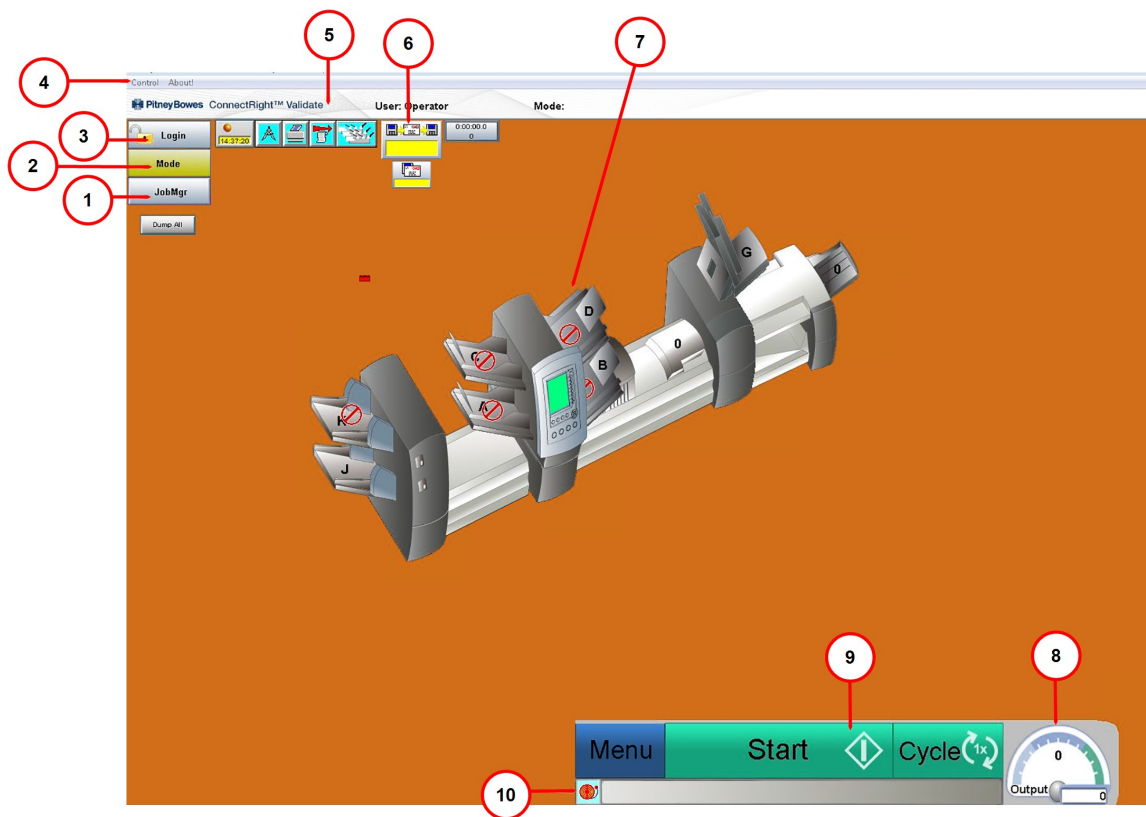
Item	Description	Item	Description
1	Job Manager Button	6	Mailpiece Manager Icon
2	Mode Button	7	Inserter Model
3	Login Button	8	Speed Indicator
4	Main Menu Bar	9	Inserter Operation Buttons *(start/stop)*
5	Pitney Bowes Banner	10	Alarm Icon

- **(1) Job Manager** - load job file (information about mailpieces contained in the job)
- **(2) Mode Button** - load mode (specific system settings and parameters for a job)
- **(3) Login Button** - log into the system
- **(4) Main Menu Bar** -
  - *Control* - power down the system or change the language displayed on the screen

  - *About* - software info (version, copyright date, installation date, and system ID)

- **(5) Pitney Bowes Banner** - user and job information
- **(6) Mailpiece Manager Icon** -access Input file
- **(7) Inserter Model** - three dimensional model of the system
- **(8) Speed Indicator** - actual speed of the machine measured in cycles per hour
- **(9) Inserter Operation Buttons** - menu, stop, and cycle
- **(10) Alarm Icon** - access alarm (error) details

File Based Software - Alarms

An alarm is an error message the file based software displays when there is a problem running the system, for example when a jam or machine error occurs. The alarm message indicates the reason for the machine stoppage.

The alarm box is located at the bottom of the main software screen.

Viewing Alarm Details

When an alarm displays at the bottom of the main screen perform these steps to view details.

1. Select **View** or double-click the error message that displays in the alarm box at the bottom of the main software screen.
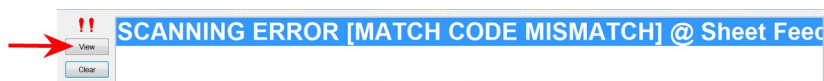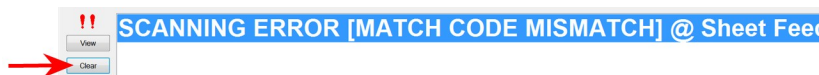
2. When the Alarm History window opens review the information about the error and suggested solutions.
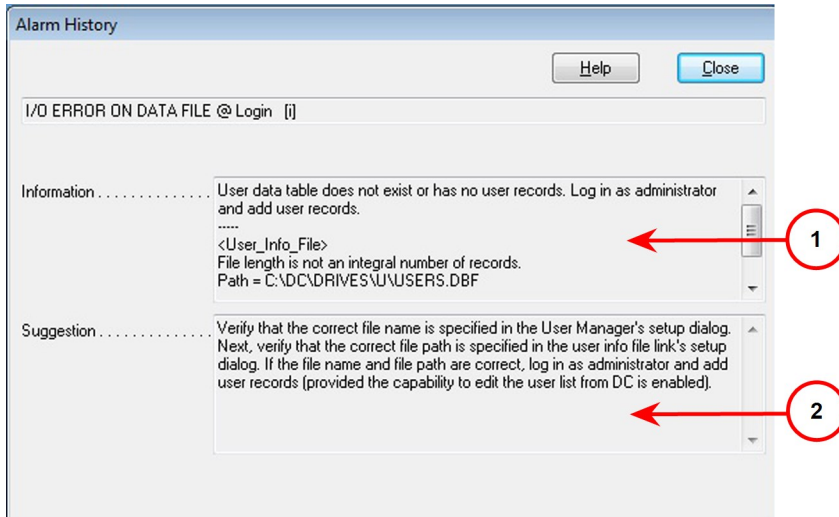
Item	Description
1	Alarm Details
2	Suggested Solutions

Clearing Alarms

1. Once the error has been fixed, select **Close** on the Alarm History window.

2. Select **Clear** to close the alarm box at the bottom of the screen.

Accessing Alarm History

You can access an Alarm History window without an error in progress. This feature is helpful during a job run when you have already cleared previous errors from the screen and need to go to a specific alarm to see why the machine stopped running.

This window lists all of the alarms that occurred while running the job. You can select any of one of them to get details.

1. Select the **Alarms** icon and select **History** from the drop-down menu.
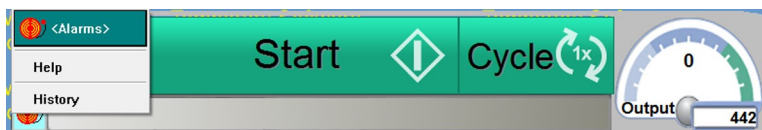
2. Highlight the alarm you would like more details about and select **View**.
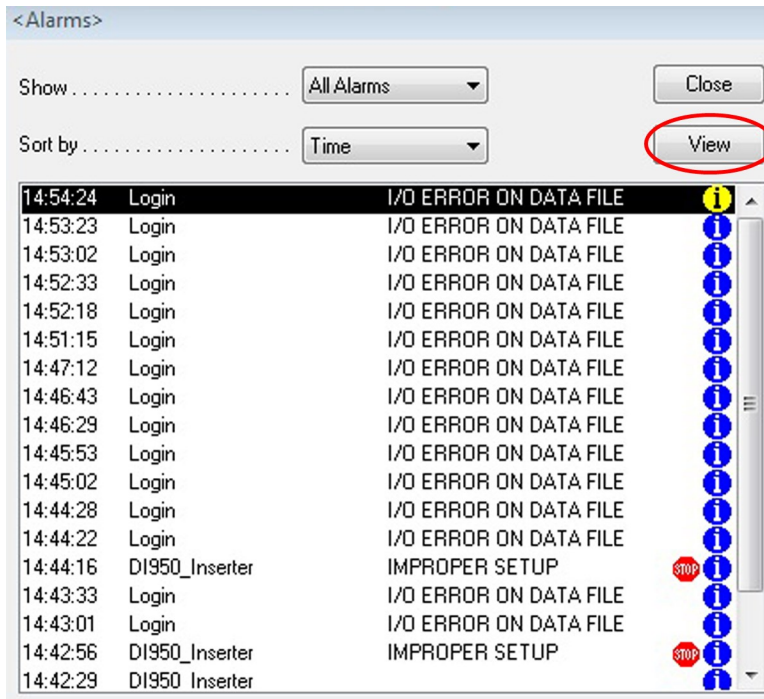
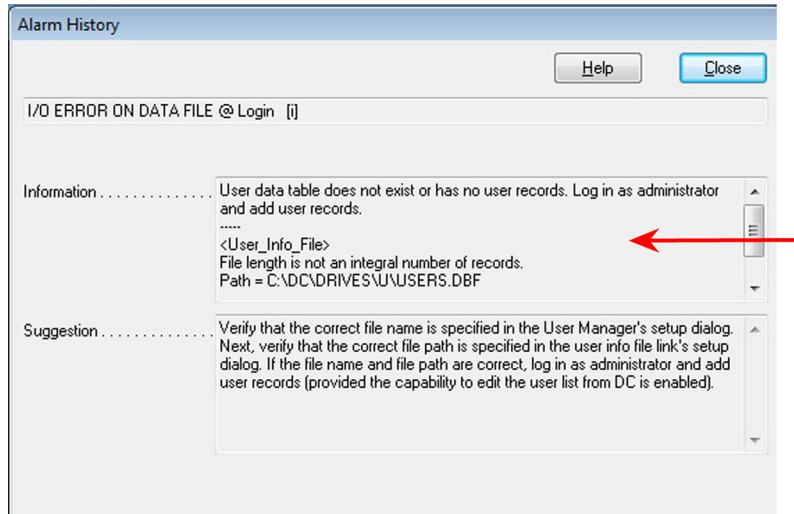## Note:

If there are multiple errors displayed in the history, the ones with a red stop sign icon are the root causes for the machine errors, the other alarms are secondary to those.

3. When the Alarm History window opens review information about the previous errors to help idenitfy root causes for any system failure.

# 2 - Setting Up a Job

Setting Up a Job

Here is the sequence of steps to set up a job using the DI950 with file based processing software.

- *Log in*
- *Load a mode*
- *Load the MRDF*
- *Set mail date*
- *Set up inserter components*
- *Prepare and load material*
- *Reset counters*

Log In

Perform these steps to turn the system on and log in.

#	Step	Action
1	Power up the system (all associated modules) and the file based software PC.	
2	When the main file based software screen opens, select **Login**.	
3	Select your user name or access level from the Login screen and select **OK**.	
4	Enter your password and select **OK**.	
5	If the login is successful, your **user name** or **access level** appear in the Pitney Bowes banner at the top of the main window.	
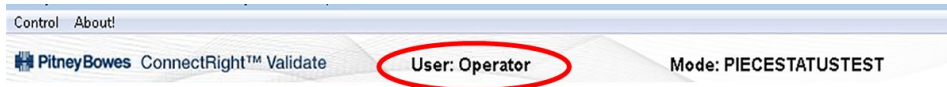
NOTE:

By selecting **Login** again, you can log in under a different user name or access level. The inserter automatically logs you out after a predetermined length of inactivity. If this happens, you will have to log back in to continue.

Change the User Password

#	Steps	Actions
1	*Log in*.	
2	Select **Login** on the main screen and select **Change Password** from the drop-down menu	
3	When the dialog opens, edit the password and select **OK**.	

Load a Mode

A mode is file based processing terminology for the information contained in the job. The software uses operating modes to run a job on the inserter. A mode establishes the unique combination of system settings and parameters for processing a specific mail job.

Before running a job, you must load the correct mode that contains all the job details.

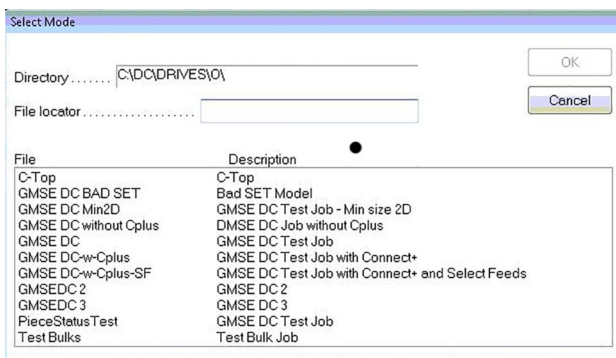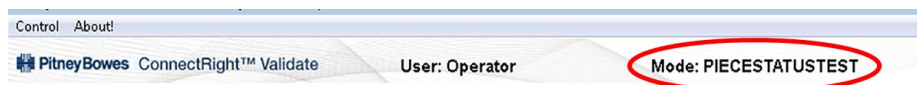| #	Step	Task
1	*Log in*.	
2	Select **Mode** on the main screen and select **Load Mode** from the drop-down menu.	
3	Select the correct mode for the job and select **OK**. *(Verify the job loads on the inserter UIM.)*	

4   If the mode is loaded successfully, its name appears on the Pitney Bowes banner (at the top of the main screen).

Load the MRDF

Perform these steps to load the correct **MRDF** file on the system *before running a job*.
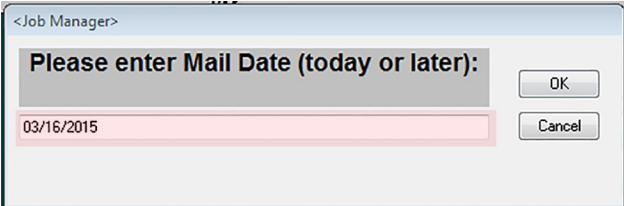
#	Step	Task
1	Select the **Mailpiece Manager** icon on the main software screen.	
2	Locate the required **MRDF** file on the list, highlight it and select **OK**.	
3	Go back and look at the **Mailpiece Manager** icon, the correct file name should be on the icon.	

NOTE:

If you receive a *Job ID Mismatch* error message when you start to run the job, you have either loaded the incorrect MRDF or the wrong input material for the job.

Set Mail Date

The system default sets the mail date for the day the job is being run. To change the mail date perform these steps.

#	Step	Task
1	Select **Job Manager** on the main software screen.	JobMgr
2	Select **Set Mail Date** from the drop-down menu.	
3	Enter the date the job is being run and select **OK**.	<Job Manager> Please enter Mail Date (today or later): 03/16/2015 OK Cancel

Set Up Inserter Components

Perform these steps at the start of a new job to ensure the inserter is properly prepared.

1. Open the covers.
2. Inspect and check the E-Z Seal® supply.
3. Close the covers on the entire system.

Reset the Counters Manually

Systems using file based processing software are normally configured to reset the counters automatically at the end of each job. Before beginning a new job verify the counters are set to "0." If you need to reset the counters in the middle of a job for any reason, you can do that as well.

To manually reset the counters perform these steps.

#	Step	Action
1	Select **Menu** on the main software screen.	
2	Select **Reset Counts** from the drop-down menu.	

Prepare and Load Material

NOTE:

Make sure you have the correct input and feeder materials for the job to be run.

Perform these steps at the beginning of a job and during a job whenever materials need replenishing.

1. **Inspect loose material for warping.** *(Crooked or protruding pieces may cause alarms.)*

   Inspect all loose material for warping (for example, cut sheets, inserts, envelopes).

   a. Lay one piece of the material on a flat surface.

   b. If some warp is detected, push down on the highest rising point.

   c. An envelope placed flap up on a flat surface with the operator pressing down on one corner should not have any corner raised more than 0.5-inch (13 mm) from the surface.

   d. Curl/warp of the envelope flap should *not exceed* 1/8-inch (3 mm) measured while holding the flap on a flat surface at the crease line.

2. **Prepare and load the control documents.**

   a. Inspect the print quality and barcode (if any) on the control documents.

   b. Aerate and shingle the cut sheets (if used).

   c. Load the control documents.

3. **Prepare and load the inserts and envelopes.**

   a. Aerate an approximate 3-inch stack of material by holding one end of the stack and fanning the other. Repeat for the other side of the stack.

   b. Look for glue spots or pieces that are stuck together and remove them from the stack.

   c. Load the material. (Many inserter issues are cause by material loading errors, use care.)

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3 - Running A Job

In this section

Running a Job with File Based Processing Software

Here is the sequence of steps to run a job with the file based processing software.

- *Set up the job*
- *Check system status*
- *Run a trial piece*
- *Create the Select file for reprints*
- *Finish the job*
- *Log out*

NOTE:

It is possible to turn off the file based processing software and run the job using the DI950 interface. This is called *stand alone mode*.

Stand Alone Mode

Stand alone mode is running the inserter without the file based processing software. To run the inserter in stand alone mode perform the following steps.

#	Step	Action
1	Power on the inserter.	
2	If the file based software PC is on, exit out of the software by selecting **Control>Shut down** from the main software menu bar.	
3	Program the job through the inserter interface.	
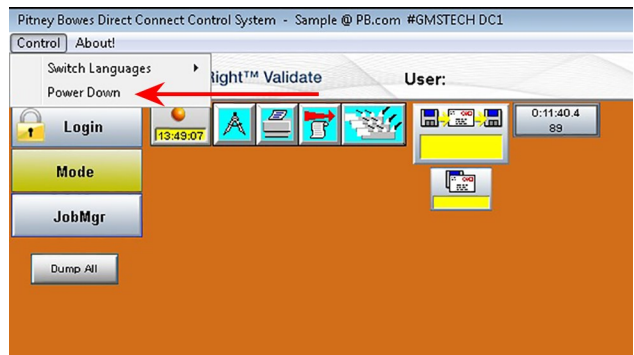
Check System Status

A routine part of running a job includes checking the status and condition of the system using the graphical interface on the file based processing software main screen.

Check the status of the system on the main software screen:

- Are all safety covers are closed?
- Are all messages or alarms resolved?
- Verify you are logged in under the required access level.

NOTE:

A red flashing feeder icon on the screen means that the inserter is out of material.

Run a Trial Piece

A trial piece allows you to verify your job settings are correct and the job will run as planned. Examine the trial piece to be sure the correct number of items were inserted into the envelope and that the mail piece looks the way you expect.

NOTE:

The trial piece will be unsealed for easy inspection, even if the job calls for a sealed mail piece.

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1. With the system started, select **Cycle** on the main software screen until one collation is processed.
2. Open the unsealed envelope and inspect the completed mailpiece; verify the content is:

   - Folded correctly

   - Complete with the correct inserts

3. If the mailpiece was assembled correctly, select **Start** (on the main software screen) to start the system again.
4. At some point during the job you must manually record the trial piece. Refer to *Record Manual Corrections* for instructions on how to do this.

NOTE:

If the trial piece failed to assemble or run correctly, refer to the **DI900/DI950 Operator Guide** (SV# 61311E), *Troubleshooting and Maintenance* section for troubleshooting tips and possible resolutions.

Create a Select File for Reprints

At the end of a job run there may be pieces that were damaged and not processed (due to jams, misfeeds, errors, etc.) If this happens the job is not 100% complete and these pieces must be sent for reprint. In this case you have to generate a **Select** file for running the mailpieces that need to be reprinted. The Select file is a system generated file that provides a list of all failed and unprocessed mailpieces; it is used to prepare for running reprints.
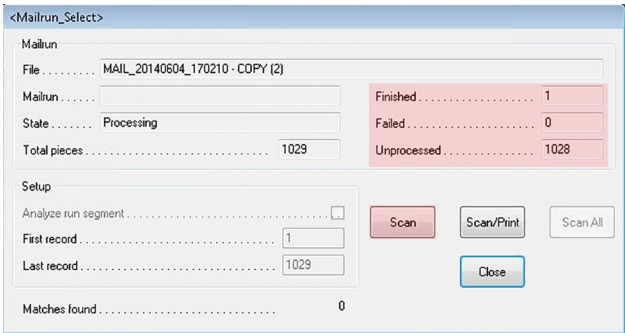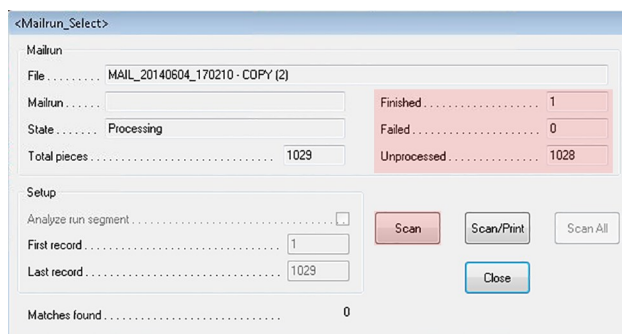

NOTE:

The Select directory is monitored by Planet Press. When a Select file is created Planet Press reviews the file and recreates the pieces that are missing and need to be reprinted. The goal is to have 100% *Finished* pieces at the end of the job.

#	Step	Action
1	Select the **Mailpiece Manager** icon on the main screen and select **Tools>Create Select File** from the drop-down menu.	
2	When the dialog opens you will be able to view the total **Finished**, **Failed**, and **Unprocessed** mailpieces. Select the **Scan** button. This creates a Select file and places it in the **M:\Select directory**.	

#	Step	Action
3	Select **Close**. *This automatically unloads your job and you will have to reload.*	
4	Once the failed and unprocessed pieces are reprinted, select **Job Manager** on the main screen.	**JobMgr**
5	Select the **MRDF** for the job you were running previously and select **OK**. *The job gets reloaded. Once it is manually repaired it is removed from the Select file.*	

Stop the System During a Job

IMPORTANT!

Never leave the machine unattended while running a job!

If you must leave the area while running a job, select **Stop** on the main software screen. This clears the deck and completes all in-process collations, transports them through the system, and stops the inserter from feeding any new mailpieces.
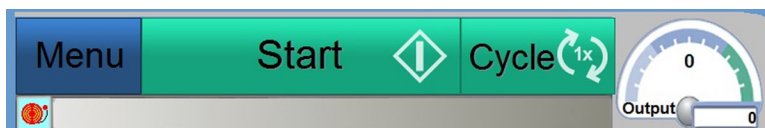
Stop the Machine

1. Select **Stop** on the file based software main screen.

Resume the Job

1. Select **Start** on the file based software main screen.

NOTE:

When you return to the inserter, complete one machine cycle to make sure the inserter is ready to resume processing. Refer to *Run a Trial Piece* for more information.
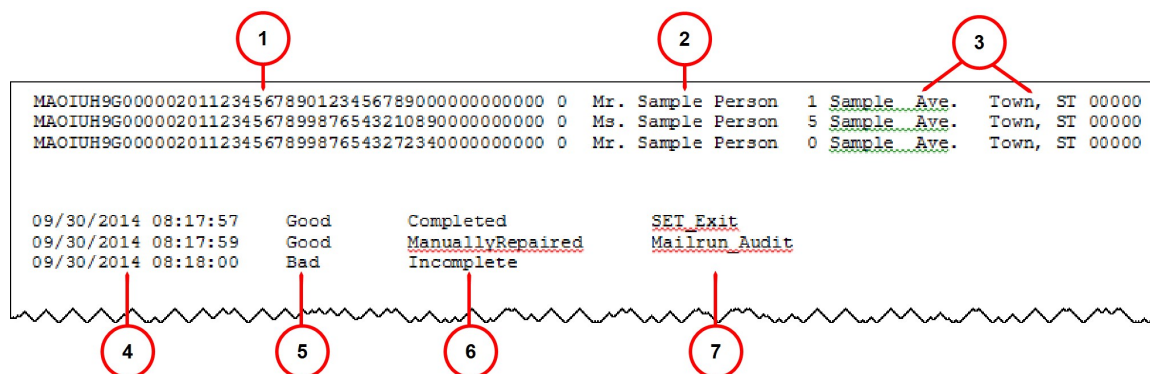
Output File

With file based capabilities, it is important to maintain the security of data files to ensure mail job integrity.

The output file contains data related to a completed mail run and provides physical proof that the job was processed. The information includes details on how the individual mailpieces were processed through the inserter. *(Information may vary based on the customer's MRDF file.)*

- Identifier field (Job ID, record #, page #, etc)
- Customer name and address *(if included in the customer MRDF file)*
- Individual mailpiece disposition (complete, incomplete or manually repaired)
- Individual mailpiece status (good or bad)
- Output location

Reading the Output File

Item	Description	Item	Description
1	Identifier field	5	Mailpiece disposition
2	Customer name	6	Mailpiece status
3	Customer address	7	Output location
4	Time stamp		

Automatic Backup and Archive of the Output File

Every 14 days the file based software automatically creates a backup of the output file for the customer's records. The backup of the output file is stored as .txt file in a specific archive folder.

Archiving Output Files - Proof of Compliance

All output files should be archived (*not* deleted) on a regular basis for permanent proof of correct mailpiece assembly.

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4 - Reports

In this section

Reports Overview

Operators can generate a few different reports for printing or exporting to .txt files with the file based processing software.

There are two different types of reports operators can access:

- *Standard Productivity Report*
- *Customer Classic Report*

Standard Productivity Report

A standard productivity report contains system productivity information since the last time the total counts were reset. If you need a productivity report, print it *before* resetting the counters, as resetting the counters clears out the data you will need.

To generate a standard productivity report perform these steps:

#	Step	Action
1	Select the **Printer** icon on the main software screen.	
2	Select **Reports** from the drop-down menu.	

#	Step	Action
3	When the report is displayed, confirm the *inserter number*, *date*, and *time* shown.	
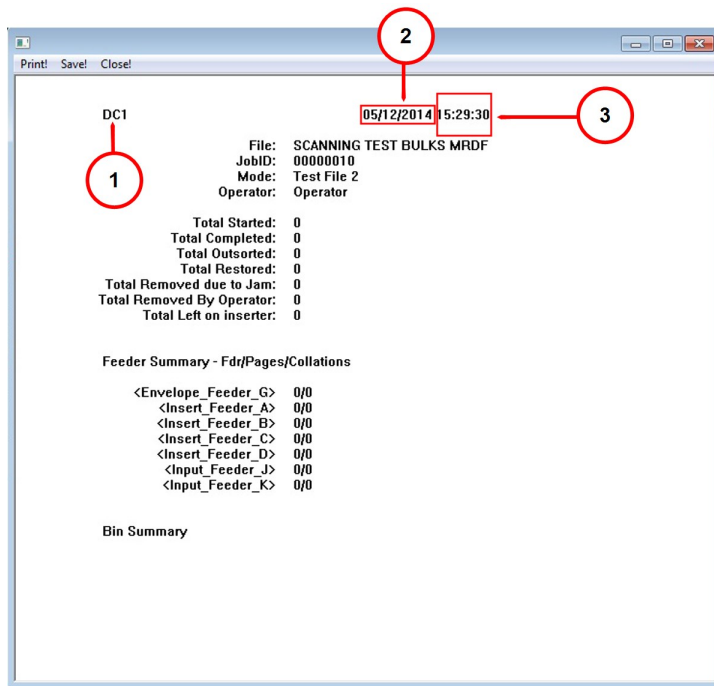
1 =Inserter #

2= Date

3= Time

#	Step	Action
4	Select **Print** from the report main menu bar in the top right-hand corner of the report display screen.	
5	Select **Close** from the report main menu bar.	

Customer Classic Report

The **Customer Classic Report** contains more details about the machine and the job (mailpiece summary, machine and operator efficiency information, and stop summary data).To generate this report perform these steps.

NOTE:

Only operators with **key operator** status and above can access this report.

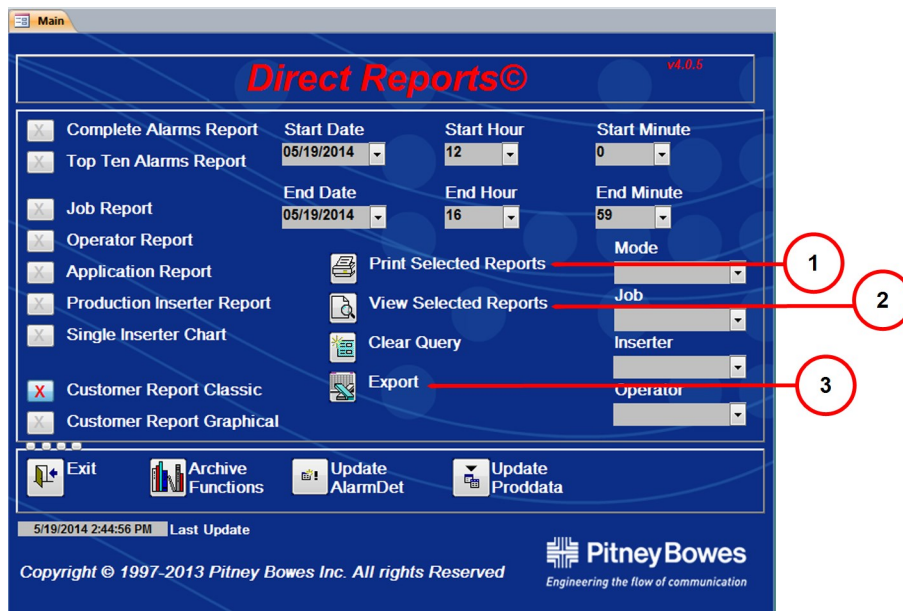| #	Step	Action
1	Select the **Direct Reports** icon on the main software screen.	
2	Select **Reports** from the drop-down menu.	

#	Step	Action
3	Select **Print Selected Reports** or **View Selected Reports.**	

#1 - Print Selected Reports

#2 - View Selected reports

#3 - Export

4	Select **Print** from the Report main menu bar.	
5	Select **Export** to export report results to an Excel spreadsheet format. The file is stored in **C:\DC\drives\S\PRODDATA** as an .xls file.	

NOTE:

You can customize this report by adding details about the system or job. To do this, select the check box next to the desired information to be included in the report.

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5 - Finishing a Job

In this section

Finishing a Job

When a job is done, finish up with these steps:

- *Stop the machine*
- *Record any manual repairs*
- *Close the MRDF file*
- *Log out*

Stop the Machine

NOTE: Some file based processing software systems and applications are configured to clear the deck automatically and in this case the machine stops on its own.

- Select the **Clear Deck** button on the DI950 control panel. *(The machine automatically stops after the deck is cleared.)*

OR

- Select **Stop** on the main software screen

Record Manual Mailpiece Repairs

At the end of every job the file based software automatically audits for any unprocessed mail pieces that were manually removed for any reason. This includes damaged and undamaged pieces. These mail pieces are recorded and moved to the Select file to be included in an automatic reprint file created by Planet Press.

If some of the removed pieces are not damaged but have been removed from the inserter due to a system stoppage, you can manually repair these pieces using the **Manually Repair Mailpiece** tool. They will not have to be reprinted.

There are two ways to record manual corrections, either with a *hand scanner* or *manually* through the software interface, *both are acceptable methods.* This activity can be performed any time during the job run, but it must be done *before* the job is completed and closed out.

NOTE:

You must perform manual reprints *before* completing the job so these pieces are not included in the Select file for reprint. If the piece is damaged (torn, skewed, crumbled, etc.) this will not be a manual repair, it will need to be reprinted.

Using a Hand Scanner to Record Manual Repairs

To record manual repairs using a hand scanner perform these steps.

#	Step	Action
1	If you encounter errors during a mail run, remove the psychical mailpieces caused by the error.	
2	Select the **Mailpiece Manager** icon from the main software screen and select **Tools>View/Reject/Repair Mailpiece** from the drop-down menu.	
3	When the Mailrun Audit screen opens, place the cursor in **Scan** field.	

#1 - Scan Field

#2 - Status Field

#	Step	Action
4	Using the hand scanner, scan the piece ID barcode on the mailpiece (one piece per collation) and the ID displays in the **Scan** field.	
5	Select **Enter** on the keyboard and a "Record XXX Repaired" message appears in the **Status** field verifying the mailpiece has been repaired.	
6	Select **Close**. The piece is manually recorded.	

Using the File Based Software to Record Manual Repairs

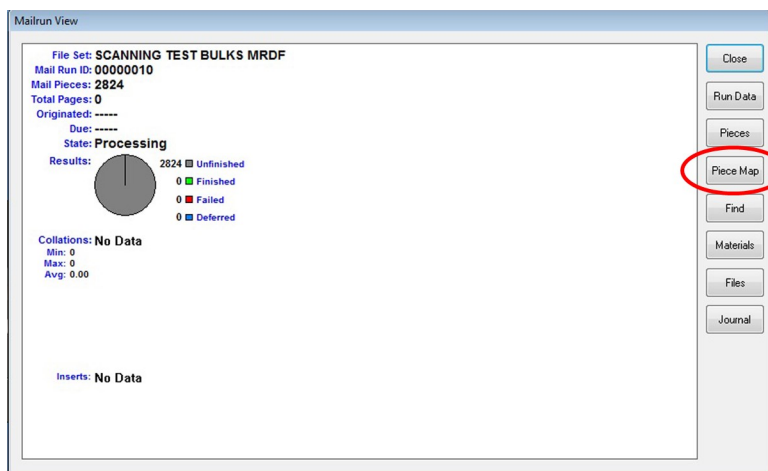To record manual repairs using the file based software perform these steps.

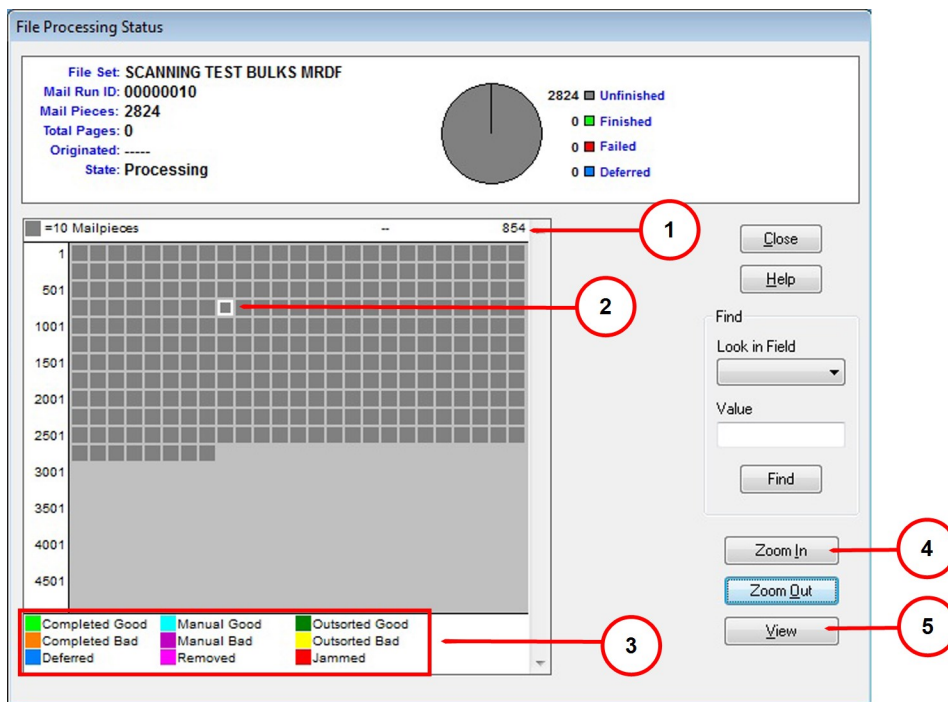| #	Step	Action
1	Select the **Mailpiece Manager** icon on the main software screen.	
2	Select **Run Info** from the drop-down menu.	
3	Select **Piece Map** on the Mailrun View dialog box.	

#	Step	Action

4 When the Piece Map file screen appears, select **Zoom In** until you "zero in" on the individual mail piece that was manually corrected and select **View**.

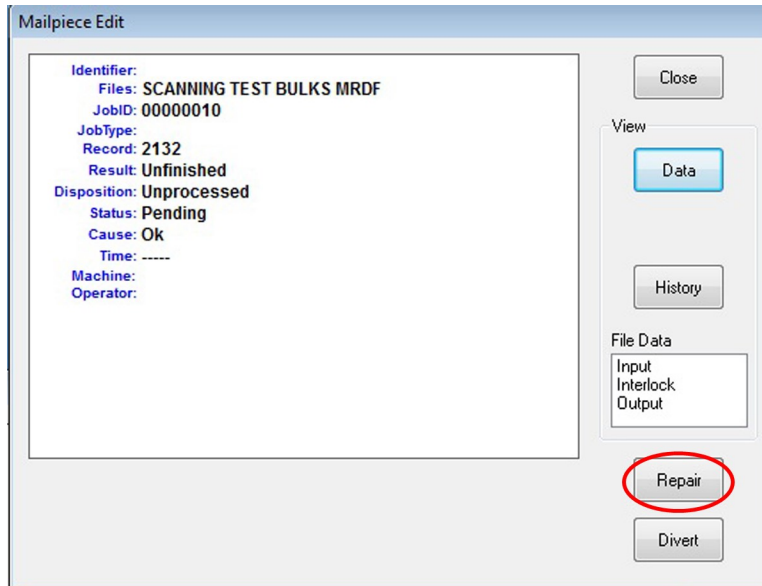**#1** - Piece ID#

#2 -- Selected Piece

#3 - Color-coded Status

#4 - Zoom In

#5 - View

#	Step	Action
5	When the Real-time Mailpiece Status screen opens, select **Repair** and select **Close**.	

Mailpiece Edit

Identifier:
Files: SCANNING TEST BULKS MRDF
JobID: 00000010
JobType:
Record: 2132
Result: Unfinished
Disposition: Unprocessed
Status: Pending
Cause: Ok
Time: -----
Machine:
Operator:

Close

View
Data

History

File Data
Input
Interlock
Output

Repair

Divert

| 6 | When the Piece Map file screen opens, select **Close**. | |

Close the MRDF File

To close the MRDF file (sometimes called an input file) when a job is complete perform these steps.

#	Step	Action
1	Select the **Input File** icon on the main software screen. *(The text in yellow is the name of the open file.)*	
2	Select **Close File** from the drop-down menu.	

Log Out

Follow these steps to log out of the system after all activity associated with the job is complete.

#	Step	Action
1	Select **Login** on the main software screen and select **Logout** from the drop-down menu.	
2	The user status area on the Pitney Bowes banner becomes blank.	

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pitney bowes

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For Service or Supplies

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