# comPARAPrint TECH+ DB Demo Software Version 1.00

The Demo release of the software provides a means for you to observe the functioning of the software family. While it does not allow you to import your own images into the system, this release includes twelve datasets, six fingerprints (three rolled, three latent) and six palmprints (three rolled, three latent), which may be loaded and compared. You can modify these datasets, extract their features, add and subtract points of minutia, observe the effects of contrast, brightness and sharpening operations and make comparison. You can observe the operation of the **Mx** and **Yn** filters, which show the points of minutia involved in the comparison. You cannot save or export files or datasets. You can enter these prints into the database, search any print marked as a latent against the database, and recall the search results. Finally, you can print any image to a graphics-capable Windows compatible printer.

# **Operation:**

Note: a complete Help file is provided with the software. It can be accessed separately, or from within the program by clicking on Help/Help Topics.

A **comPARAPrint** dataset consists of the four processed images (original, binary, bad and skeletal) and the extracted features for a print. This type of file is generated via the Save Data Set function. To perform a comparison, a known print is loaded into the 'Recorded' window, and a latent, or other unknown print is loaded into the 'Latent' window. Clicking on the Compare button then compares prints.

# To load a dataset:

1. With the File menu dropped, place the mouse over the option Open Data Set

2. if the image is to be loaded into the Recorded window, select Recorded or type 'R' Or

2a. If the image is to be loaded into the Latent window, select Latent or type 'L' The File Open dialog will be generated, displaying all files with the extension '.dts'

3. Locate and click or double-click on the filename of the desired file, or type the desired filename into the Filename field.

4. Click on Open. (Note: if you double-clicked on the filename, the file will load automatically.) The image will be loaded into the appropriate window.

## **Comparing Prints:**

Datasets, such as those provided with this demo, include extracted features. You may run a comparison using this set of features, or you may extract your own set of features and run a comparison based on those. (Refer to the help file for further information on extracting and modifying extracted features.)

Once features have been extracted to your satisfaction, simply clicking on the Compare button the Main Window launches the comparison engine. This type of comparison involves the entire print. Comparisons can also be made which involve only a subset of the features seen on the Latent. (See below).

The comparison engine will display a number in the SIM window that represents the goodness of the match; a higher number represents a greater likelihood of a match. In addition, a bar graph displays similar information. A red bar in the last position indicates an exceedingly high likelihood of a match.



## To compare a subset of the extracted features:

1. Click on the Process Area of Interest button in the Main Toolbar. (See help file.)

2. Drag the mouse to create a rectangular area of interest on the latent print.

3. Release the mouse button. A comparison will be made between the area of interest defined and the recorded print.

4. Repeat as desired.

5. To undo the area of interest and return to your starting point, click on the No Tools Selected tool **I** on the Main Toolbar.

Datasets in this demo are loaded into the Latent and Recorded databases for your convenience. Any latent opened or loaded into the latent window can be searched against the Recorded database. The minimum similarity match parameter can be set. Prints can be deleted from the databases, and re-entered. Refer to the Help file for details of this and any other operation.

Selecting the Database View option on the View option group causes the Database Window to be displayed.



In this view, prints loaded into the Recorded window can be added to the Recorded database, prints loaded into the Latent window can be loaded into the Latent Database, and Searches against the database can be performed.

# To add a print in the Latent/Recorded Database:

1. If the print has not been previously saved as a data set, create and save the dataset.

- 2. Open the saved dataset in the Latent/Recorded Window.
- 3. Select View/Database View/ on the Main Menu. The database windows will appear.



2. Place the cursor over any record in the Latent/Recorded Database window, or over the bar at the top of the window if there are no entries and right-click. A pop-up menu will appear.

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Add Latent
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4. Click on Add Latent/Add Recorded. A data entry form will be displayed.

DBFORM		×
Case: 082799-2185 Officer: Bill Sewell	Date: Fri Aug 27 13:08:20 1999	
Hand © Left © Right	Finger Unknown	
Offense		
Pandering		
ОК	Cancel	

5. Supply the requested data. (Note: the Case Number/OCA field must be filled in.).

# To Load a print from the Latent Database:

1. Select View/Database View/ on the Main Menu. The database windows will appear.

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- 2. Scroll the Latent Database window until the desired record is seen.
- 3. Place the cursor over the desired record and right-click. A pop-up menu will appear.

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4. Click on Open... The print will be loaded into the Latent window.

Any latent in your Latent Database can be searched against the Recorded Database.

## To Search:

- 1. Load the desired print from the Latent Database.
- 2. Select View/Search Database/ on the Main Menu. The Similarity Filter dialog will appear.



3. Enter the number for the lowest similarity you wish to accept and click on OK. The search will execute against prints of the same type (finger or palm) in the Recorded database.

Similarity Filter	×
Low Similarity Cutoff:	200
	Cancel

Any print found to have a similarity greater than or equal to the value you entered for the lowest similarity will be added to the Match Candidates Database, and be displayed in the Match Candidate window. 4. Load any print from the Match Candidates database for further study.

When a latent is searched against the Recorded database, candidate matches are placed in the Match Candidate database and displayed in the Match Candidate window. If the search results in no candidates, no entries will be available in the Match Candidate database.

## To load a print from the Match Candidate database:

1. Select View/Database View/ on the Main Menu. The database windows will appear.



2. Scroll the Match Candidate Database window until the desired record is seen.

3. Place the cursor over the desired record and right-click. A pop-up menu will appear.



4. Click on Open... The print will be loaded into the Recorded window.

#### **Purchase Information**

Sirchie offers the **comPARAPrint** family software in four configurations: **comPARAFingerprint**, **comPARAPalmprint**, **comPARAPrint TECH+** and **comPARAPrint TECH+ DB**.

**comPARAFingerprint (CPARA5000L)** is fingerprint only software, optimized for comparing latent and rolled finger impressions.

**comPARAPaImprint (CPARA6000L)** is palmprint only software, optimized for comparing latent and rolled palm impressions.

**comPARAPrint TECH+ (CPARA7000L)** consists of both fingerprint and palmprint software in a single package.

**comPARAPrint TECH+ Db (CPARA7000LDB)** consists of both fingerprint and palmprint software in a single package with a database capable of holding 500 latent and 500 recorded prints, with a fast search engine.

## **Contact Information:**

Inquiries concerning this software should be addressed to:

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