



CFS-1800F Audit Trail Data Kit Guide: Installation and Operation Instructions

[Table of Contents]

	<u>Page</u>
Installation Instructions	
1. Introduction	2
1) Software/Hardware Requirements	2
2. Before Getting Started	
2-1. Register at the lock and then unlock	2
1) Set the date and time	2
2) Register user(s) at the lock	2
3) Open the lock	3
2-2. Connect the Lock to a PC	4
1) Using the Serial Connection	4
2) Using the USB Connection	4
3. Install the Software	5
Operation Instructions	
4. Open the CFS1800F Program	8
5. Set the Port - If you are using the USB connection	8
6. Download the Audit Trail	10
1) Sample Audit Trail Data File	11
7. Perform the Data Management	12
7-1. Search	13
1) Search by Gate	13
2) Search by User ID	14
7-2. Applications	15
1) Sample Data Management Data File	16
7-3. Save to Excel	17
7-4. Preview	17
8. How to Uninstall the Software	18

Installation Instructions

1. Introduction

This document provides step-by-step instructions for the installation and administration of the CFS-1800F Audit Trail Data Kit, which includes the DB9 male-female serial cable and the CFS1800F software.

1) Software/Hardware requirements

Computer (Desktop or Laptop) with a 386 or higher processor; RS-232 Communications Port or USB Port (Note: USB-to-Serial Converter is needed for the USB connection.); Microsoft Windows 98 or later versions (NT/Workstation/Server, ME, 2000, XP, 2003); 4 MB Disk Space, 16 MB RAM; Microsoft Access 97 or later versions.

2. Before Getting Started

2-1. Register at the lock and then unlock

1) Set the date and time

*Please refer to the Installation and Operation Manual's 4-4 1) Time Input.

(#) → (*) → (Master Code) → (#) → (10) → (#) → (yyymmddhhmmss) → (#)

Example: In case of 2:12:15 PM on August 1, 2003 (030801141215)

=> (#) → (*) → (Master Code) → (#) → (10) → (#) → (030801141215) → (#)

2) Register user(s) at the lock

*Please refer to the Installation and Operation Manual's 4-2 1) Fingerprint Registration.

Note: When you are registering the user, you need to provide the user's ID number and fingerprint.

(#) → (*) → (Master Code) → (#) → (4) → (#) → (ID (1-4 digits)) →

(#) → (Fingerprint Recognition) → (Voice Prompt (Registration complete))

*Please refer to the Installation and Operation Manual's 4-1 2) User Access Code Set Up (3-10 digits).

(#) → (*) → (Master Code) → (#) → (1) → (#) → (User Access Code) → (#) →

(User Access Code again) → (#)

- In the free scan mode, which is the default mode the lock operates in, the lock uses the 1:N (one-to-many) identification method of authentication. You need only the fingerprint (not the user ID) to unlock in this mode.
- In the ID scan mode, the lock uses the 1:1 verification method of authentication and in order to gain access you need to provide both the fingerprint and the user ID.

The lock supports up to 100 users in the free scan mode, and 1000 users in the ID scan mode. *Verification is more secure and faster than the identification method.*

Please note: User Access Code is **NOT** a User ID. User Access Code is a one-time temporary 3-10 digit code that stays in effect until you change or delete the code. User Access Code is not restricted by time. User Access Code is either active or deleted. The infrequent guests or short-term visitors (i.e., repairperson) should be given the User Access Code, not the User ID, to access the lock. **Important:** User Access Code must be deleted when the guest leaves for the obvious security reasons. The frequent guests (i.e., children coming home during school break) should be registered with their fingerprints, not with the User Access Code.

Please note: The CFS-1800 Audit Trail Data Kit does not allow you to perform the PC enrollment of the user. User registration must be done at the lock only, which means that you can't assign a name to the user. This is why the value of the user name (the UserName field) for the user that has been registered at the lock will appear as "UnDefined" in the audit trail entry.

If you are using the [Audit Trail] version of the Data Kit, not the [Audit Trail and PC Enrollment] version, it is highly recommended that the person in charge of registering users keep a **manual log** of users, including user names, user ID numbers, and if possible, the finger (i.e., left thumb) that the user has used to register himself at the lock.



Data Kit - Audit Trail:
Includes Cable and Software.



Data Kit - Audit Trail & PC Enrollment:
Includes Cable, Software and Fingerprint Reader.

3) Open the lock

*Please refer to the Installation and Operation Manual's 5 2) Opening the Lock using Fingerprint Mode.

- *Free Scan Mode (This is the default mode. Up to 100 Users.)*

(#) + (#) + (Apply the fingerprint on the sensor)

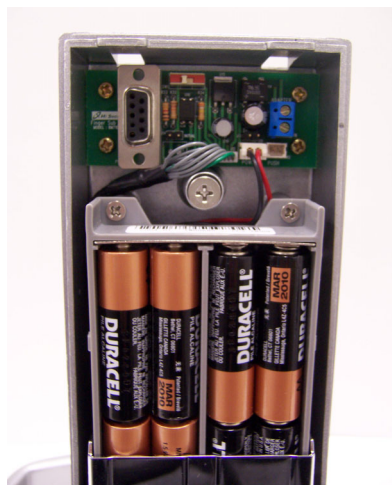
*Please refer to the Installation and Operation Manual's 5 1) Opening the Lock using the User Access Code.

(#) → (User Access Code) → (#)

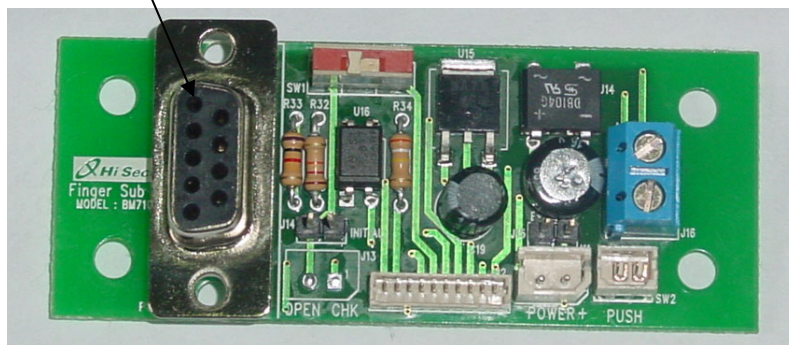
IMPORTANT: If the user is granted access, but does not physically open the lock, his transaction will not be considered as an audit trail event, and therefore will not be downloadable.

2-2. Connect the Lock to a PC

Note: The Audit Trail Download feature is enabled only when the lock is connected to the PC.



Please open the lock's battery cover. You will find the **DB9 Female Connector** on the PCB Board at the back of the lock.



PCB board

1) Using the Serial Connection



Connect the DB9 male end of the serial cable (found in the Data Kit) to the DB9 female connector on the PCB board at the back of the lock, and connect the other end (DB9 female) to the PC's 9-pin RS-232 port.

Note: Most PC serial I/O ports have a 9-pin male connector.

RS-232 Serial Connection

2) Using the USB Connection

Many new laptop computers and some desktop models are now being shipped without RS-232 serial ports and instead are equipped with USB ports. In order to communicate over a USB port instead of a RS-232 serial port, you need to get a USB to RS-232 Converter.

For your convenience, we do offer a USB to 9-pin RS-232 Serial Converter as an optional item in the Data Kit. If you wish to obtain the USB-Serial Converter yourself, first you must make sure that the Converter supports the RS-232 serial interface and that there is no IRQ required. You should be able to find the single port USB to RS-232 Converters commonly available at most computer supply stores at reasonable prices. All of these Converters are supplied with a device driver software, which you must install on your PC.



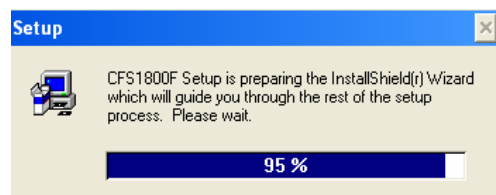
After you connect the serial cable to the USB-Serial Converter and plug the Converter into the USB port of your PC, it would look similar to the picture on your left.

USB Connection

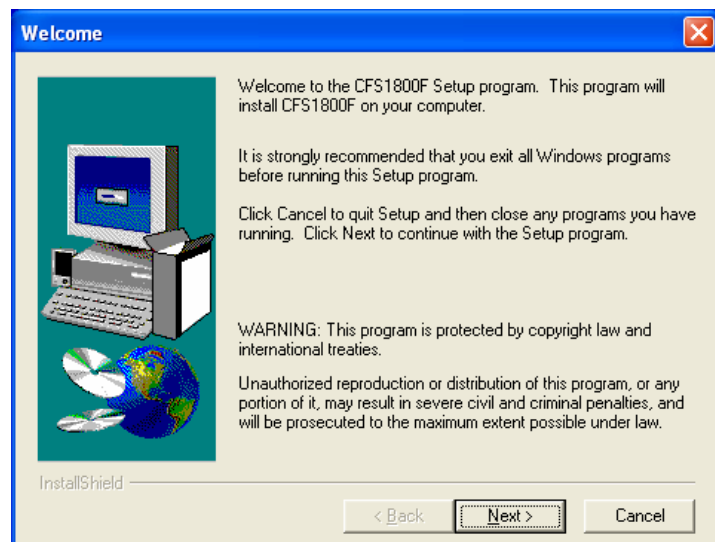
Important: With Communications (COM) ports, you need a specific port to connect the USB-Serial Converter to. If the Converter is connected to COM port number 6, for example, you must make sure that you set the port number to 6 before you download the audit trail events. (See Page 8 for entering the port number in the input box.)

3. Install the Software

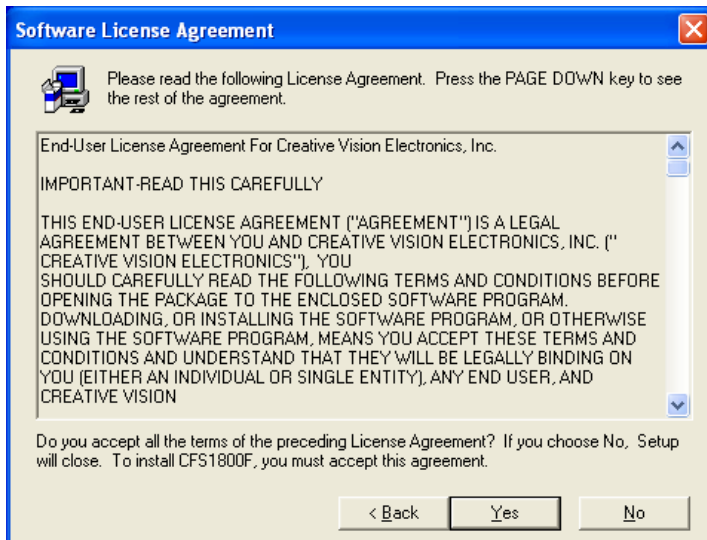
Place the **CFS1800F** software in the CD-ROM drive.



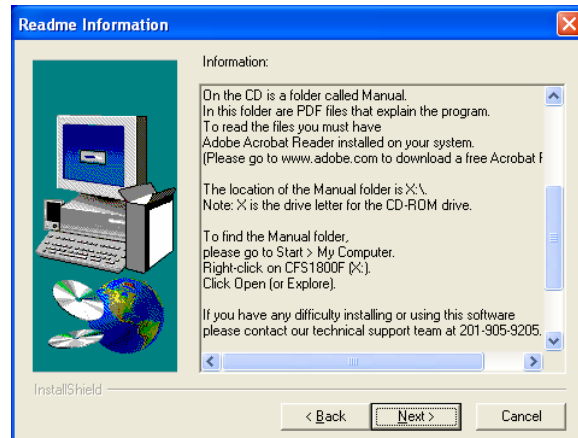
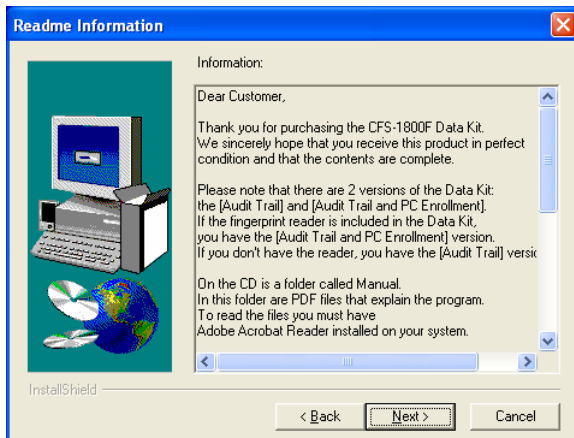
The software installation will start automatically. If the CD-ROM drive does not automatically run: Select Run from the Start menu, and type `x:\CFS1800F\setup.exe` in the Open box (where x is the drive letter for the CD-ROM drive), then click OK. During the setup, the program will create a directory, "C:\Program Files\CFS1800F". The program name will be **CFS1800F**.



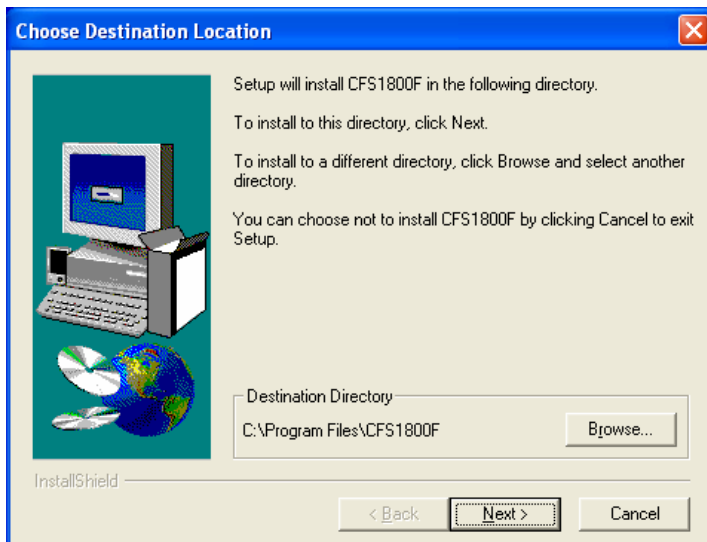
Click **Next**.



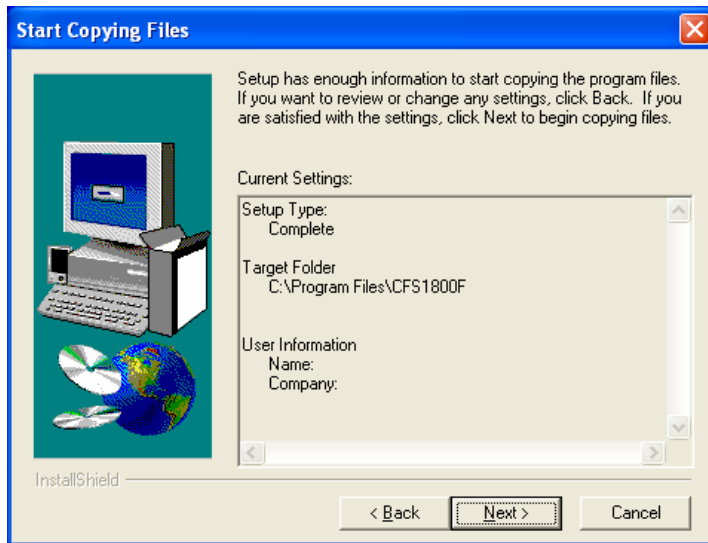
Click **Yes** to install the software.



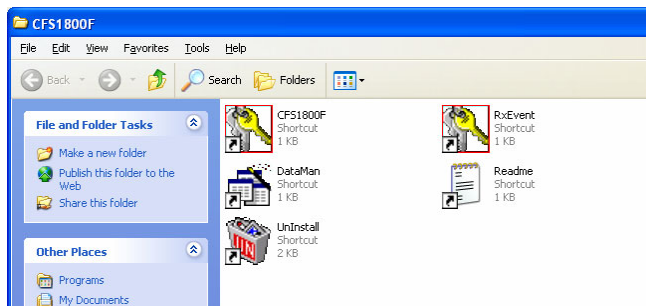
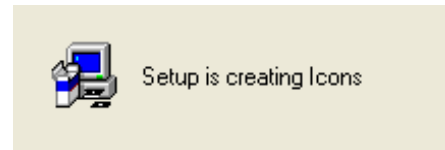
Scroll down to read the Readme information. Click **Next**.



Click **Next**.

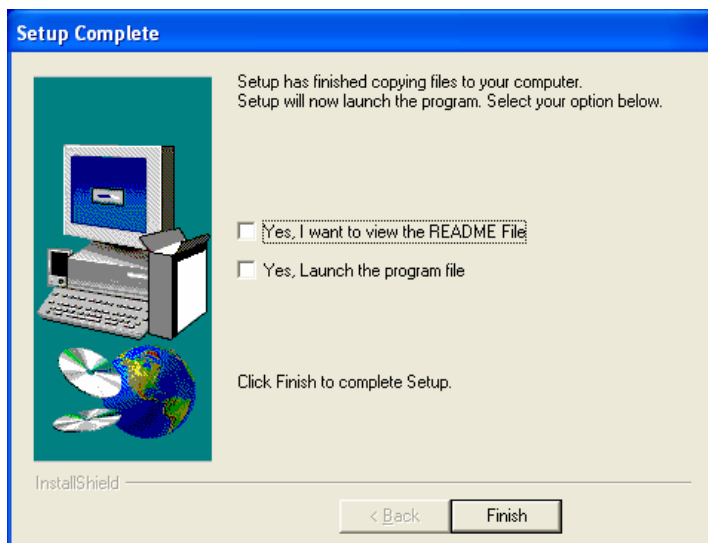


Click **Next**.

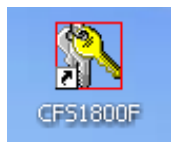


You will see the 5 Shortcut Files inside the CFS1800F program folder.

Double-clicking on **CFS1800F** takes you to the main menu screen. **RxEvt** refers to the audit trail download function and **DataMan** stands for Data Management.



Click **Finish** to complete the installation.

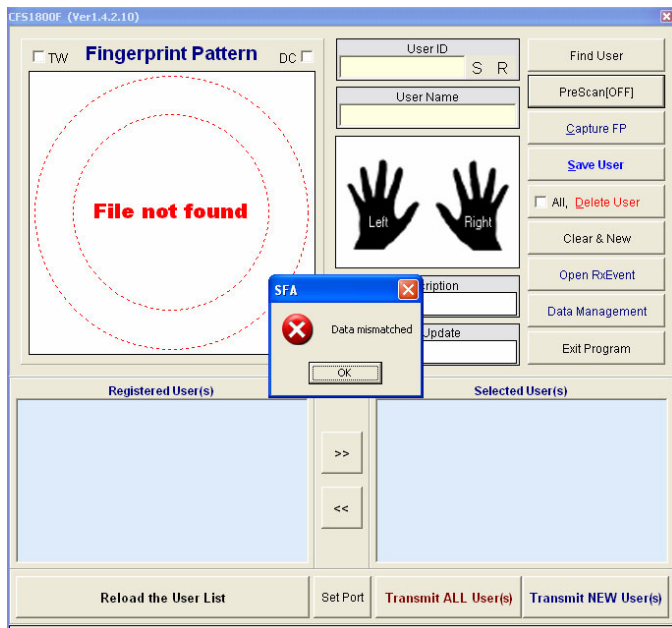


To start the software, click on the Start button, select Programs, then CFS1800F. You can also double-click on the **CFS1800F** shortcut icon on your desktop to open the program.

Operation Instructions

4. Open the CFS1800F Program

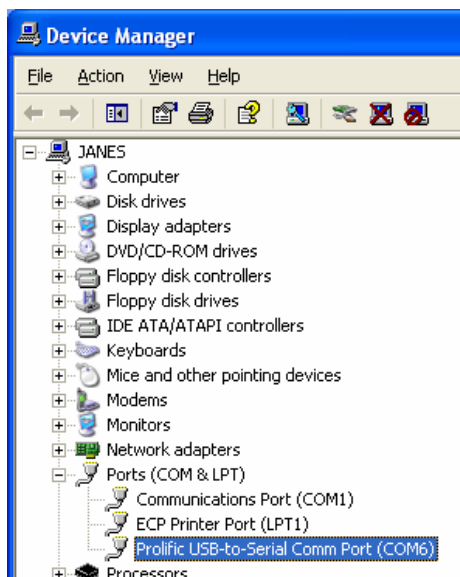
IMPORTANT: Make sure you have connected the lock to the PC and you have set the time and date to the lock before you proceed.



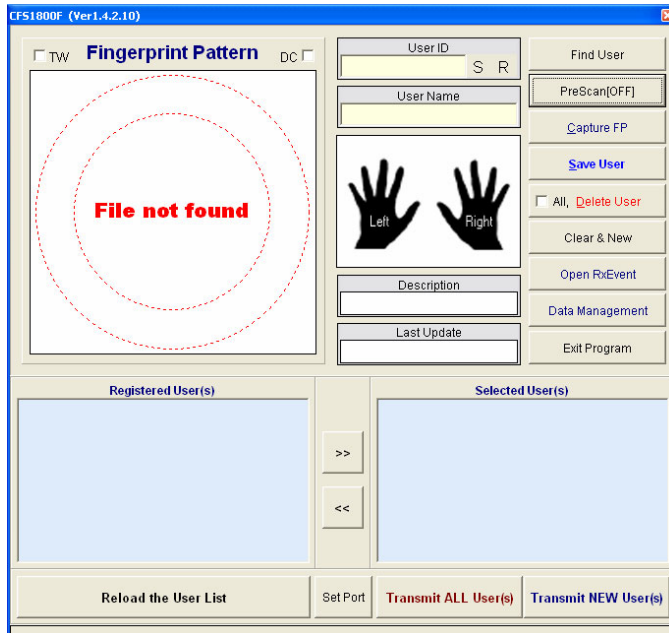
This is the **CFS1800F** program's main menu screen. A dialog box appears with the message, "Data mismatched." You are receiving this message because you don't have the fingerprint reader, which is included in the [Audit Trail and PC Enrollment] version of the Data Kit, not in the [Audit Trail] version, connected to the PC. Ignore the message, and click on the **OK** button to make this box disappear.

5. Set the Port - If you are using the USB connection

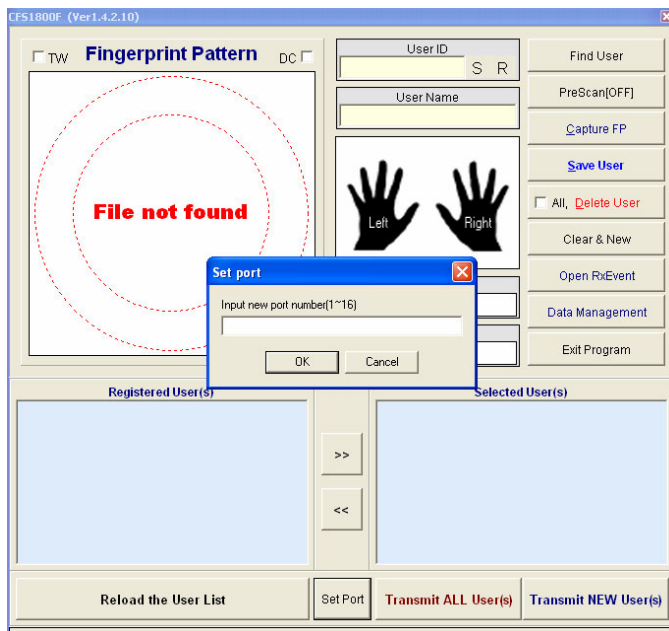
If you have connected the lock to the PC via the serial cable and the USB-Serial Converter, you must find out the specific port that is recognized by the USB-Serial Converter: Go to Device Manager (Start > My Computer. Right-click on My Computer and then click Properties. In the System Properties window, click on the Hardware tab. Click Device Manager).



Here, you'll see that the port recognized by the USB-Serial Converter is COM6. This is the Communications Port (port number 6) into which the converter is connected. Please note: your port number may not be 6. It could be a different number depending on what ports are available on your PC.

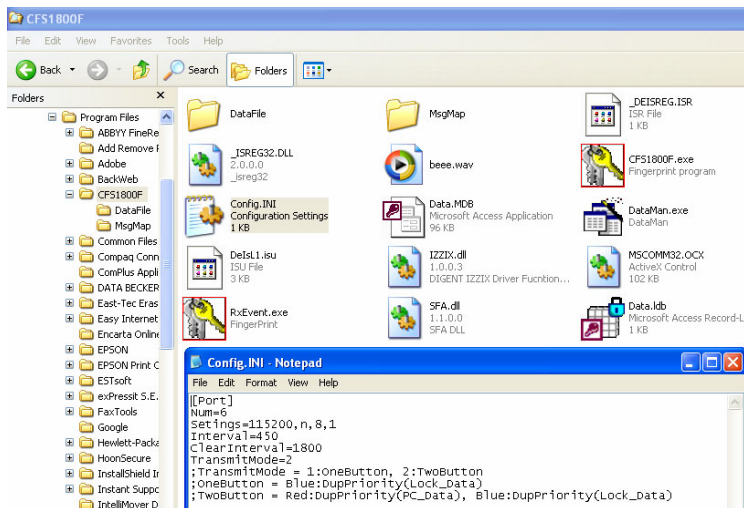
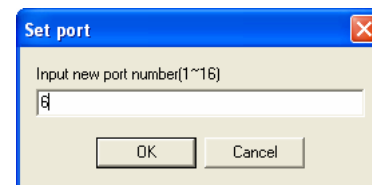


Click on the **Set Port** button.



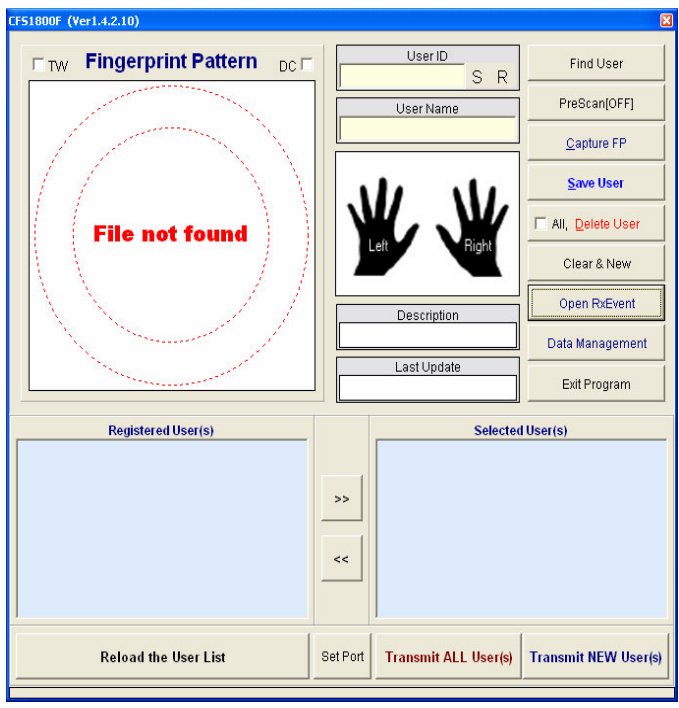
A dialog box appears with the message, "Set port." Since the port recognized by the USB-Serial Converter is COM6 (See Device Manager on Page 8), you should enter 6 in the box.

Important: You must set the correct port number before you download the audit trail events. If you do not set the port, you will not be able to download any events.

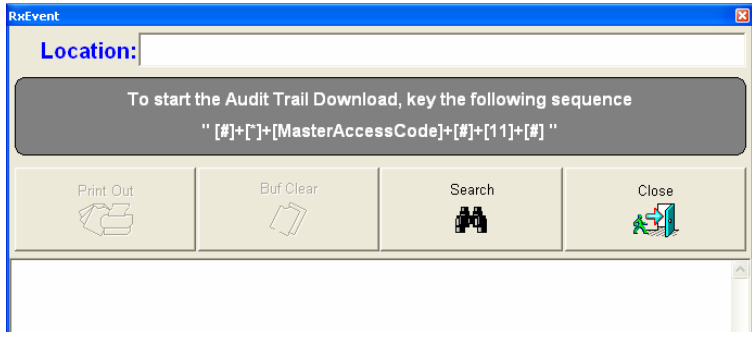


If you look inside the **CFS-1800F** Program folder and click the **Config.INI** file, you'll see that the port number is now set to 6, which is the number of the port the USB-Serial Converter is connected to.

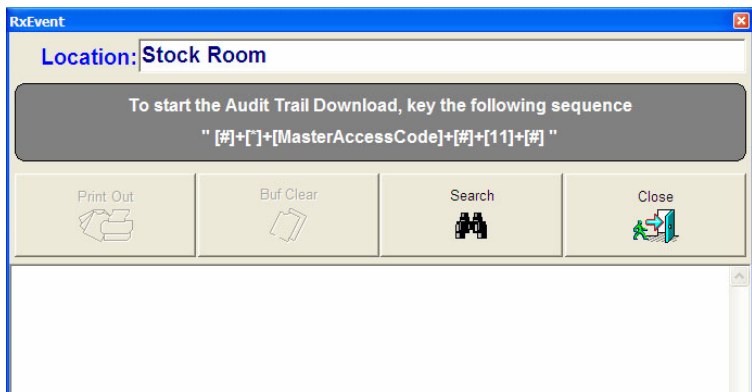
6. Download the Audit Trail



Click on the **Open RxEvent** button in the side tool bar.



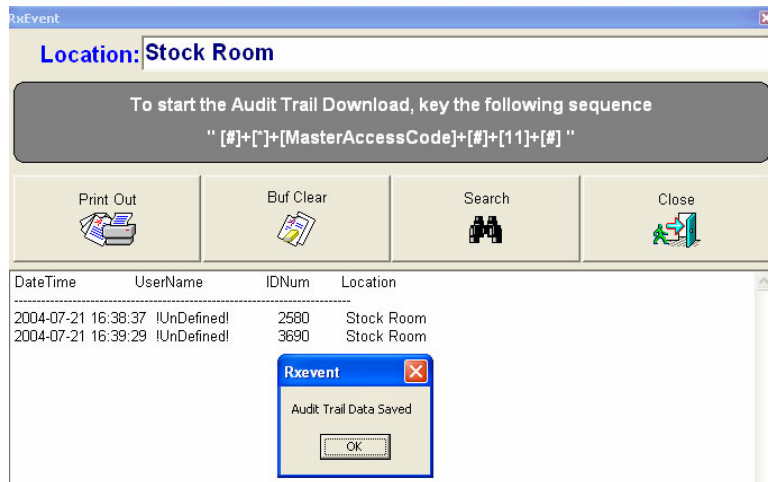
Fill in the Location address bar with the name of the room, door or place where the lock is installed and accessed. The name, for example, could be the Stock Room. Note: It is recommended that you name the lock before you download the audit trail data so that you could easily refer to the lock later.



When you are ready to download the audit trail, enter the sequence on the keypad of the lock:

(#) → (*) → (Master Code)
 → (#) → (11) → (#)

1) Sample Audit Trail Data File



A dialog box appears with the message, "Audit Trail Data Saved". This means the events you've just downloaded have been automatically saved to the database (in Access 97 format - See Data.MDB below).

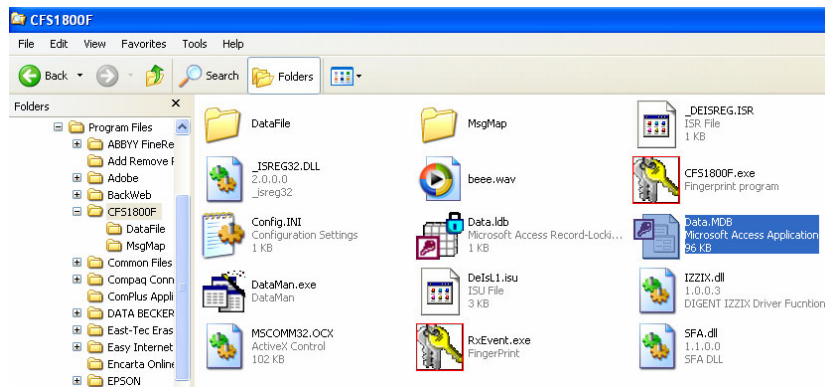
Click on the OK button in the RxEvent box in order to make it disappear so that you can go onto the next transaction download.

- ✓ An authorized user opened the door to the stock room at 4:38pm on July 21, 2004. Note: This user has the User ID 2580 (in the IDNum field).
- ✓ An authorized user opened the door to the stock room at 4:39pm on July 21, 2004. Note: This user has the User ID 3690 (in the IDNum field).

Important: Do NOT include any of the following special characters in the name of the Location: /, :, *, <, >, |, ? Should you include any one of them, you will receive an error message and the downloaded access event will not be saved to the database. Please note that the downloaded transaction history will only include entries recorded of authorized people who have actually opened the lock. It will not include entries of authorized people who have not opened the lock. It will also not include entries of users who have opened the lock with the Emergency Override Card Key or the Push Button.

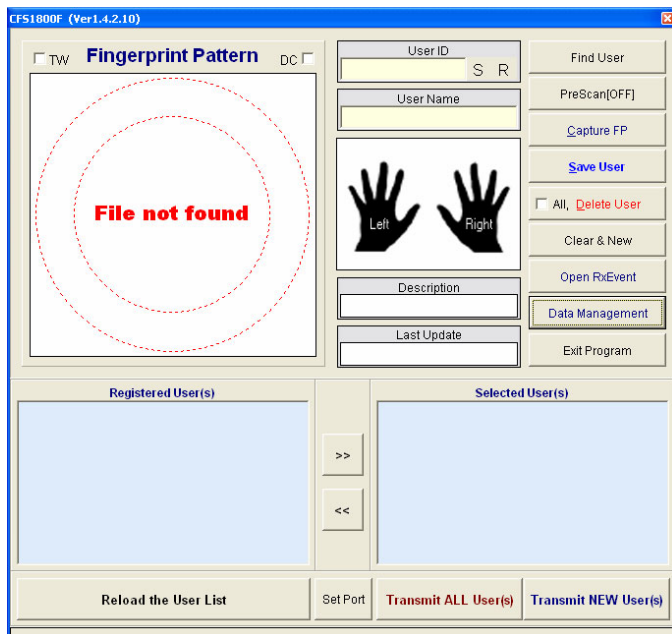
In addition to downloading the transaction(s), you can also perform the following functions while you are in the RxEvent window:

- Print out a report.
- Clear the Buffer - to clear the current transaction.
- Search - to go to Data Management (See Page 11).
- Close - to return to the CFS1800F main menu screen.



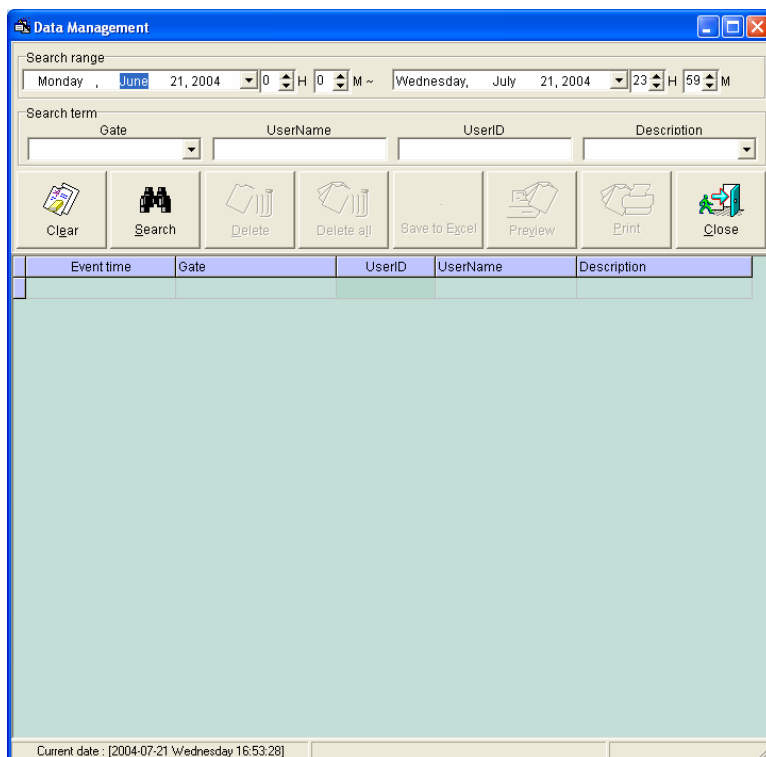
All the access events are saved to the database file, Data.MDB, which opens with the Microsoft Access application (97 or higher versions).

Note: The Data.MDB file can be found in the program directory where you installed the CFS-1800F software.



If you click on the **Search** button in the tool bar of the RxEvent window, you will be taken to Data Management. You can also go to Data Management by closing the RxEvent program and then clicking on the **Data Management** button in the tool bar of the CFS1800F main menu screen.

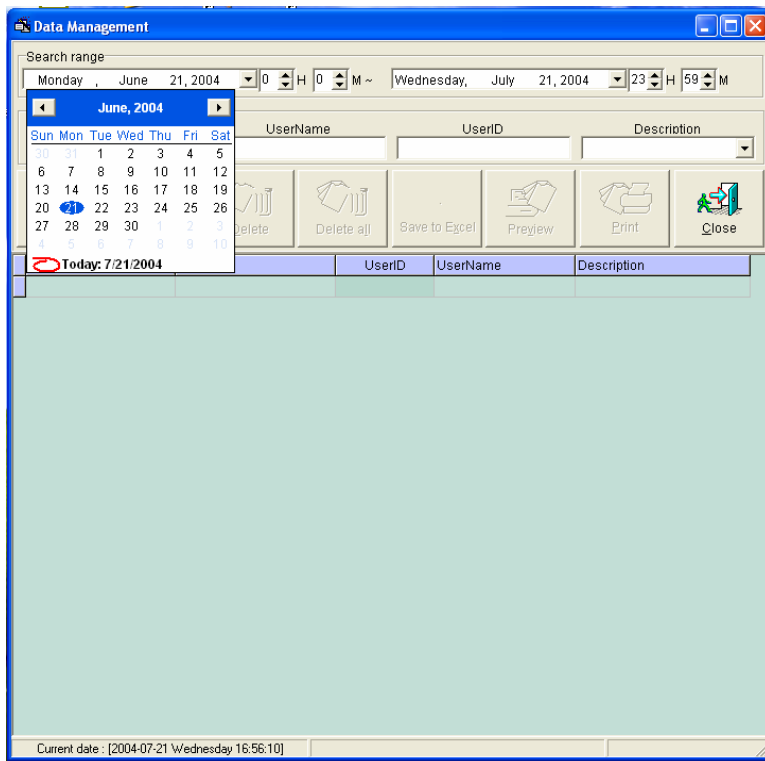
7. Perform the Data Management



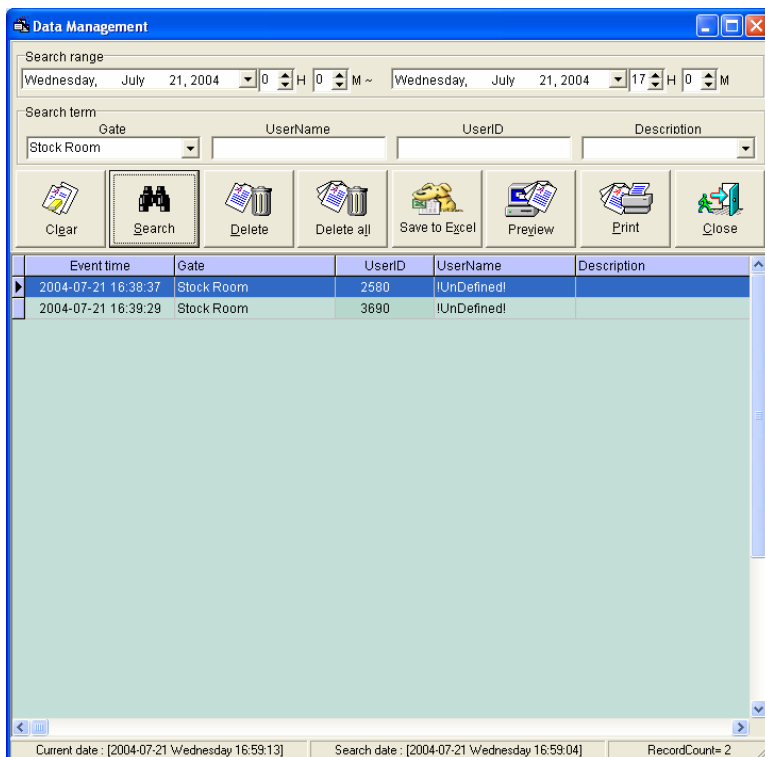
With **Data Management**, you can manage the audit trail data that you've downloaded: You can clear the transaction record(s), delete a single entry, delete all the entries, save the record as your own file, print, or close the program. You can also search or sort by different fields: Gate (or location), UserName (the value of the UserName field is "UnDefined" if the user was enrolled at the lock, not on the PC; the value is the name of the user assigned to the user - if the user was registered at a PC), UserID, and Description.

7-1. Search

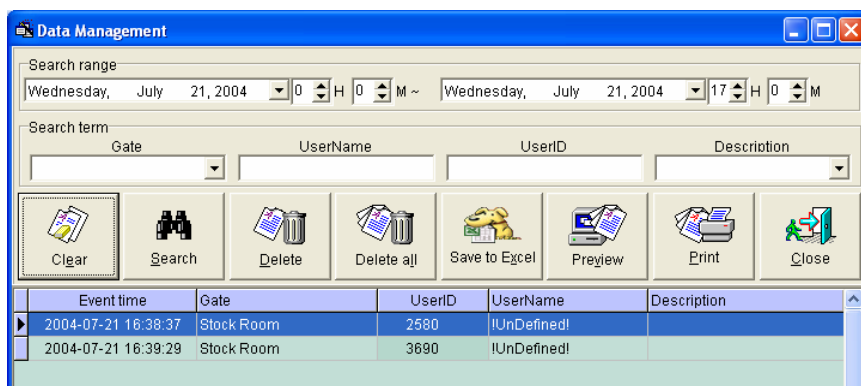
1) Search by Gate



Change the dates and times in the **Search Range** box so that you can track the transactions that occurred during the specified time period.



After you change the dates and times in the Search range box, enter **Stock Room** in the Gate box and click on the **Search** button in the tool bar. The search results will show the stock room was accessed 2 times on Wednesday, July 21, 2004 between 12:00am and 5:00pm - first by the user (User ID 2580) at 4:38pm and then by the user (User ID 3690) at 4:39pm.

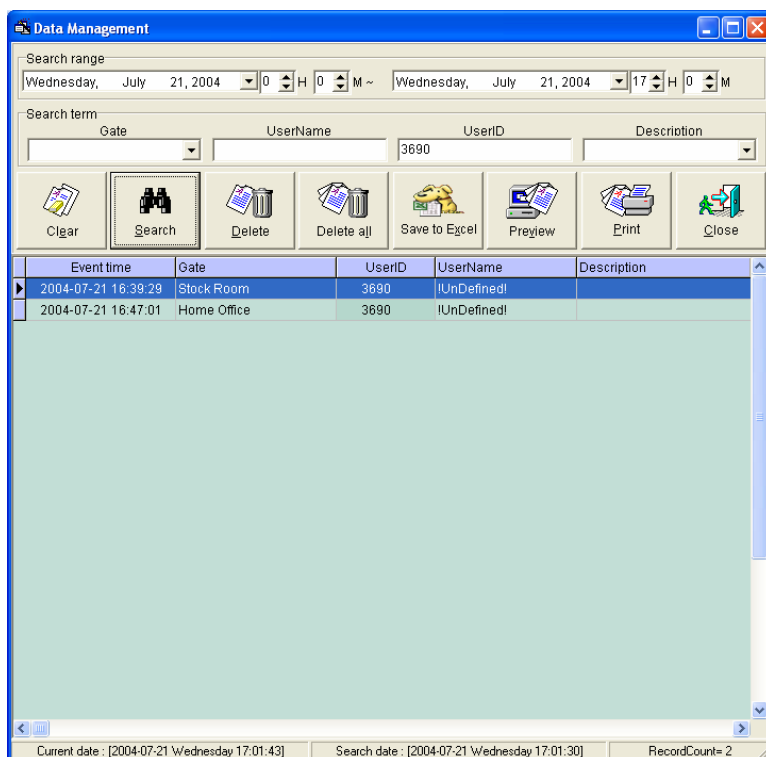


Click on the **Clear** button in the tool bar to change the Gate or to perform another search.

Please note:

- You can't search by User Name because you can't assign a user name to the user that is registering at the lock. This is why the value of the UserName field is "UnDefined" in the above 2 entries - This means the user was registered at the lock, not on the PC.
- It's highly recommended that you keep a manual log of users with information on user ID, user name and if possible, the actual finger (i.e., left thumb) that the user has used to register himself at the lock.
- If you wish to assign user names, or perform a search by User Name (i.e., John) or Description (i.e., Sales, Shipping), you need to get the **[Audit Trail and PC Enrollment]** version of the Data Kit.

2) Search by User ID



To search by user ID, enter the number in the User ID box. You'll see the user (with the user ID 3690) gained entry 2 times on Wednesday, July 21, 2004 between 12:00am and at 5:00pm: He accessed the stock room at 4:39pm and later opened the door to the home office at 4:47pm.

Note: You can't search by Description with the current [Audit Trail] version of the Data Kit. If you wish to assign a user name or perform a search by UserName or by Description (i.e., Sales, Shipping), you need to get the [Audit Trail and PC Enrollment] version.

7-2. Applications

The CFS-1800F Audit Trail Data Kit is best suited for commercial, residential, industrial and institutional applications. In addition to the Stock Room and Home office, there are other locations where you could consider installing the lock and downloading the audit trail events from that lock:

- a. Garage
- b. Basement Room
- c. Guest Room
- d. Living Room
- e. Home Office
- f. Computer Room
- g. Warehouse
- h. Laboratories
- i. Hospitals, Clinics and Pharmacies

a. The **garage** doors are a frequent entry point. Any door leading from the garage into the house should be securely locked.

c. The infrequent **guests** or short-term visitors (i.e., repairperson) should be given the User Access Code, not the User ID, to access the lock. The User Access Code of the user is a one-time temporary 3-10 digit code and it stays in effect until you change or delete the code. The User Access Code is not restricted by time. It's either active or deleted. **Important:** The User Access Code must be deleted when the guest leaves for the obvious security reasons. The frequent guests (i.e., children coming home during school break) should be registered with their fingerprints, not with the User Access Code.

d. **Living Room** should be secured to track the access days and times of home maintenance personnel or in-home care child care/elderly care providers.

i. Under the recently enacted **Health Insurance Portability and Accountability Act (HIPAA)**, doctors, hospitals, health insurers, and other health industry players must follow new privacy procedures and security methods. HIPAA requires that only authorized personnel should be able to access the patients' medical records. CFS-1800F offers a built-in audit trail feature, which meets the **HIPAA compliance** standards and is therefore suited for use in a health care setting, especially at private physicians' offices, healthcare centers, clinics, hospitals, ambulatory care centers, medical billing offices and pharmacies.

1) Sample Data Management Data File

The following entries show the downloaded audit trail events that occurred between 12am and 5pm on Wednesday, July 21, 2004.

Event time	Gate	UserID	UserName	Description
2004-07-21 16:38:37	Stock Room	2580	!Undefined!	
2004-07-21 16:39:29	Stock Room	3690	!Undefined!	
2004-07-21 16:43:31	Garage	2580	!Undefined!	
2004-07-21 16:47:01	Home Office	3690	!Undefined!	
2004-07-21 16:47:51	Basement Room	0852	!Undefined!	
2004-07-21 16:49:20	Computer Room	0852	!Undefined!	
2004-07-21 16:51:12	Guest Room	0000	PassNumber	

Current date : [2004-07-21 \Wednesday 17:03:20] Search date : [2004-07-21 \Wednesday 17:03:11] RecordCount= 7

The home owner opened the door to the Stock Room at 4:38pm on July 21, 2004.

The home owner's spouse opened the door to the Stock Room at 4:39pm on July 21, 2004.

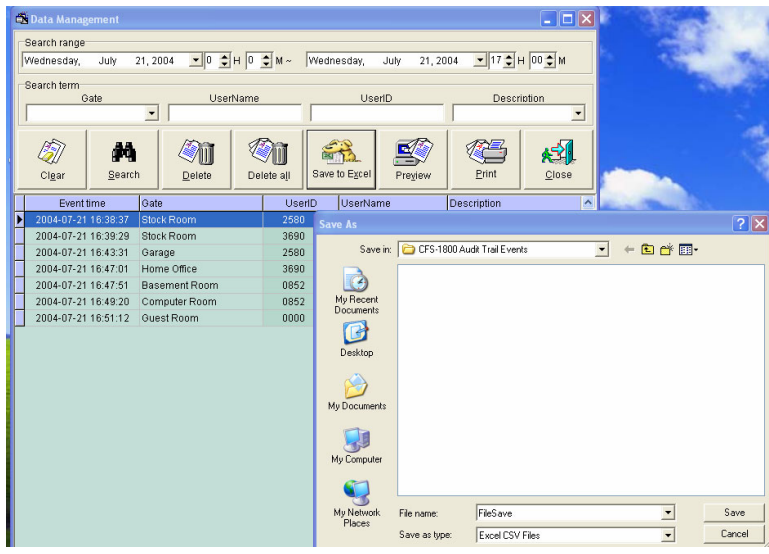
The home owner's son opened the door to the Basement Room at 4:47pm on July 21, 2004.

The guest opened the door to the Guest Room at 4:51pm on July 21, 2004.
 Note: His UserID is 0000, meaning he does not have a UserID. Therefore, he must have accessed the Stock Room via his PassNumber (User Access Code).

Please note:

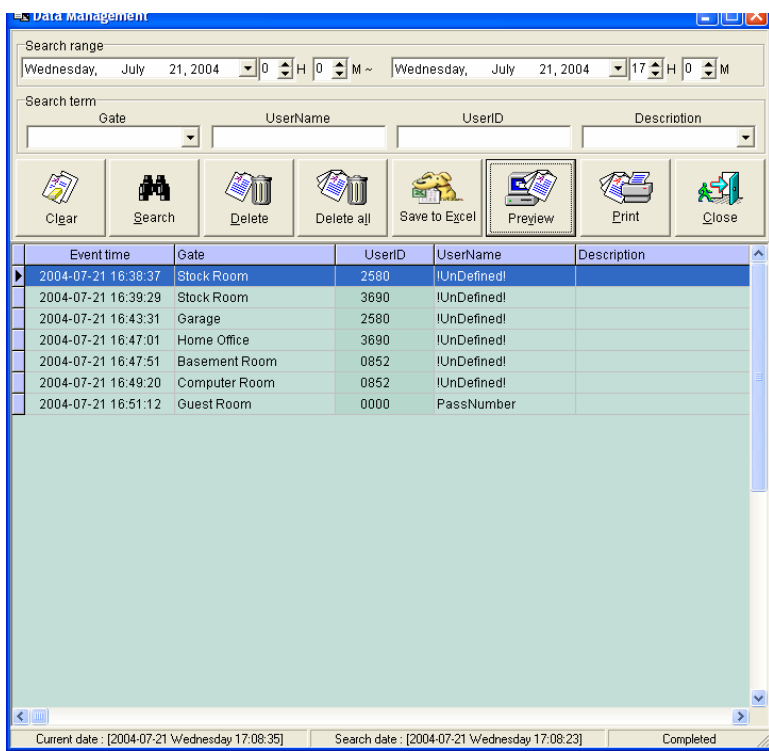
If the entry shows that the user has a User ID, then this means the user accessed the Gate with his fingerprint. You can't assign a user name to the user that's been registered at the lock with his fingerprint. This is why the value of the UserName field is "Undefined" in the above 6 entries.

7-3. Save to Excel

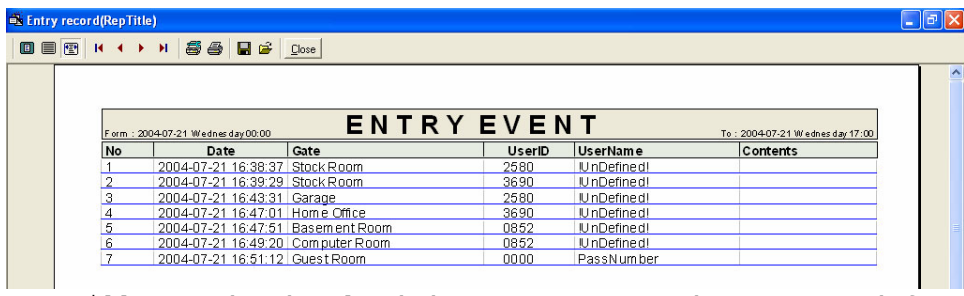


You can save the **Data Management** entries as your own file by clicking on **Save to Excel** button in the tool bar.

7-4. Preview

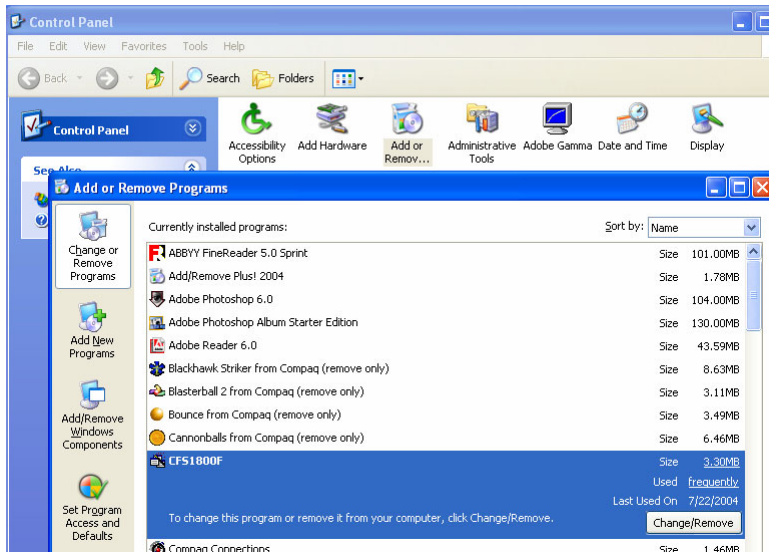


To preview the entry record(s), click **Preview** in the tool bar.



You will see the downloaded access events that occurred from 12:00am to 5:00pm on Wednesday, July 21, 2004.

8. How to Uninstall the Software



To remove the CFS1800F software on Windows XP:

Start > Control Panel > Add or Remove Programs. Click on the Change/Remove button. (The picture on your left is from Windows XP Home Edition.)

To remove the CFS1800F software on Windows 98:

Start > Settings > Control Panel > Add/Remove Programs. When the Add/Remove Programs Properties dialog box appears, click on the Install/Uninstall tab.