DATREND Systems Inc.

ES601pc

Equipment Record Editor

For the ES601pc Companion Software Package

Operating Manual

ES601pc Equipment Record Editor

For the ES601pc Companion Software Package

Operating Manual

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DATREND Systems Inc.

To order this manual, use Part Number 6100-428

Revision	Revision History Description	Date
C	Added Appendix A	2009-Jun-03
D	Update Address	2012-Aug-30
E	Update Address and Logo	2016-Jul-05

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EQUIPMENT RECORD EDITOR

Managing Equipment Records

ES601Plus "Equipment Records" relate an equipment control number of a medical device to a Test Procedure, allowing you to initiate comprehensive inspection and performance testing activities for a specific piece of equipment simply by entering the control number of the equipment into the ***ES601Plus***. Such control numbers can be entered using the QWERTY touch keypad of the analyzer, or by an external PS/2 keyboard, or by an external barcode scanner.

Equipment Records are created with the accessory Equipment Record Editor for the *ES601pc* software package. The Editor allows you to create and/or modify up to 18432 Equipment Records which can then be loaded into the non-volatile memory of the ***ES601Plus***.

Additionally, the Editor allows you to input and save additional information about each device, such as description, make, model, and several other equipment details. Although this extra information is not communicated to the ***ES601Plus*** and saved in its memory, any additional information you may input is retained in the file system of the Equipment Record Editor. In conjunction with the Test Procedure Editor and Test Report Generator of *ES601pc*, the Equipment Record Editor provides you with a simple computer-based system for equipment tracking and maintenance, including means for:

- creating and monitoring an equipment inventory;
- retaining and reviewing the service history of equipment in your inventory; and
- creating PM inspection procedures for specific types of equipment.

If you already have a PC-based equipment management system (CMMS), the Equipment Record Editor provides data importing features that allow ***ES601Plus*** Equipment Records to be easily and rapidly generated from pre-existing equipment information exported from your CMMS data base.

To run the Equipment Record Editor, click on the "Equipment Record Editor" button on the *ES601pc* main menu. The Equipment Record Table will then appear (***Figure 1***).

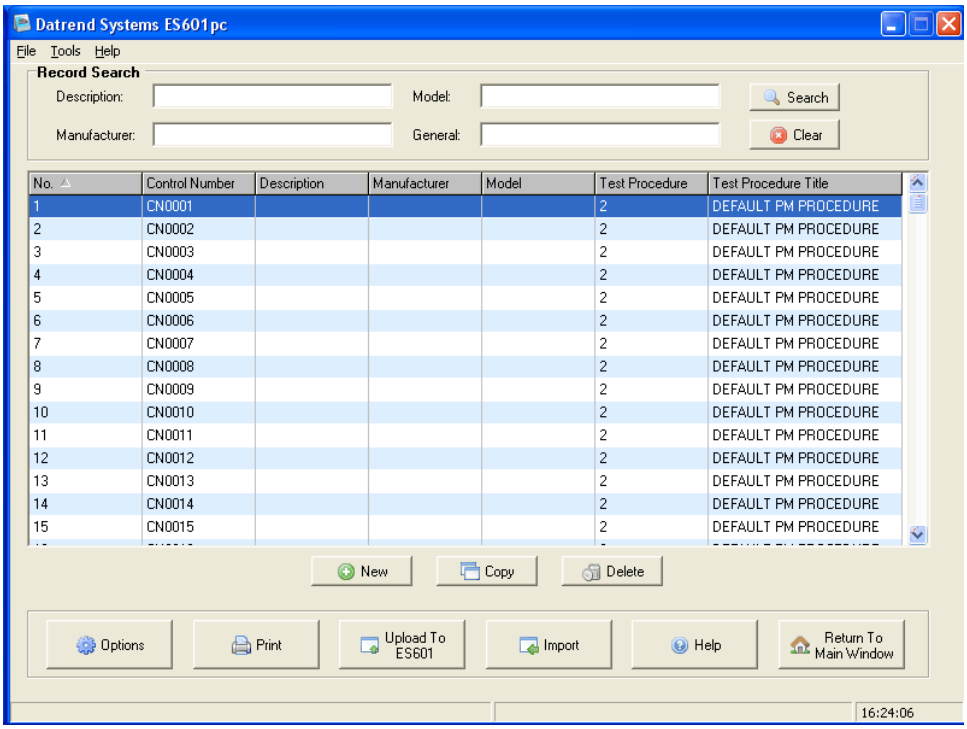


Figure 1

Creating A New Equipment Record

To create a new Equipment Record, click the "New" button below the Equipment Record Table. This will cause a new entry to be added at the end of the Table. The Equipment Record Editor will then appear, allowing you to enter specific information about the device such as its control number, make, model and so on.

Copying Equipment Records

To copy one or more pre-existing Equipment Records, click on a specific Record in the Table or click and drag the mouse over a group of consecutive Records, and then click "Copy". At the end of the Table, new Records will be created having the same attributes as the selected Records, except the control number

field of each new Record will be left blank for later editing.

Deleting Equipment Records

To delete one or more Equipment Records, click on a specific Record in the Table or click and drag the mouse over a group of consecutive Records, and then click "Delete". You will be asked to confirm the deletion. Click "Yes", and the selected Records will be removed from the Table.

Editing Equipment Records

To edit the contents of an Equipment Record, double-click the Record in the Equipment Record Table, or select a Record and hit the <Enter> key on the keyboard. The Equipment Record Editor will appear (***Figure 2***). Text boxes are provided allowing you to input a Device Control Number, Manufacturer, Model, and Device Description. The Editor also provides three user-defined Custom Fields into which you can enter any desired information.

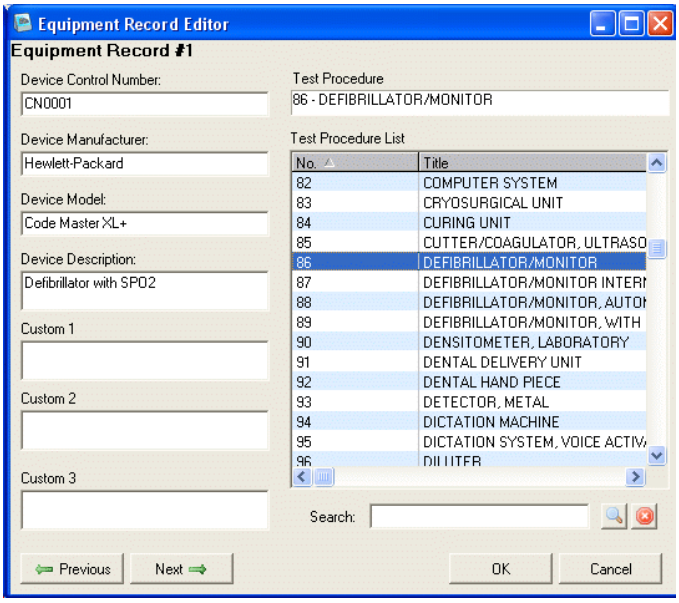


Figure 2

The Test Procedure to be associated with the Device is selected by clicking on a Test Procedure in the list at the right of the dialog. To locate a specific Test Procedure in the list, enter part or all of the Procedure's name in the Search box, and then click the "Search" button or hit the <Enter> key on the keyboard. The Test Procedure list will then be filtered according to what you entered in the Search box. To restore the full listing of Test Procedures, click the "Search Clear" button to the right of the "Search" button.

To view the previous or next Equipment Record in the system without returning to the Equipment Record Table, click the "Previous" or "Next" buttons of the Equipment Record Editor.

Click "OK" to save the changes entered via the Editor, or click "Cancel" to return to the Equipment Record Table without saving.

Of the information you may potentially input via the Editor dialog, only the Device Control Number and the Test Procedure number will be transmitted to the ***ES601Plus*** for storage in the non-volatile memory of the safety analyzer. Any additional equipment information you may input, such as Device Model or Description, is saved to disk by the Editor but it is not transmitted to the ***ES601Plus*** since the information is not needed by the safety analyzer in order to run the Test Procedure. However, the additional equipment information you may choose to enter into a Record may prove helpful later on, when reviewing Equipment Records to determine how Test Procedures were assigned to Control Numbers in your system, or when creating new Equipment Records for devices added to your system in the future.

Searching Equipment Records

To search Equipment Records, enter search terms in one or more of the Search boxes located above the Equipment Record Table (***Figure 1***). After entering one or more Search terms, you may then click the "Search" button or hit the <Enter> key on the keyboard. To search based on an equipment description, enter part or all of the description into the "Description" Search textbox. To search manufacturers, use the "Manufacturer" Search textbox. To search by equipment model name or number, use the "Model" Search textbox. To search all text fields provided by the Equipment Records, use the "General" Search textbox.

When the "Search" button is clicked, the Equipment Record Table is filtered by the search terms entered. Entering search terms into more than one search box

will display all Equipment Records that include any of the terms specified.

To restore the full listing of Equipment Records after a search, click the "Search Clear" button below the "Search" button.

Importing Equipment Records

To import Equipment Records from a Comma Separated Values (CSV) file, click the "Import" button below the Equipment Record Table (***Figure 1***). The Import Equipment Records dialog will then appear (***Figure 3***). Click "Browse" to select the CSV file containing the equipment data.

Figure 3

Each line of the CSV file must correspond to one piece of equipment, which typically will be identified by a unique control number in an equipment management system. The information fields appearing in each line of the equipment data are referred to as "columns" by the Equipment Record importer. In each line of equipment data, the columns must be delimited by a specific character, and the same character must be used consistently throughout the CSV file to delimit the columns. The delimiter character can be specified through the Delimiter dropdown list of the Import Records dialog. To specify a delimiter other than those appearing in the list, select "Other" and then enter a single character into the Delimiter textbox which appears.

If one or more lines at the beginning of the CSV file do not contain equipment

information, use the spinner buttons to specify the number of lines to be skipped at the start of the file. The value shown corresponds to the line number of the CSV file at which equipment data importing will begin.

If the equipment information fields or columns are, in addition to being separated by a delimiter, also surrounded by quotation characters ("), then check the "Fields are Surrounded by Quotes" box on the Import Records dialog.

Once the import settings have been selected, click the "Continue" button. If the "Continue" button is not enabled, either the filename or the delimiter has not been entered correctly. Make sure the CSV file exists and review your delimiter settings in this case.

After "Continue" is clicked, the Import Records dialog will change appearance and will show how the first line of equipment-related information in the CSV file will be imported (***Figure 4***). Via this dialog, you can choose which CSV data fields or columns are mapped to the fields of the *ES601pc* Equipment Record. The fields of the Equipment Record are listed on the left-hand side of the dialog and include "Device ID"; "Device Description"; "Manufacturer"; and so on. Three "Custom" fields which can contain arbitrary data are also provided.

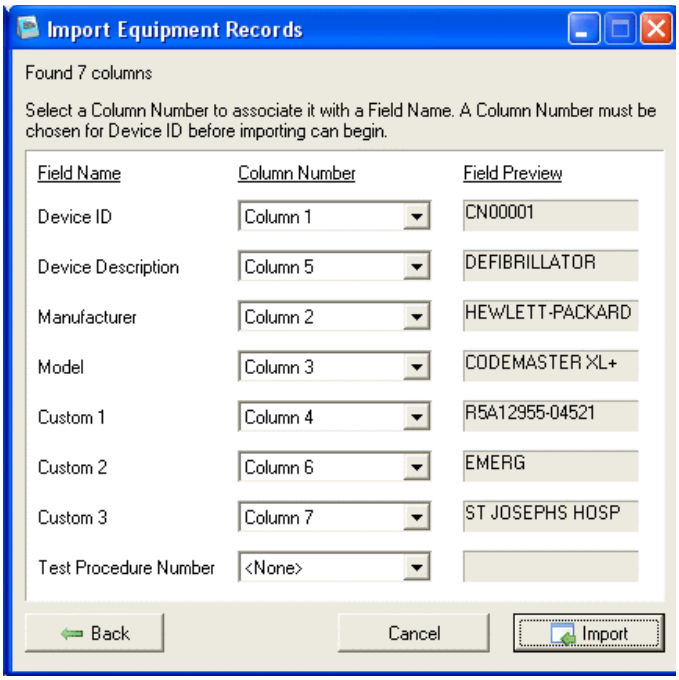


Figure 4

If the equipment control number is the first field or column of each line in the CSV file, select "Column 1" in the dropdown list box shown to the right of "Device ID" on the Import dialog. If the selection is correct, the equipment control number from the first line of equipment data should appear in the Field Preview textbox at the far right.

Repeat the column-selection process for each field of the Equipment Record. If you do not want any data to be imported into a particular field of the Equipment Record, then set the "Column Number" for that field to "None". The only field which you must specify is the Device ID. The import cannot be initiated if the CSV column containing the equipment control number is not identified.

Once the CSV columns have been mapped to their respective Equipment Record fields, click the "Import" button to begin the import process. If a duplicate Device ID is found in the CSV file, a message box will appear allowing you to input an alternative Device ID for the duplicate, or you can choose to skip the duplicate and thus omit it from the imported results. When the import process has finished, the Equipment Records will appear in the Equipment Record Table. Depending on how the CSV columns were assigned prior to the import, certain columns in the Equipment Record Table may appear blank.

Refer to Appendix A for a specific example of importing equipment records.

Uploading Equipment Records

To transmit Equipment Records to the ***ES601Plus***, click the "Upload" button below the Equipment Record Table (***Figure 1***). This will cause a communications selector to appear (***Figure 5***).

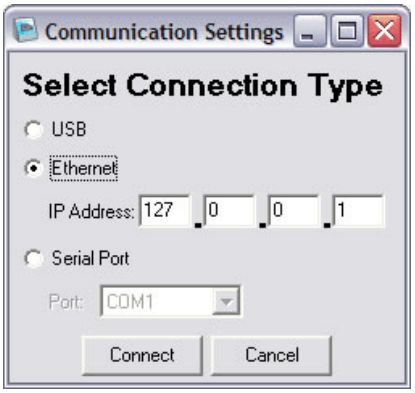


Figure 5

Choose to communicate via USB, Ethernet, or Serial Port. If the connection is via ethernet, enter the IP address assigned to the ***ES601Plus*** (note this IP address is displayed on the LCD of the ES601 when the analyzer is operating in "Ethernet Mode"). If the connection is via serial port, choose the COM port to which the ***ES601Plus*** is connected. Once the communications options have been set, click "Connect" to send the data to the ***ES601Plus***.

Printing Equipment Records

To print Equipment Records, click the "Print" button below the Equipment Record Table (***Figure 1***). You may optionally choose to print all Records, selected Records, or filtered results as they are currently being shown in the Table (***Figure 6***). As well, certain Equipment Record fields can be excluded from the printout, by unchecking the box corresponding to the undesired information. By default, all fields of the Equipment Record are included in the printout.

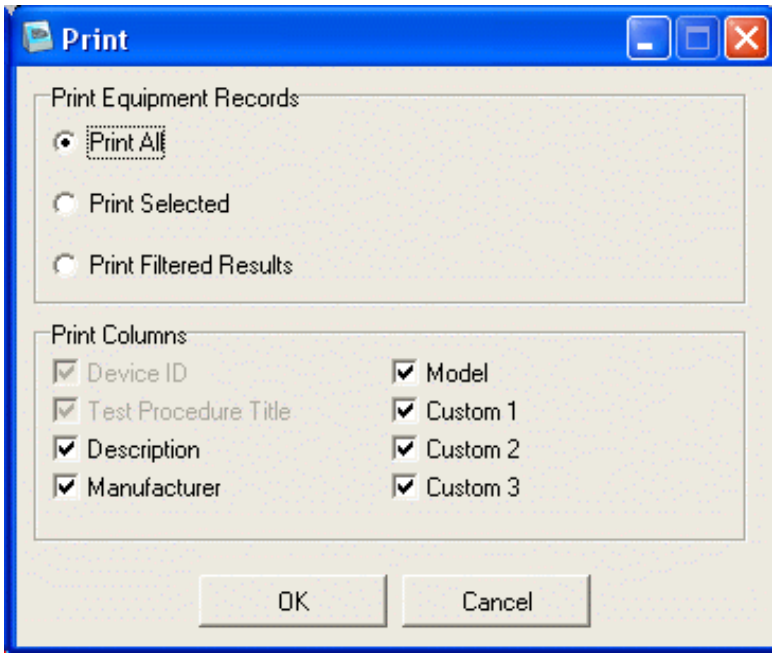


Figure 6

Options Menu

To modify the viewing options of the Equipment Record Table, click the "Options" button below the Table (***Figure 1***). The Options dialog will then appear (***Figure 7***). Columns can be unchecked and excluded from view in the Table. The names assigned to the three Custom fields of the Equipment Record can also be edited via the textboxes provided. Click "OK" to accept and save the changes, or click "Cancel" to return to the Equipment Record Table without saving.

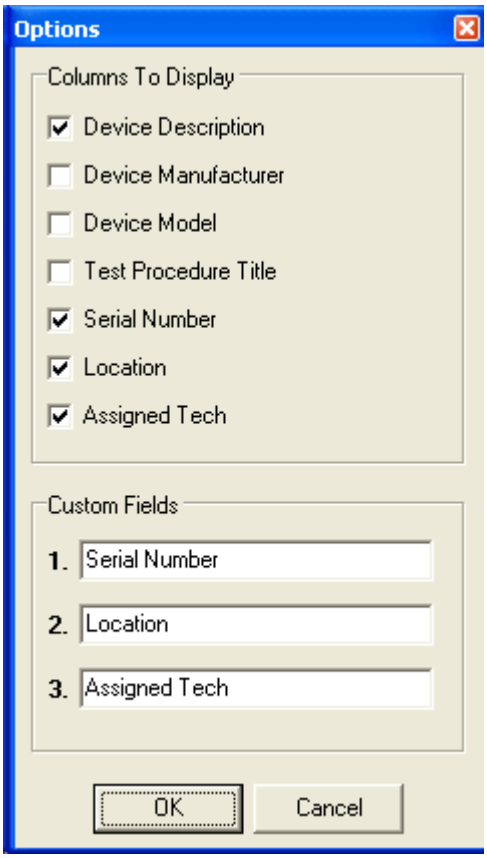


Figure 7

With viewing options set according to ***Figure 7***, the Equipment Record Table will appear as shown in ***Figure 8*** (example data only).

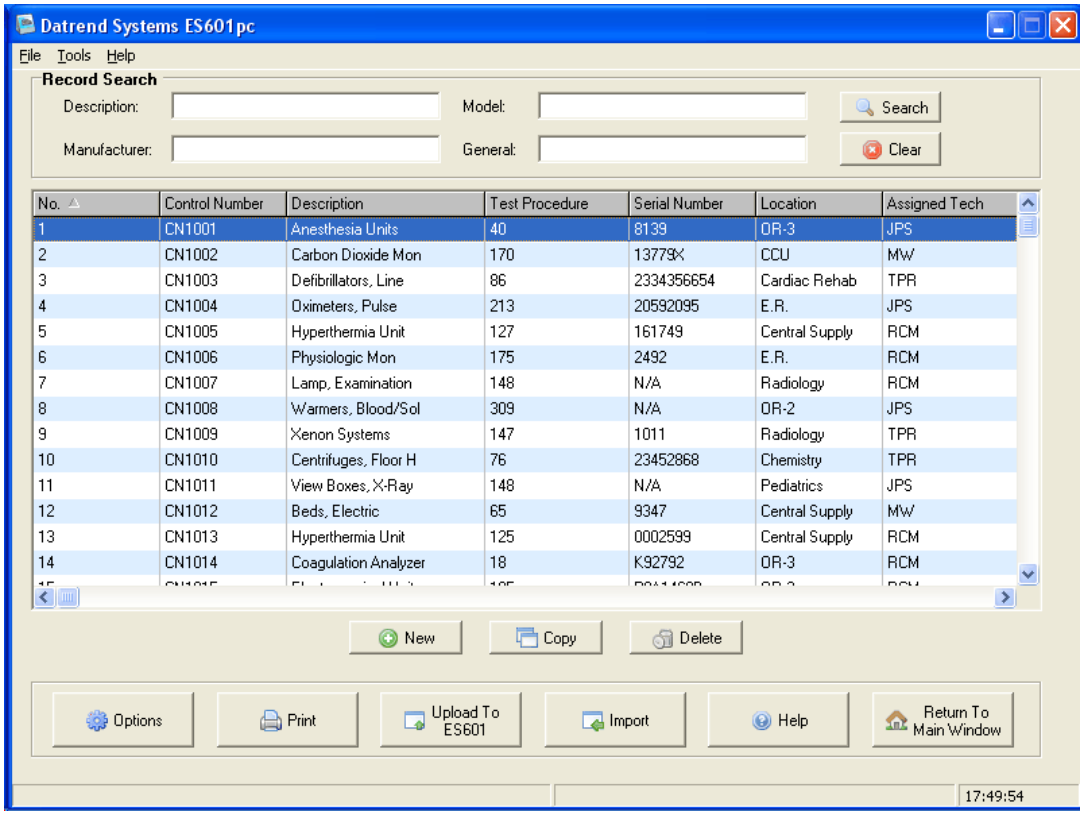
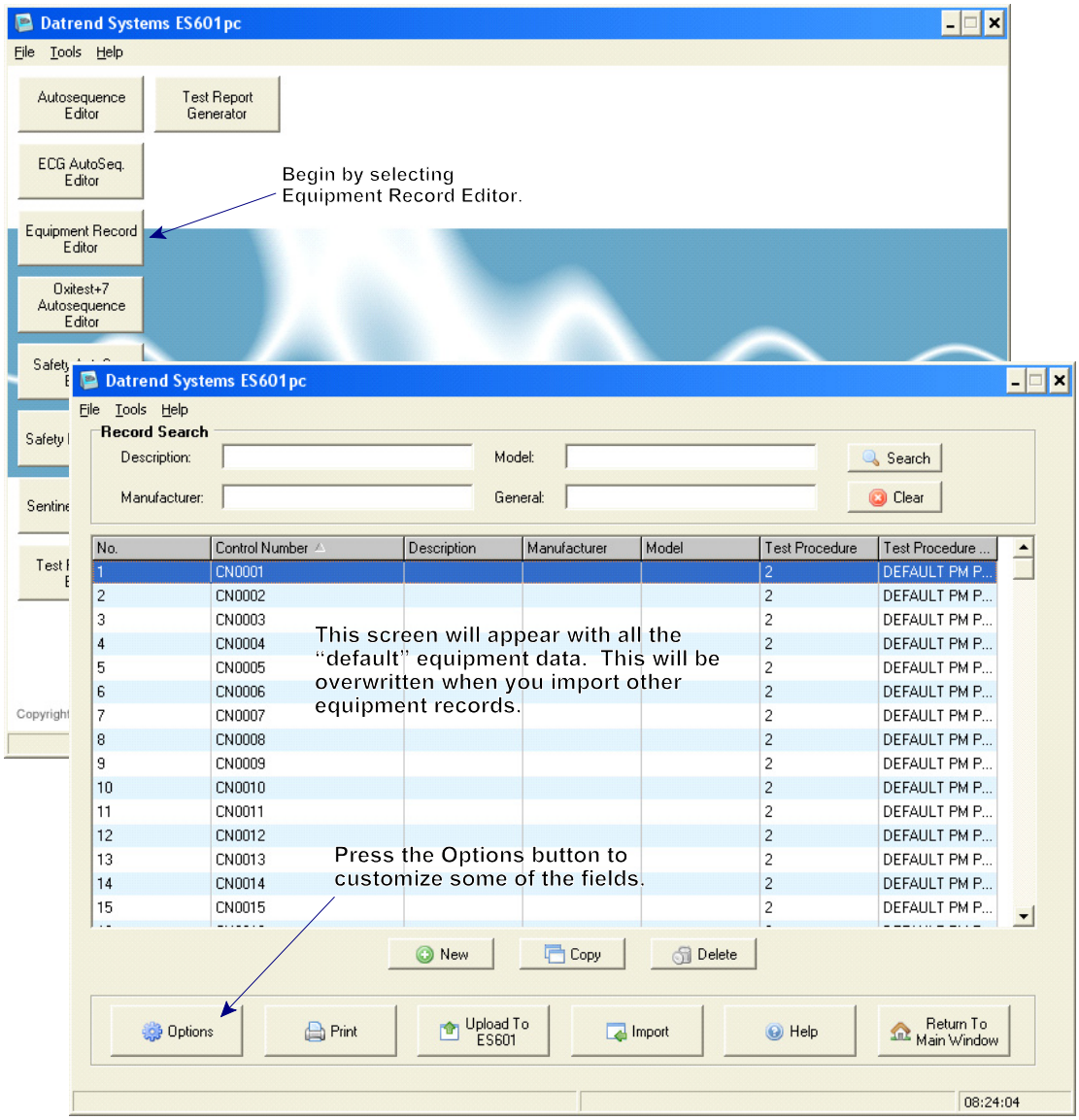
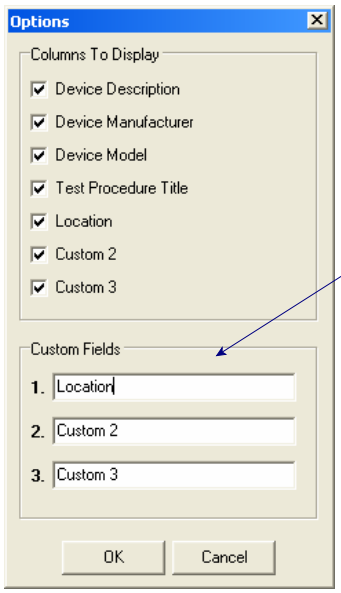

Datrend Systems ES601pc
File Tools Help
Record Search
Description:
Model:
Search
Manufacturer:
General:
Clear
No. | Control Number | Description | Test Procedure | Serial Number | Location | Assigned Tech
1 | CN1001 | Anesthesia Units | 40 | 8139 | OR-3 | JPS
2 | CN1002 | Carbon Dioxide Mon | 170 | 13779X | CCU | MW
3 | CN1003 | Defibrillators, Line | 86 | 2334356654 | Cardiac Rehab | TPR
4 | CN1004 | Oximeters, Pulse | 213 | 20592095 | E.R. | JPS
5 | CN1005 | Hyperthermia Unit | 127 | 161749 | Central Supply | RCM
6 | CN1006 | Physiologic Mon | 175 | 2492 | E.R. | RCM
7 | CN1007 | Lamp, Examination | 148 | N/A | Radiology | RCM
8 | CN1008 | Warmers, Blood/Sol | 309 | N/A | OR-2 | JPS
9 | CN1009 | Xenon Systems | 147 | 1011 | Radiology | TPR
10 | CN1010 | Centrifuges, Floor H | 76 | 23452868 | Chemistry | TPR
11 | CN1011 | View Boxes, X-Ray | 148 | N/A | Pediatrics | JPS
12 | CN1012 | Beds, Electric | 65 | 9347 | Central Supply | MW
13 | CN1013 | Hyperthermia Unit | 125 | 0002599 | Central Supply | RCM
14 | CN1014 | Coagulation Analyzer | 18 | K92792 | OR-3 | RCM
New
Copy
Delete
Options
Print
Upload To ES601
Import
Help
Return To Main Window
17:49:54

Figure 8

Appendix A

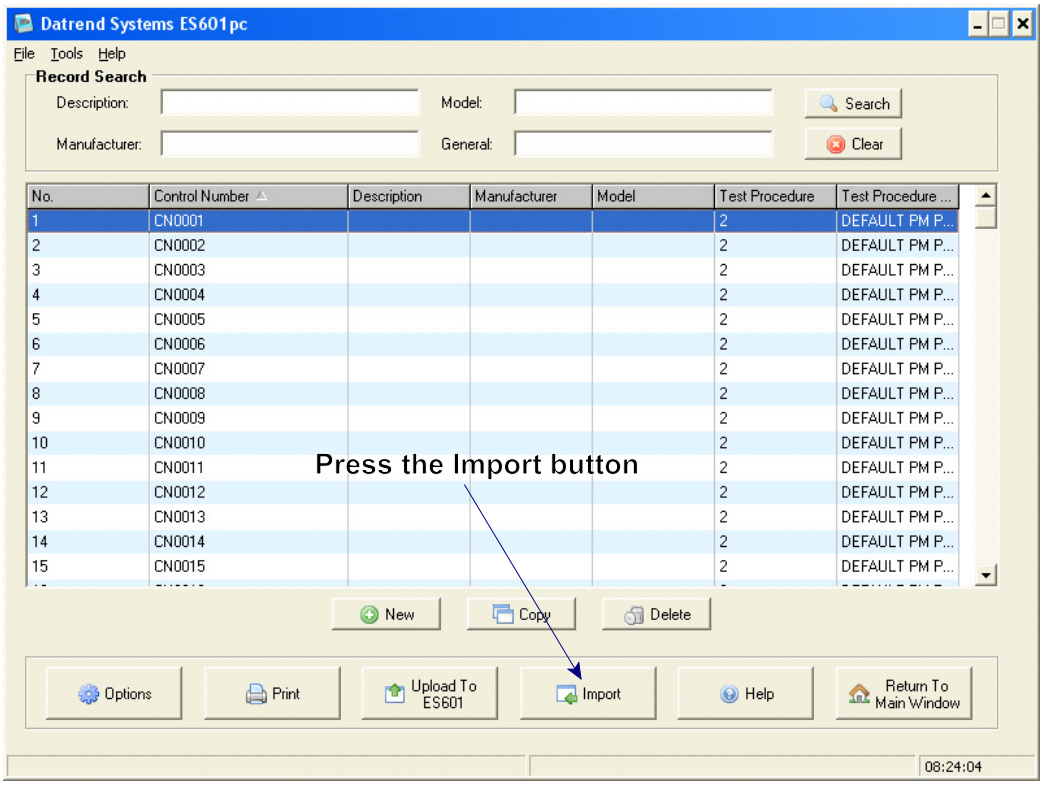
Appendix A - Importing Equipment Records



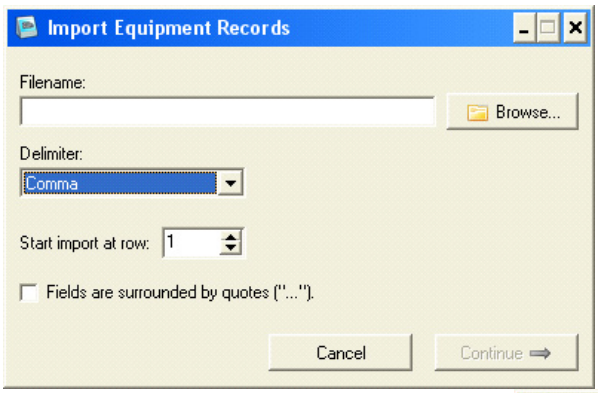


Enter any Field Names you wish. These can include Location, Facility, anything at all.

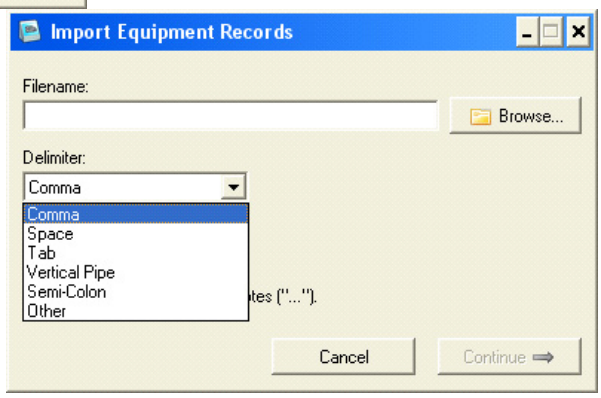
Press OK when you have finished.



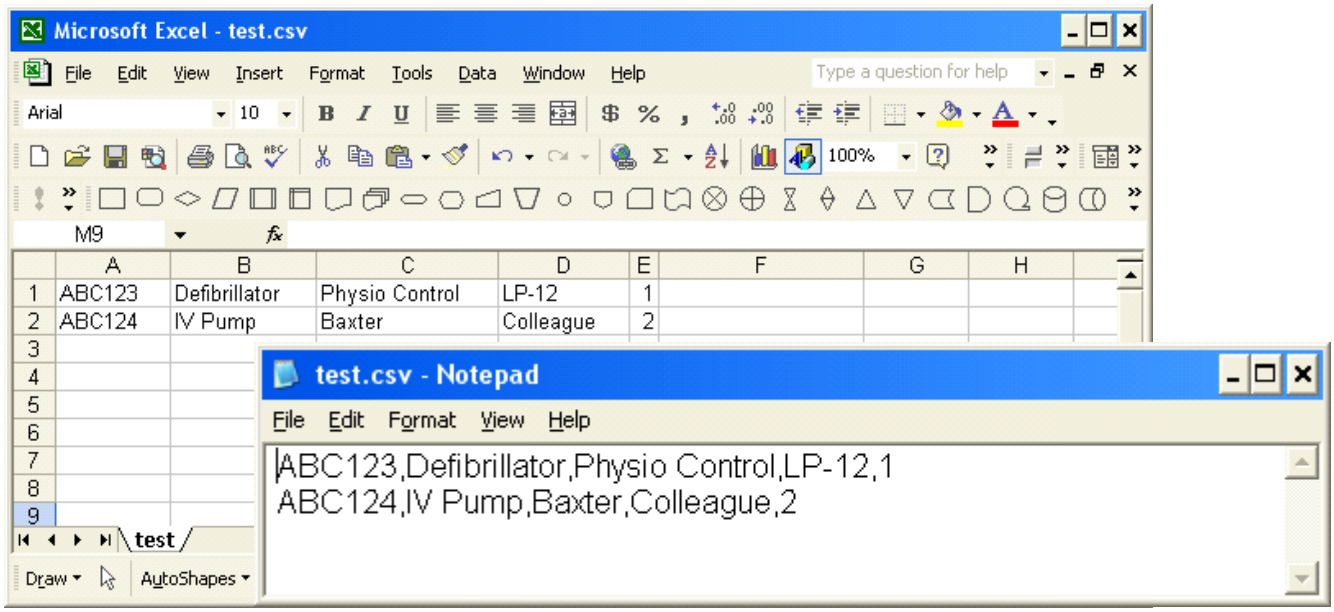
Press the Import button



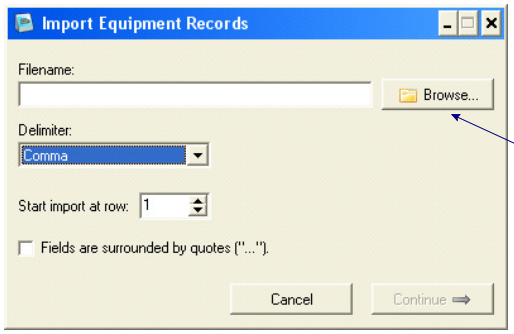
The Import option screen will open to choose the file to import. Generally, a CSV (comma separated values) file is easiest to work with.



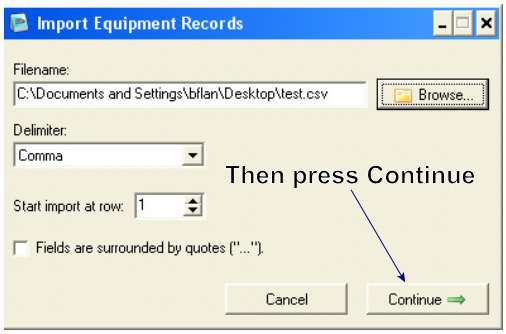
Although columns may be matched later in the process, the equipment records to be imported should be in the following format:



The preceding is an example of a short equipment list. There can be more fields, but this will demonstrate the function. In this case, Column E is the test procedure number - This can be added or changed later. Be sure to save the file as ".CSV".

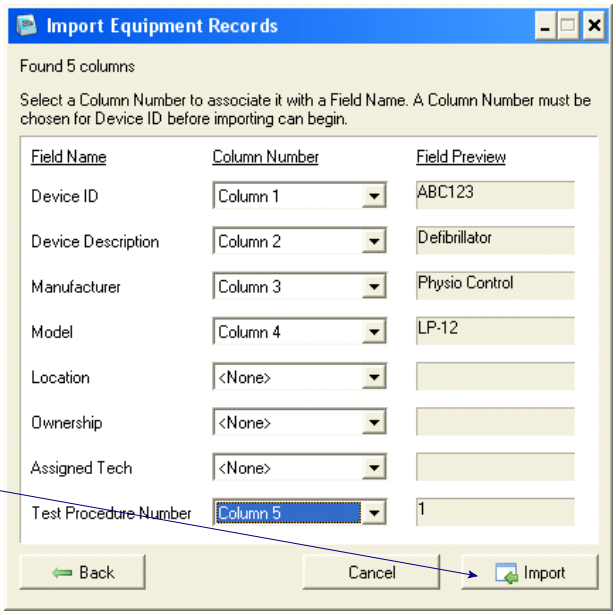


Press Browse to locate the file you wish to import.



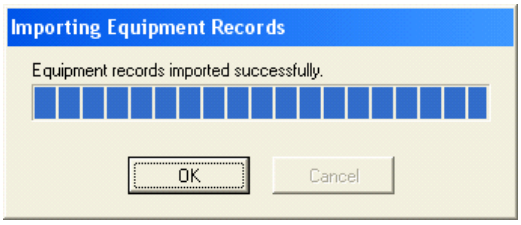
Then press Continue

This screen may be used to to match fields with columns. A preview of the field will appear when the column is selected. Match as few (at least the Device ID), or as many, of the fields as you wish.



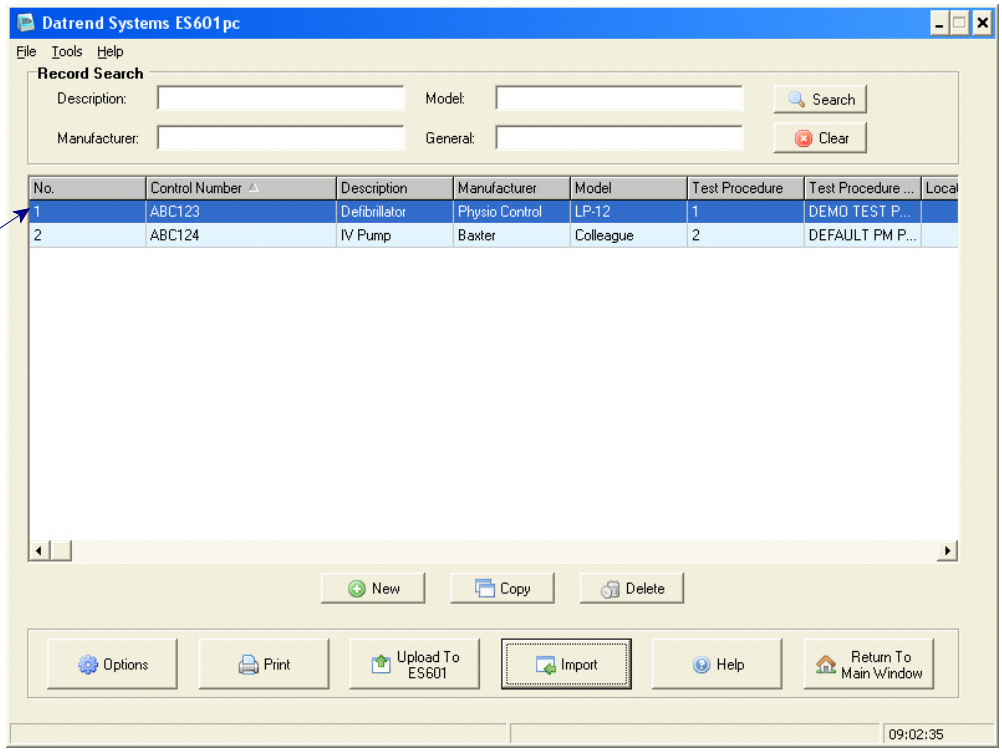
When finished, press Import.

For this simple example, the import process will run very quickly. The amount of time required to import will depend of the number of records in the input CSV file. Press OK when the import completes.

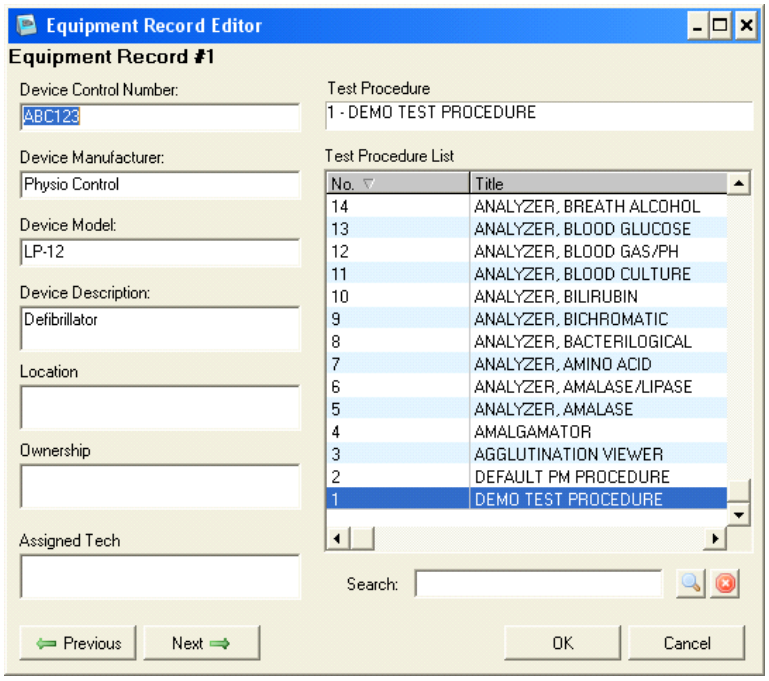
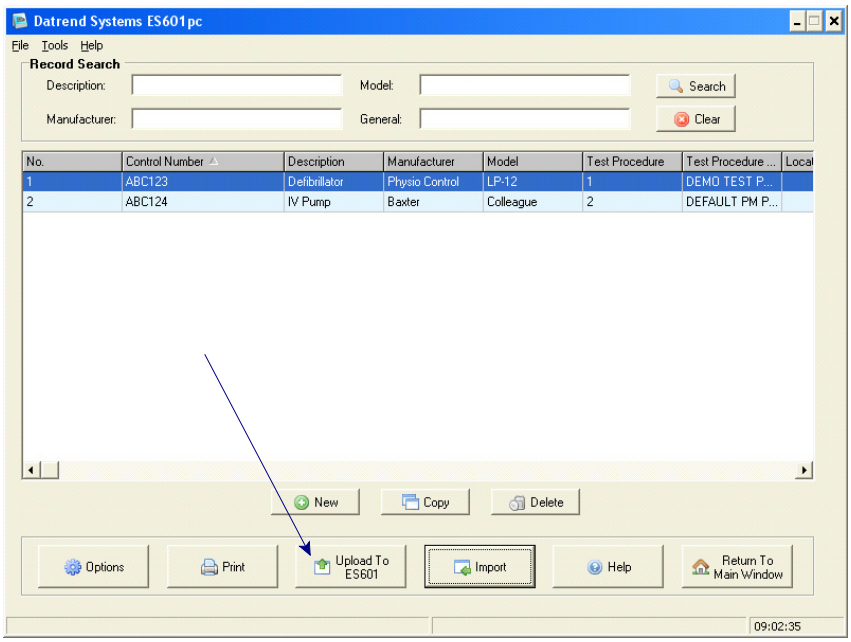


You will notice that the default equipment records have been replaced by the new data.

Double-click a record to view/edit.



If not already assigned, test procedures can be assigned now, and custom fields can be added or edited.



Ensure the ES601*Plus* is connected to the PC then upload the data to the unit, and the equipment records and associated test procedures will be ready.