10 Database Utilities

10.1 Overview of the Exporter[™] Software

PRELIMINARY NOTE: The Exporter software, catalog Item 709, is *optional software* which you may order should you need to export the CableEye database for third-party software, or if you heavily use the database and require the Repack and Join functions for your work. In this section, we provide the complete Exporter software guide to enable those who have purchased it to learn how to use it, and those who have not to see its capabilities.

What is Exporter? CableEye Exporter is a utility for managing your CableEye database files. With Exporter, you can:

- 1 Translate your CUSTOM.DAT cable database file into an ASCII text file that can be read and edited by external database or spreadsheet programs on either a PC or Macintosh.
- **2** Translate an ASCII text file produced by an external database or spreadsheet program back into the CableEye database format to be read by CableEye.
- **3** Clear out any space-consuming voids and empty spaces in your **CUSTOM.DAT** database files that result from frequent deletion and saving of cable files.
- 4 Join two separate CableEye database files into a single larger file.

About the Cable Database – Two files in your CableEye folder store cable information: CABLESnn.DAT and CUSTOM.DAT. When the main CableEye program is launched, it merges these two files into a single internal cable database (see page 3-18 for more information on cable database files). The CABLESnn.DAT file contains wiring information about standard cables and is write-protected ("nn" shows as two digits and reflects the version number of this file). The CUSTOM.DAT file contains wiring information on custom cables that you have tested and saved with CableEye. The larger internal database formed while CableEye is running then contains information about both standard and custom cables. **What Exporter Does** – The CableEye Exporter utility lets you manage your **CUSTOM.DAT** file (or multiple **CUSTOM.DAT** files). The program contains four functions, each function performing a particular file management task:

Export – This function creates a new ASCII-format text file (.txt) from a CableEye database file. The database file you would export is most likely your **CUSTOM.DAT** file, which contains wiring information on custom cables that you have tested with CableEye, but can be any file in the CableEye database format. All cable data and notes from the database file are exported to the new text file (<filename>.TXT) created by EXPORT.

The new text file can be imported and edited by a commercial software program, such as a database manager. The modified file can be translated back into the CableEye database file format by using the IMPORT function and put into use as the new CUSTOM.DAT file.

Import – This function creates a new CableEye database file from a field-delimited ASCII-formatted text file, usually a file produced by a database manager. If you name the new CableEye database file "CUSTOM.DAT", it will be merged with the standard CABLESnn.DAT file when you start up CableEye to form the internal operating database.

Repack – This function checks a CableEye database file and removes any voids in the file resulting from the erasure of entries. If allowed to build up over time, voids can take up significant space in a file. A new repacked database file is created in the current directory.

Join – This function merges two separate cable database files into a single CableEye database file. This permits cable data collected by two or more separate sources, such as field operators, to be unified in a single custom database. The new joined database file is created in the current directory.

Other Features – The Exporter utility has a preferences screen (to view the screen, choose the PREFERENCES heading on the main screen and press ENTER). Here, you can modify the format preferences that determine the field and line delimiters of the text files you create with Exporter. For field delimiters, you choose between commas

and tabs; for line delimiters, you choose between a caret and CRLF (the carriage return line feed character); an additional preference lets you choose between PC or Macintosh text formats, depending on which platform the text file will be read.

10.2 System Requirements and Installation

1 – The CableEye Exporter utility will run under Windows 95/98 or NT. If you need to run under Windows 3.1 or DOS, contact CAMI Research for a *DOS version* of Exporter.

2 – Exporter may be placed in your CableEye directory, or run separately in its own directory. Exporter can only work with CableEye database files, such as CUSTOM.DAT, located within its current directory. You must also have the following files available for Exporter to operate:

TRPREF.DAT	Preferences file containing Exporter delimiter preferences
CONNECT.DAT	Connector file containing connecter descriptions
EXPRES.DAT	A file containing startup information that Exporter needs

If you have lost your **TRPREFW.DAT** file, start Exporter without it. You will be immediately queried about the missing file and can move to Exporter's Preferences screen. There you can quickly choose new preferences and save a new **TRPREFW.DAT** file.

Installing Exporter – Simply drag the files from your installation diskette into your CableEye directory and you are ready to begin! No special installation procedure is necessary for Exporter. When you have finished exporting files, you should copy the .TXT files from the CableEye folder into the directory in which your third-party application software will use them.

Remember that Exporter requires these files from the main CableEye directory:

CUSTOM.DAT	(your custom cable database)
CONNECT.DAT	(the CableEye connector library)

So, if you create a separate subdirectory for Exporter, be sure to copy these files into that subdirectory after installing the program there.

10.3 Using Exporter

Although Exporter is not a complicated program, and while it provides on-screen prompts and directions, you may want to read through this section to learn more about the program's features, shortcuts, tips, and methods.

Backing Up Cable Database Files – Be sure to back up your cable database files on a regular basis! Your cable database files, CONNECT.DAT and CUSTOM.DAT, contain valuable information about the cables you have tested. A large CUSTOM.DAT file can represent many hours of work, and mistakenly overwriting a file can mean the loss of this work. Be sure you maintain a backup copy of these two files in a safe place before you use Exporter to translate or process these files.

Starting Exporter – Double-click the Exporter icon to begin. You will then see the following control screen.



Expor	ter - CAMI	Research
? About	CLI Prefs Cle	ar Help Quit
Proce	ess	Find source .DAT file:
• <u>E</u> x	port	Find
C Imp	oort	
С <u>В</u> е	pack	Specify new .TXT file: Find
C <u>J</u> oi	in	-to- Start
Active Prefs: Tabspace delimiters, PC platform, CRLF linebreaks, "Error.log" error log name, 15 max errors.		

You choose the function you wish to use in the "Process" box, and supply necessary file information on the right by clicking the *Find* button and choosing icons or typing file name text.

Problems finding the TRPREFW.DAT file on startup – Exporter uses the **TRPREFW.DAT** file to learn how to correctly format text files for different field delimiter and line break characters, and for compatibility with either the PC or Macintosh platform.

On being launched, if Exporter cannot find your TRPREFW.DAT file, or if that file contains corrupted or unreadable information, Exporter will immediately switch you to its Preferences screen. You can then quickly choose new preference options and save them in a new, correctly formatted TRPREFW.DAT file.

Setting Preferences – Before exporting or importing files, you need to choose the *format* of the text file that will be created when using Export, or will be read when using

Import. The format specification tells Exporter which characters are used to separate fields and lines, and whether the target platform is a Windows PC or a Macintosh. Click the Pref button to open the Preferences window and make your selections. For more information about Preferences, refer to page 10-7.

Using the Functions – The following instructions can be used for any of the four listed functions (Export, Import, Repack, Join).

Before you begin...

Be sure the output or input format specified in Preferences is correct. See the example line within the Preferences window. If the field delimiter and line break characters are not appropriate, your file will not be processed correctly and the target software will be unable to interpret the result.

1 – Click the appropriate radio button in the "Process" box for the function you need.

2 – Select the Source file name by clicking the *Find* button. Recall that all cable files produced by CableEye have the extension ".DAT". The source file you enter must be in the same directory as the Exporter program and *will not be overwritten* or affected in any way.

3 – Select the Destination file. Usually you will type in the name you desire. The correct suffix is automatically appended as you type. Note that if you select a file that already exists, it will be overwritten with new data when the function executes. The program takes no action until you click the GO key. Once pressed, the function will perform the translation of the source file into the desired output format.



F	ind J	custom.det
-		

Find source DAT file

Process

@ Export

File parter: Out-on.	tal
Save as type: Ted lie	147.94



Note: The *Join* function, unlike the other functions, requires that you enter two source file names. This function combines two different cable database files into one. The procedure for entering the second name is the same as for the first. After entering the second source file name, you need to enter a third name for the destination file.

4 – Once you have provided source and destination file names, Click *Start* to begin processing.

In all the functions, processing is usually very quick, taking only a few seconds. Once processing begins, you will see a record counter indicating progress. When processing concludes, an alert is sounded.

Encountering an Error While Processing – While a function is processing, Exporter may stop the process if it encounters a serious problem in the source file. This may happen

when important information is missing from the file or in an incorrect format. When processing stops, an error message appears informing you of the problem.

Exporter will not create a file when an error occurs. You may be able to use the information displayed to correct the problem before attempting to process the file again.

In the case of the IMPORT function, in which a text file is imported as a cable database file, Exporter automatically creates an error log that keeps track of any errors encountered by IMPORT. See the next topic for more information.

Understanding the Import Error Log and Max Error Limit – The Import function creates a new cable database file by translating a text file. Should the process encounter a minor error during the file translation, such as some missing data or an empty field, the error is written into an error log file that Exporter automatically creates in the current directory. The error log file's default name is ERROR.LOG. You can rename this file in the Preferences window if desired.

In this example, an error file named **ERROR.LOG** is created in Exporter's directory when you use the *Import* function (the ".log" suffix is automatically appended to "error").

While processing a source text file, the *Import* function will write errors into the log file until it reaches a maximum limit of errors (called "max error limit"). At that point, processing stops, and no new destination file is created. Since minor errors in a source file are not uncommon, the default max error limit for *Import* is fifteen.

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Viewing the Preferences Screen – If you want to change your current preferences, you must display the Exporter Preferences window by clicking the *Pref* button. Note the following:

1 – "Field Delimiter" lets you choose either a comma or a tab as the field delimiter between fields of text in a record.

2 – "Destination Platform" lets you choose either PC or Macintosh as the destination platform where the destination file will be read. Your choice also dictates how a text file produced on either platform will be imported into the CableEye database format. The destination platform choice is important when CRLF is your "Line Breaks" option. PC computer programs recognize a full CRLF (carriage return line feed) character as a line break. Macintosh programs, on the other hand, recognize only a CR character as a line break. Exporter inserts the correct choice depending on your destination platform preference.

Preferences	×
Field Delimiter C Comma ⓒ Tab Spac	
Destination Platform	
Line Breaks	
CRLF C ^ (caret)	
Example of exported text	
Line 1: <field 1=""> Tab <field 2="" crlf<br="">Line 2: Field 2 (cont.)> Tab <field 3=""> CRLF</field></field></field>	
Connect.dat: C:\Program Files\CableEye 95	Find
Error Log: Error.log	
Max Errors: 15	
Cancel Save	

3 – "Line Breaks" lets you choose between CRLF characters or carets (^) as line break characters. If you plan to use a PC spreadsheet or database program that interprets the CRLF character as a record-terminating character, then you must use the caret character (^) as your line break preference.

4 – The *Save* button saves your choices in the **TRPREFW.DAT** file and passes control back to the main Exporter screen.

Understanding the Preferences Example Line – The "Example of exported text" shown in the Preferences window follows this model:

```
Example: "field1"<field delimiter>"field2-line1<line
break>field2-line2"<field delimiter>"field3"<line break>
```

For the example shown in the Preferences window, Exporter formats its output text files with CRLF characters as line breaks, and Tab characters as field delimiters.

Prefs

10.4 Record Format for Export and Import

One "record" in the database constitutes data for a single cable. For example, a database with 200 cables would have 200 records. We subdivide each record into a series of fields assigned as follows:

Field 1 – CAMI Filename (*Example:* DB25M-DB25F-S25D) 19-character fixed-length text field.

This is the User name of the cable file originally determined when SAVE TEST DATA is executed.

Field 2 – CAMI ID (*Example:* 624) 5-character fixed-length text field.

This is specified only for files created by CAMI Research for the standard database, CABLESnn.DAT. For CUSTOM.DAT, this is a null field.

- Field 3 Left Connector Type (*Example:* CN36M) 15-character fixed-length text field.
- **Field 4** Right Connector Type (*Example:* MC36F) 15-character fixed-length text field.
- Field 5 Notes Text (Example: VGA VIDEO EXTENSION^{This} cable ...) Variable-length text field.
- Field 6 Label Text (Example: VGA VIDEO, Part Number 232-A5) Variable-length text field.
- Field 7 Wire List (*Example:* L1:R1 L2:R2 L3:R3) Variable-length text field.

Wire Lists: A wire list consists of a sequence of nodes separated by delimiters. Each node represents the junction of two or more test points. The delimiter is a *space* or a *comma*. The pin identifier format is an L or R (denoting Left or Right) followed by a pin number. Pin numbers may also be letters, or a combination of letters and numbers.

Example: LSH:RSH L1:R1 L2:R2 L3:L4:R3:R7

Explanation of Example: Left and right shields are joined, L1 and R1 are joined as are L2 and R2. L3, L4, R3, and R7 are connected into a complex node.

Delimiters and Terminators:

Pin delimiter is a colon, ":" (*Example:* L1:R1)

Node Delimiter is a SPACE, " " (*Example:* L1:R1 L2:R2)

Field Delimiter is either a Tab character, or Commas with Quotes

Tab character: tab separates fields *Commas with quotes:* comma separates fields, double quotation marks enclose all fields.

Record Delimiter is Carriage Return (with Line Feed for PC-format files).

Full Record Example (Comma/Quote Delimited):

"DB25M-DB25F-S25D","624","CN36M","MC36M","Use this cable with part number 222-EVN, or part number 452-MM.","C15 LINK CABLE, PART NO. 224.5","LSH:RSH L1:R1 L2:R2 L3:L4:R3:R7" (CR,LF)