

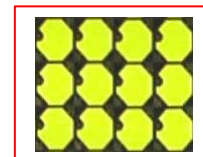
## Quick Start Helen Manual v3.0+



External LED type sign



Flip Dot type sign



Internal LED sign



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## **CONTENTS**

<b>Hanover Displays UK (Head Office).....</b>	<b>3</b>
<b>1. INSTALLING HELEN ON YOUR PC.....</b>	<b>4</b>
<b>2. GETTING STARTED.....</b>	<b>6</b>
<b>2.1 DESTINATION LISTS DATABASE 2.1.1 Creating a New list.....</b>	<b>8</b>
2.1.2. Sign Configuration.....	9
<b>2.2 DESTINATIONS/ROUTES.....</b>	<b>10</b>
2.2.1 Creating New Destinations .....	10
2.2.1.1 Inputting the Destination Code.....	11
2.2.1.2 Inputting the Sign Information.....	11
2.2.1.3 Saving Your Destination Information.....	12
2.2.1.4 Deleting an existing destination.....	12
<b>2.3 SAVING/UPLOADING LISTS.....</b>	<b>13</b>
2.3.1 Save Output File .....	13
2.3.2 Transferring your database to the controller .....	14
2.3.2.1 Loading via Keylo.....	14
2.3.2.2 Loading via USB stick onto DG3 controller.....	15
2.3.3 Transferring the database to DG3 from the USB stick.....	16

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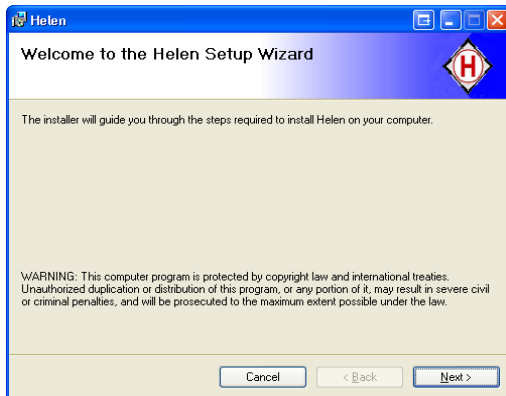
Website: [www.hanoverdisplays.com](http://www.hanoverdisplays.com)



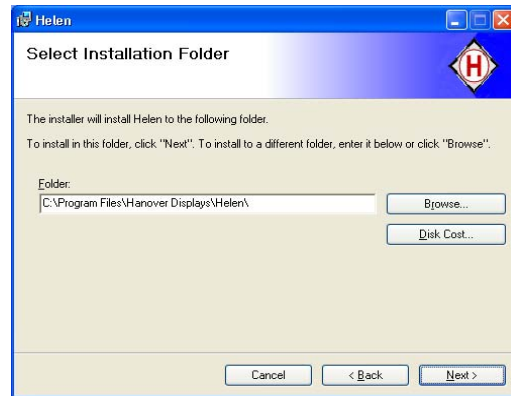
## 1.1 Installation

From this point, the installation is the same either from the website download or from the Resource disk:

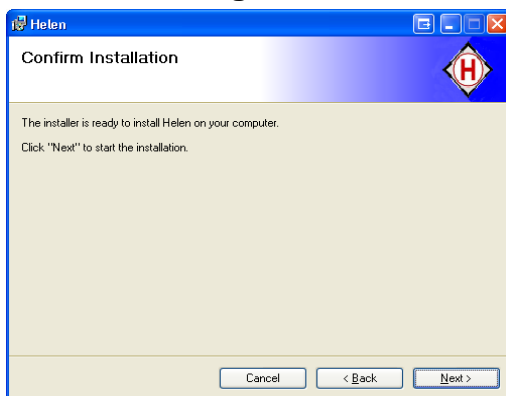
- The 'HELEN Setup' window will pop up and click 'Next' to proceed with the installation (Figure 5).
- Select the directory location, the default is 'C:\Program Files\Hanover Displays\Helen' (Figure 6)
- Click "Next" (Figure 7)
- Installation is now complete, close the window (Figure 8)



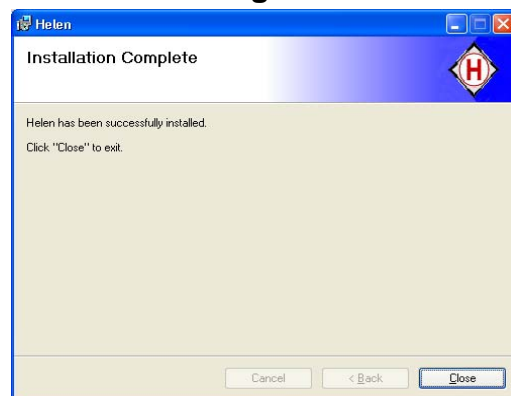
**Figure 5**



**Figure 6**

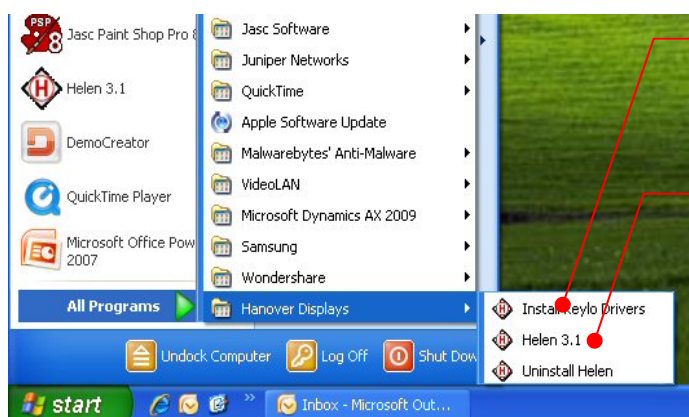


**Figure 7**



**Figure 8**

Once installed HELEN is added to your program list and a diamond H logo icon is added to your desktop. Double click on either the desktop icon or the Helen 3.1 under '**All Programs/Hanover Displays**' as shown below.



If using Keylo loader you **must** first install the Keylo drivers. Click on **Install Keylo Drivers** and follow the wizard.

Can be used to open HELEN software if required.

## 2. GETTING STARTED

Information required before you can create your database.

Hanover Displays manufacture many different sizes and types of sign, all of which can be programmed by HELEN. To successfully create your database you require the following information:

**Sign Type:** External Amber LED, Full Colour, Colour Route Number, Flip Dot or internal sign, some examples are shown on the cover page.

**Sign Size:** This is the definition of the sign and is defined by the amount of indicators (LED's or Flip-dots) wide by height e.g. 144<sub>(across)</sub>x19<sub>(high)</sub>.

**Sign Address:** Each different sign defined by size or type must have its own unique address. This is set by the rotary switch found on the processor board within each sign, default settings front=0, side=1, rear=2.

*(Second hand/transfer vehicles may be configured differently, you can if you wish, change the switch setting to conform to the standard above. Remember the switch setting must match the sign address specified in Helen).*

To obtain this information use one of the two methods below (option 1 for LED sign systems only).

### 1. SIGN TEST which can be run from the vehicle controller.

Deric DG3 and Deric + (NB:If standard factory default lockcode 0101 does not work, please refer to the information sheet on the Hanover website to re-set controller. [www.hanoverdisplays.com](http://www.hanoverdisplays.com) )



- Press F/E until 'LOCK CODE' appears
- Enter 0101 using arrow buttons
- Press F/E 'SHOW STATUS' will display
- Press UP arrow once to display 'SIGN TEST', press F/E
- 'Testing' will be displayed on the controller.
- Press F/E to cancel test.

### Eric++



- Press F key, display will show 'LOCK CODE'
- Enter 9876  
(Note: lock code may have been changed to 0101)
- Press E, 'SHOW STATUS' will display
- Press UP arrow once to display 'SIGN TEST', press E
- 'Testing' will be displayed on the controller
- Press E to cancel

Every sign on the vehicle will now run its own test pattern. The information you require is shown in the example below.

Example: **ELD v2.07 (X1.05) #0144x19 (C=0510) P=100/100.**

This is the sign address.

This is the size of the sign



- An identity label, affixed to the rear of each sign, will show the sign type and size. See the two example variants below:

Product no shown below is an **Outside viewable LED** sign **OL010A**. Size - 96x8.  
A = wiring option.

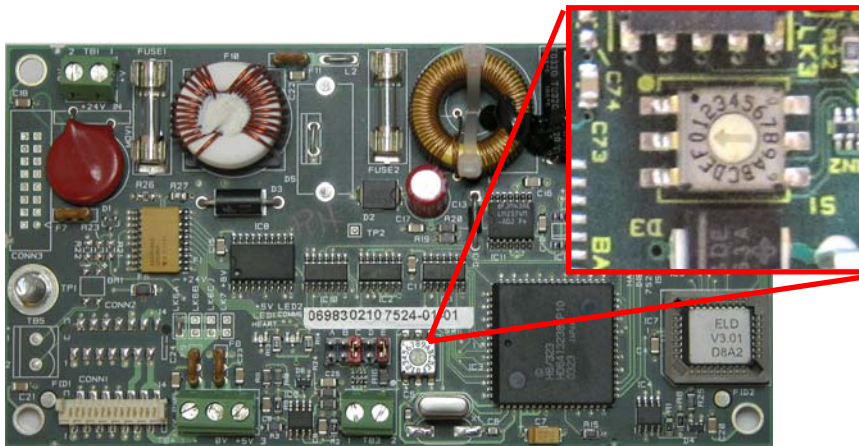
Sign size shown below is a flip-dot sign  
Size - 84x7-4

Hanover Displays Ltd			
Product no.	OL010A	Position	SIDE
Type	96"8 OUTSIDE VIEW LED SIGN 'A' WI		
Our order no.	INT01470	Your O/N	DUBAIEXHIBITION
Your Part no.		S/N	N001470001001
End User	DUBAI EXHIBITION		
Builder			
Job reference		e11	
Made in the UK	Date: 18/02/2011	034894	

Hanover Displays Ltd			
Product no.	F055C	Position	SIDE
Type	84"7-4L SLIM IP65 RATED GLASS SIGN		
Our order no.	WAR50344	Your O/N	
Your Part no.		S/N	6075034003001
End User			
Builder			
Job reference		e11	
Made in the UK		020503	

\*It may be useful to make a note of the different sign sizes and their product No's on your vehicle/s for reference.

The address will be found by removing the rear cover/s to reveal the processor and see what number the switch on the processor board is pointing to.



One example of a processor showing sign address '0'.

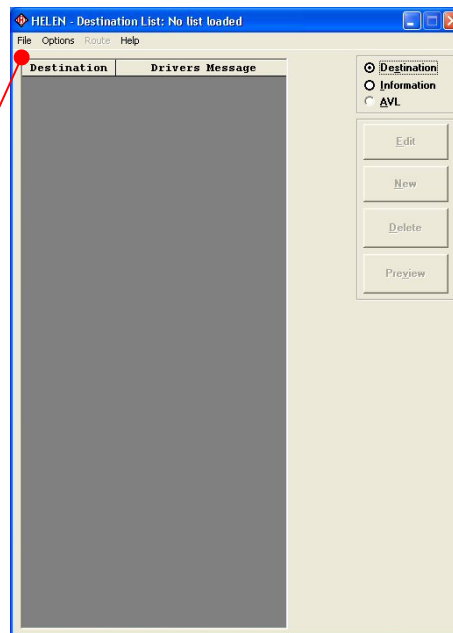
## 2.1 DESTINATION LISTS DATABASE

### 2.1.1 Creating a New list

If the Helen program has not already been opened it can be by double clicking on the desktop icon or from Start/Program Files/Hanover Displays. You will be presented with the main window (Figure 9).

#### File option.

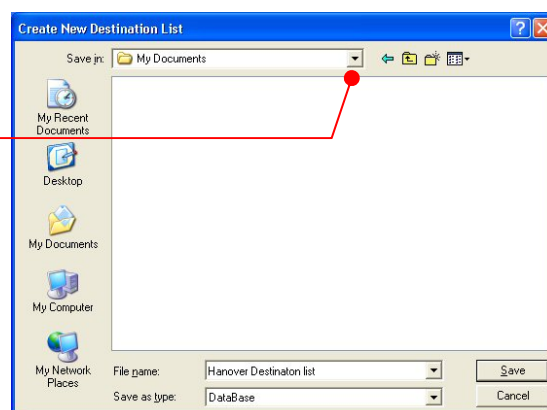
Figure 9 shows the sign editing software before a list has been created or an existing list loaded.



**Figure 9**

Select 'File' then 'New' from the menu. Use the 'Save in' drop-down box to choose your list location, for example 'My Documents'. Create a new folder and name it 'Hanover destination list'. In the input box 'File name:' enter the name of your database, e.g. 'My List' (Figure 10) then press 'Save'.

#### Save in: drop down box button.



**Figure 10**



### 2.1.2. Sign Configuration

The Sign Parameter Editor will appear automatically. This is where you enter the sign type, size and address collated in section 2 'Getting started'.

An example is shown below detailing a bus with 3 signs fitted with standard default switch settings.

Sign (Switch setting)	Sign position	Sign type	Sign size (W&H)
0	Front sign	External viewable LED	144x19
1	Side sign	External viewable LED	96x8
2	Rear sign	External viewable LED	32x17

This information now needs to be entered into Helen one sign at a time. Figure 11 shows the front sign having been entered by selecting the sign address (Sign), sign type (Type), width and height (Width x Height) and the "select standard fonts" box which must be chosen (you can change these fonts at a later date if you wish). To input another sign use the spin button to select the next sign address.

NB: Do not click the **OK** box (Figure 11) until you have entered all your different sign sizes using the sign spin button indicated in Figure 11.

#### Buttons

NB: This type of button will be referred to in the manual as a 'spin button'.

NB: This type of button will be referred to as a 'drop box button'.

**Type**

- External LED
- Not Fitted
- External LED**
- Internal LED
- Flip-Dot
- Colour RN
- TFT
- Full Colour

**Width x Height**

- 144 x 19
- 144 x 19**
- 144 x 17
- 128 x 17
- 128 x 15
- 120 x 19
- 96 x 17

To add further signs or to move between existing signs within your destination list use the spin button below the word **Sign** as shown. The number (switch setting) will change with each click of the mouse.

The **Select Standard Fonts** button must be clicked to transfer the basic fonts over to the Selected box.

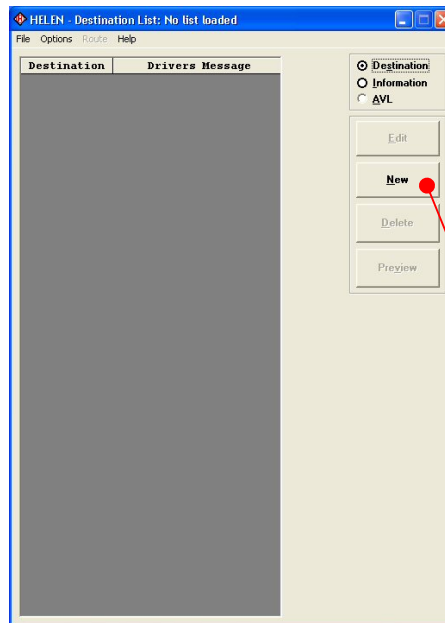
**Figure 11**

Once you have completed the configuration for all the signs click the '**OK**' button.

## 2.2 DESTINATIONS/ROUTES

### 2.2.1 Creating New Destinations

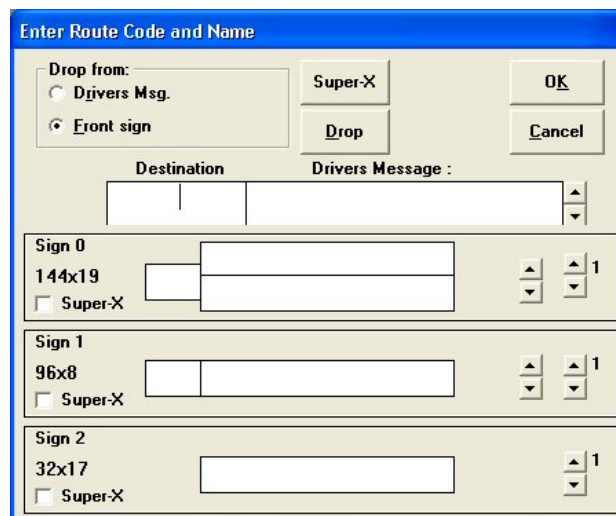
You have set-up the sign parameters and are now ready to add destination information. You will notice that the 'New' button has become available (Figure 12), which will be used for creating new destinations.



The **New** option has now appeared so you can now add new destinations to the list.

**Figure 12**

Select 'New' and a window for entering new destination information will appear (Figure 13). This window will display all the signs that were selected during sign configuration in the previous section.



**Figure 13**

### 2.2.1.1 Inputting the Destination Code

In the box marked 'Destination', (Figure 14) enter the destination code for example enter the number 1. Each code entered must be unique within the list, because this is the code to be entered on the driver's console by the driver. It can contain up to four alphanumeric characters if required. The **Destination** box will automatically fill in remaining zero's once you have clicked into another box for example 0000000001 (Figure 14).

### 2.2.1.2 Inputting the Sign Information

Firstly click the option **Front sign** from the **Drop from:** box (Figure 14) if not already marked with a black dot. Example below shows the **Front sign** option chosen.

Next enter your route and destination information into the box or boxes (1-3) within the **Sign 0** section. Example below is: 10/Brighton/via Hove. The amount of boxes or fields you require (1, 2 or 3) can be altered using the 'spin' button directly to the right of the sign. (Example below shows 3 boxes).  
*NB: Boxes available on the spin button will vary according to the sign size.*

Once your text is entered into the front sign (Sign 0 - 144 x19), it will be duplicated to the other signs & **Drivers Message:** when the box marked '**Drop**' is clicked. Make sure the '**Front Sign**' option is selected before clicking on the box marked '**Drop**'. All boxes are still editable before and after the **Drop** box has been clicked.

NB: Signs capable of only displaying 1 line of text will display over 2 or more pages.

The screenshot shows the 'Enter Route Code and Name' window. It has a 'Drop from:' section with 'Front sign' selected. Below this is a 'Destination' field containing '0000000001' and a 'Drivers Message' field containing '10 Brighton'. There are three sign sections: 'Sign 0' (144x19), 'Sign 1' (96x8), and 'Sign 2' (32x17). Each sign section has a 'Super-X' checkbox and a 'spin' button. Annotations with red lines point to various elements: 'Front sign option chosen in the Drop from: box therefore information needs to be entered via the front sign (Sign 0).', 'Sign 0 is also the switch setting for the sign processor on the vehicle (see pg7).', 'Once text has been inserted use the Drop box to populate the other signs.', 'Use the spin button to change the amount of text boxes required. This varies depending on sign size', and 'Indicates & changes pages.'.

**Figure 14**

In the above example the sign processor on your vehicle should be set to:

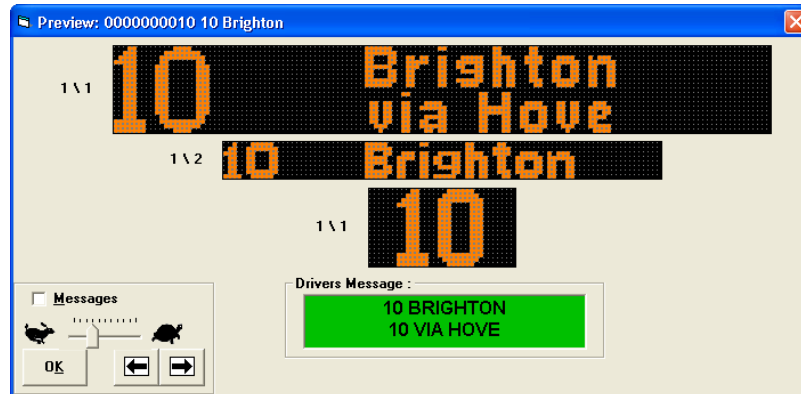
Front sign: **Sign 0** (144x19) = processor switch '0'

Side sign: **Sign 1** (96x8) = processor switch '1'

Rear Sign: **Sign 2** (32x17) = processor switch '2'

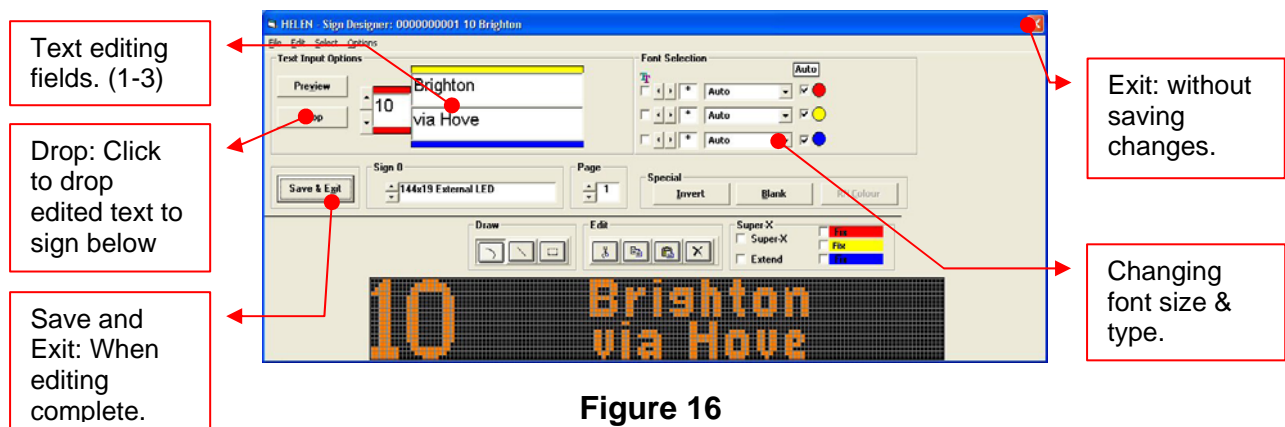
### 2.2.1.3 Saving Your Destination Information

Click OK when the text boxes are filled. The Preview screen will appear after it has generated the signs (Figure 15).



**Figure 15**

Check the displays, if editing is required double click on the sign you wish to change and the 'Sign Designer' box will appear (Figure 16).



**Figure 16**

When you have finishing editing click 'Save & Exit', you will return to the preview screen showing the changes made. When all signs display correctly click 'OK'. You will now be back at the main destination list window and the destination will now be on the list.

To add the next destination click new and repeat the process until all destinations have been input.

### 2.2.1.4 Deleting an existing destination

To delete an existing Destination go to the Destination List window, highlight the destination you wish to remove and click the 'Delete' button.

## 2.3 SAVING/UPLOADING LISTS

Once the destination list is complete, the data must be saved before it can be sent to the console.

### 2.3.1 Save Output File

Select 'Save Output File' from the 'File' menu in the destination list window to bring up the 'Save Output File' window (Figure 17).

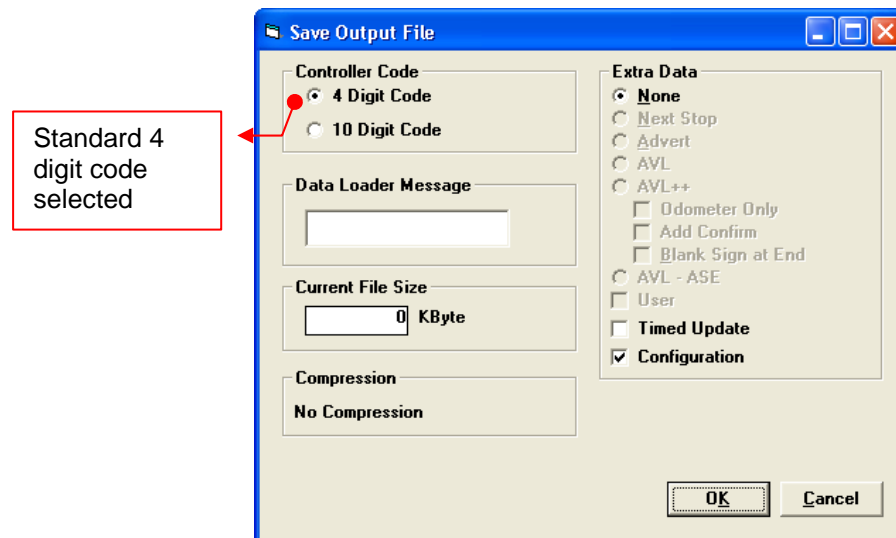


Figure 17

The controller code for this standard type of list is a **4 Digit Code**. This should already be selected. If not please select by clicking in the small circle so a black dot appears alongside the option required.

Select 'OK' and the name and size of the file(s) created will be displayed (Figure 18)

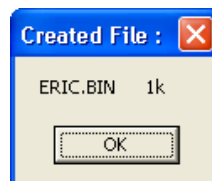


Figure 18

### Advanced Options:

For the complete explanation of all settings please refer to the full Helen manual.

### 2.3.2 Transferring your database to the controller

There are different ways to transfer your database to the controllers on your vehicle. Please follow the instructions below for your controller type and method of transfer.



DG3 controller loads via most USB sticks.



Eric & Deric controllers load via a Keylo.  
NB: Controller software must be v3.0 or above to load via a Keylo. Software version is displayed on controller power-up.

- **Keylo** for Deric+ & Eric+ controllers (portable key fob loader. Loaded via base station from computer).
- **USB stick** for DG3 controller.

#### 2.3.2.1 Loading via Keylo

Select 'Send Output File' from the 'File' menu. The transfer will be automatic once the Keylo is plugged into the base station.

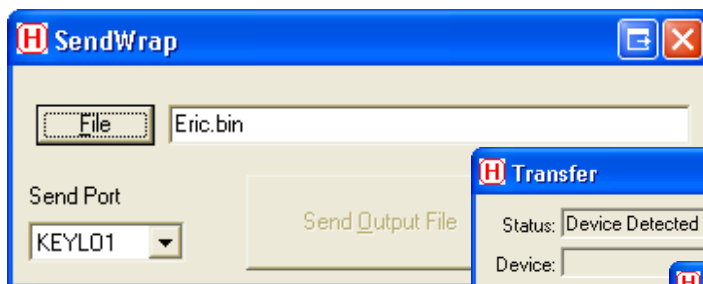
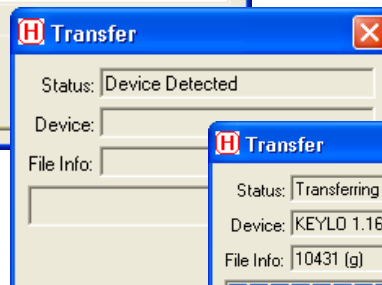
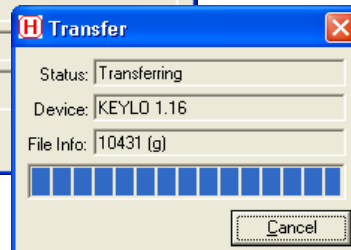


Figure 19a

19b



19c



When loading is finished 'Transfer Complete' will be briefly displayed in the Status section of the Transfer box and the LED on the Keylo will turn solid green. Keylo can now be removed. *If the LED light on the Keylo is not solid green try loading the list again by removing the Keylo from the base station and starting the load process again.*

The Keylo can be used to transfer the list automatically onto as many vehicles as required. Once the list has loaded onto the vehicle controller the controller will display 'Busy'. The Keylo can then be removed and the controller will finish decompressing the list until finished.

Once finished select one of your new destination codes to check if list loaded correctly.



### 2.3.2.2 Loading via USB stick onto DG3 controller

How to configure the USB stick for loading

The DG3 is able to use any USB stick to load a destination list via the USB port at the front of the controller. To ensure the correct data is loaded the Eric.BIN is saved on the USB stick using the directory structure: **X:\Hanover\DB\** (where X= the allocated Drive on your pc).

Follow the steps below to configure your USB drive and then load: (G Drive is example used below, it may differ on your PC).

- Insert the USB stick into your computer and locate it. In Figure 22 it has appeared as example **Removable Disk (G:)**
- In the USB stick create a folder called '**Hanover**'. Open this folder and create another folder named '**DB**' (example Figure 22 below). When finished close window.
- In **HELEN - Destination List:** window click **File** then **Save Output File As..** in the drop down box as shown in Figure 20. A **Save Output File** (Figure 21) window will appear (4 digit code should be chosen for standard list). Click **OK** box and the **Save as...** window will appear.
- Locate the '**DB**' folder within the USB stick (Figure 22) and click **Save**. A small Eric.Bin File window will appear (Figure 23) showing the file size. The USB stick is now set-up to automatically download to the DG3.

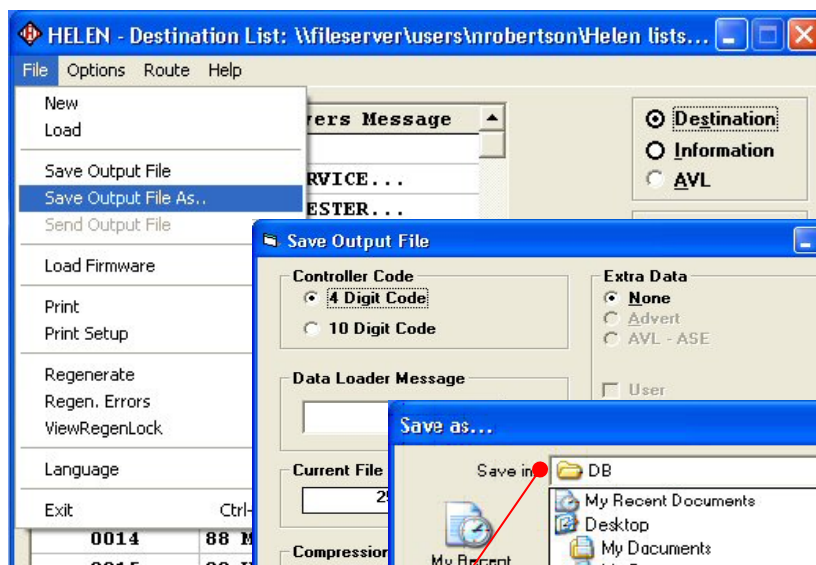


Figure 20

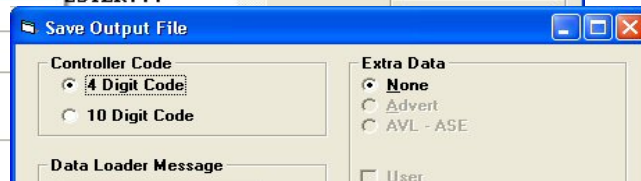


Figure 21

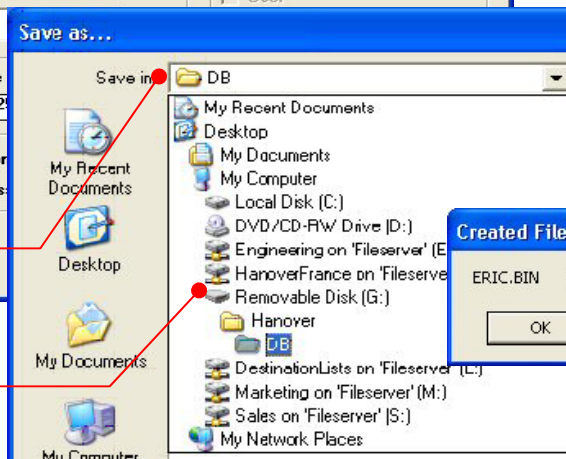


Figure 22

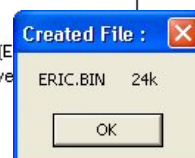


Figure 23

Save in: box must have the DB selected .

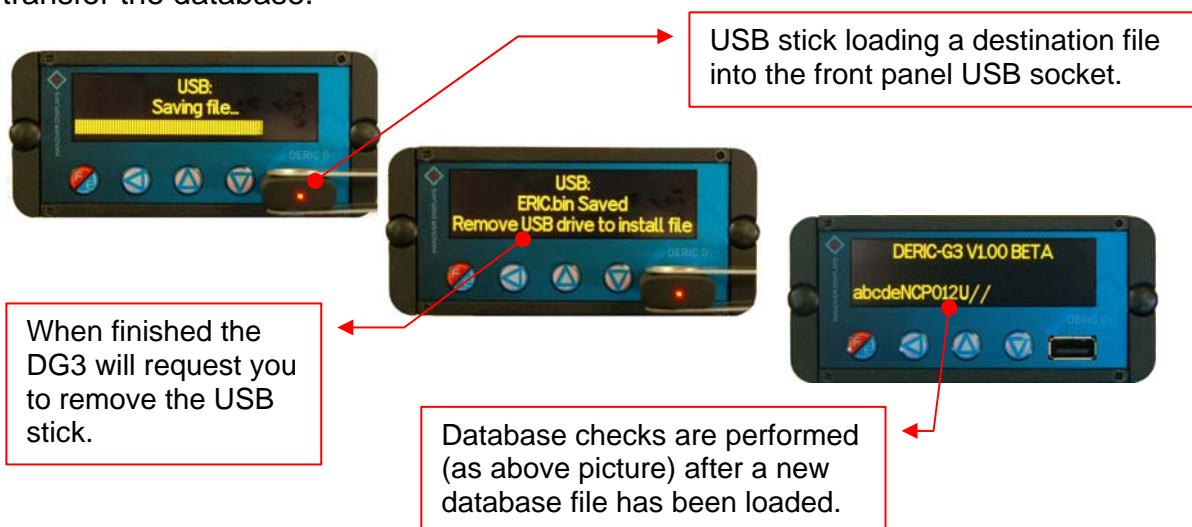
USB stick shown as G: with file Hanover/DB.

*NB: Once the Hanover & DB folder have been created on the USB stick you will be able to copy any required ERIC.BIN file from any list directly into the DB file without going through the Helen sign editing software.*

*If any changes to the destination list have been made the ERIC.BIN file must be re-saved so the latest changes are included in the ERIC.BIN file before copying it over.*

### 2.3.3 Transferring the database to DG3 from the USB stick

Insert your USB drive into the front of the controller. DG3 will automatically find and transfer the database.



Select one of your new destination codes to check if list loaded correctly.

For further or full explanation of any of the above instruction please refer to the full Helen manual available on request from the Hanover website or from Hanover Displays directly.