

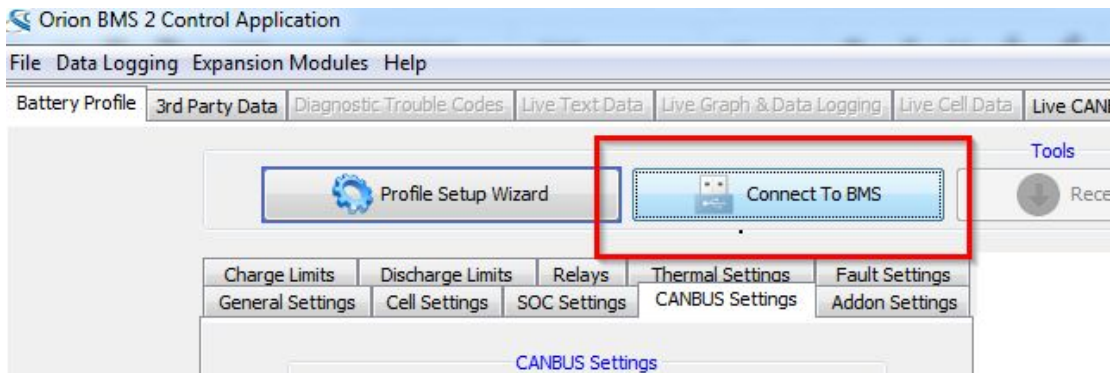


## Viewing CANBUS Communication Matrix

Unlike many products currently on the market, the Orion BMS provides the customer with the ability to customize and program precisely what data is transmitted on the CANBUS interfaces. Because of this unique capability, there is no standard or default communication matrix or CANBUS database file available as it could theoretically be different for every customer depending on how the unit is configured.

Since it is not possible to maintain a standard definition database, the best and most accurate way to view the current communication matrix is to review the settings in the BMS utility itself which also allows the operator to export them as a DBC database file (which also done through the BMS utility itself). The following steps can be used to view / export this information:

- 1) Open the relevant Orion BMS control utility. Please note that some BMS products will require a specific version of the BMS utility. These can all be downloaded on the main Orion BMS website at: <http://www.orionbms.com/downloads>
- 2) Connect to the BMS using the utility as shown below.

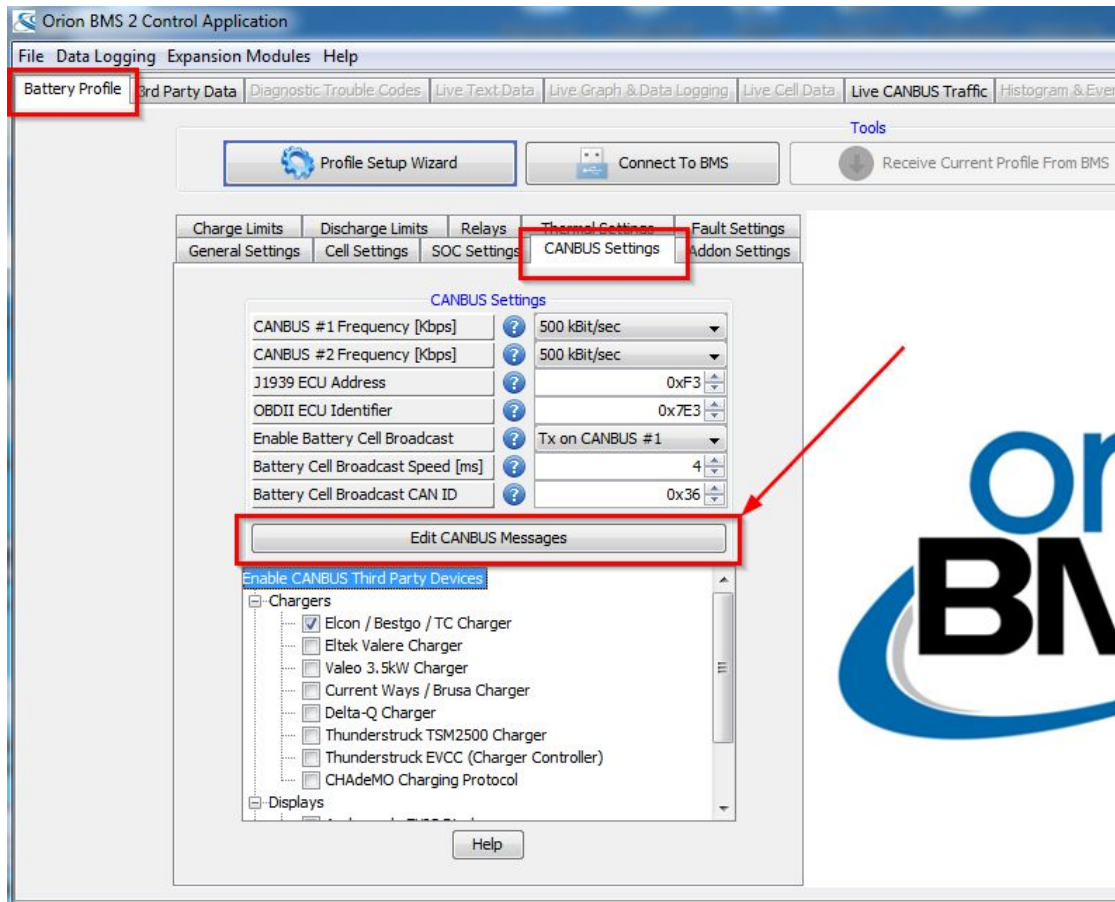


- 3) Click the "Receive Profile From BMS" button to download the current settings from the BMS. This ensures that the profile settings being viewed are the same as those stored on the BMS itself.

**NOTE:** If you do not download the current profile first, the settings being viewed may not

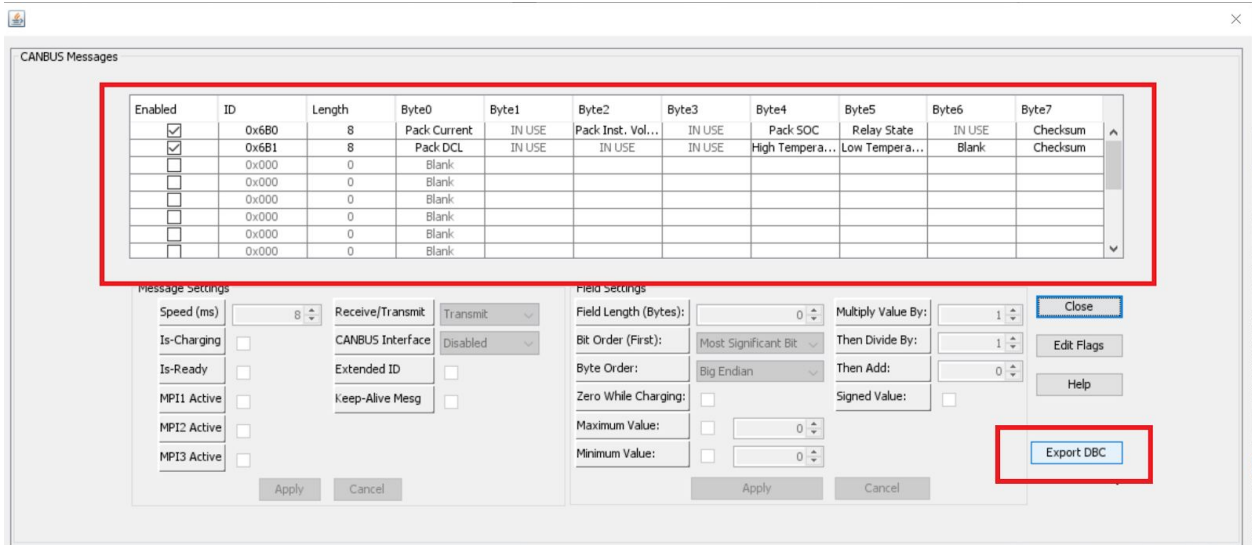
be correct. Alternatively, the profile can be loaded from disk if it is available.

- 4) Navigate to the “CANBUS Settings” tab and click on the “Edit CANBUS Messages” button in the middle of the screen. This is illustrated below.



- 5) This dialog brings up the active (programmed) CANBUS communication matrix as shown below. This is also where the matrix can be adjusted or changed to suit the needs of the application. Selecting an individual field will display additional information (such as

the bit order, byte order, scaling, etc). ID, transmission rate and other data are also here.



The entire CANBUS matrix can be exported to a DBC database file (a common file format for describing CANBUS message definitions) by selecting the **Export DBC** button on this dialog as well, which will then prompt the operator to select a location on the computer to save the exported file to. The DBC file can then be opened by a DBC database editor.