WinFrog Device Group:	**OUTPUT**
Device Name/Model:	**ADP100 DP**
Device Manufacturer:	Kongsberg Simrad Limited Campus 1 Aberdeen Science & Technology Park Balgownie Road Bridge of Don Aberdeen AB22 8GT Scotland Tel: +44 (0) 1224 226500 Fax: +44 (0) 1224 226501 Email: offshore.sales@kongsberg-simrad.com
Device Data String(s) Output to WinFrog:	N/A
WinFrog Data String(s) Output to Device:	Binary
WinFrog Data Item(s) and their RAW record:	DP OUTPUT: 450

DEVICE DESCRIPTION:
An output device that provides vessel positioning data to a Kongsberg ADP100 dynamic positioning system.

DEVICE CONFIGURATION INSTRUCTIONS

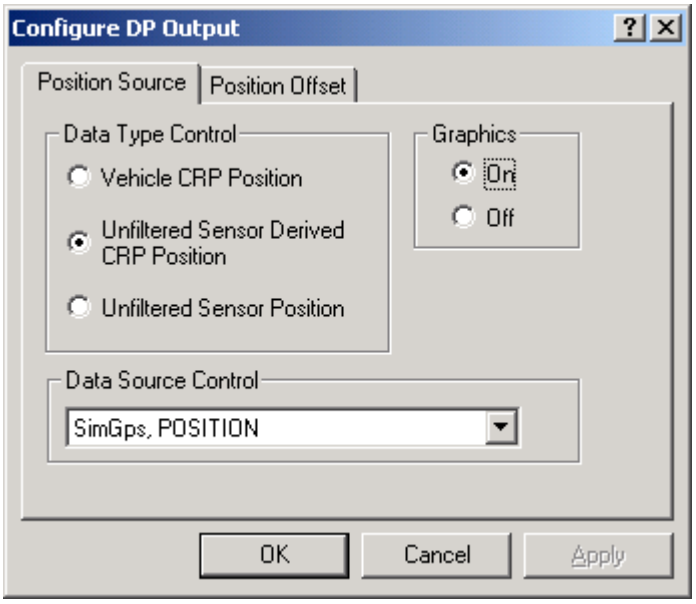
WINFROG I/O DEVICES > EDIT I/O:
Serial
Configurable Parameters

WINFROG I/O DEVICES > CONFIGURE DEVICE:
No configuration is required at the I/O Device window level.

WINFROG VEHICLE > CONFIGURE VEHICLE DEVICES > DEVICE DATA ITEM > EDIT:
Adding the ADP100 DP device creates the DP OUTPUT data item. Once the data item has been added to the vehicle, it must be edited to suit the application.

Data item: OUTPUT, ADP100 DP, DP OUTPUT

When the DP OUTPUT data item is edited from the Configure Vehicle - Devices dialog box, the **Configure DP Output** dialog box appears as shown below. The Position Source and the Position Offset tabs must be configured here. These items configure the vehicle position source and any offsets applied.



Position Source Tab:
Three items need to be configured on this tab: Data Type Control, Graphics, and Data Source Control.

Data Type Control:
In Data Type Control, there are three options to choose from: Vehicle CRP Position, Unfiltered Sensor Derived CRP Position, and Unfiltered Sensor Position.

Choose the **Vehicle CRP Position** for filtered position updates (Kalman, velocity etc as applied to the vehicle) referenced to the vehicles' Central Reference Point (CRP). The offset input under the Position Offset tab is added to the CRP position.

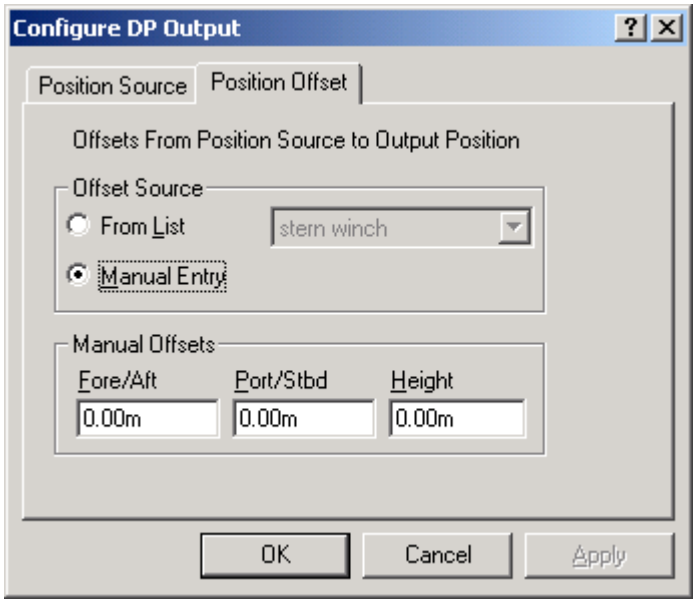
The **Unfiltered Sensor Derived CRP Position** is the same as the above only unfiltered data is output. With this option, filtering can be performed within the DP unit. This is often the preferred option as most DP units have more rigorous filtering routines that require an unfiltered data input.

The **Unfiltered Sensor Position** outputs unfiltered positions from the positioning sensors' location. The offset entered on the Position Offset tab is added to the sensors raw position.

Data Source Control:
The data source depends on the Data Type Control that was selected. If the Vehicle CRP Position is chosen, the Data Source Control will automatically be set to VEHICLE, CRP POSITION, and the primary positioning sensor data will be used. If either the Unfiltered Sensor Derived CRP Position or the Unfiltered Sensor Position is chosen in the Data Type Control, then the positioning sensor can be chosen from the dropdown list box under Data Source Control. Here a secondary positioning sensor can be chosen. It is important to note that the Unfiltered Sensor Derived CRP Position is based on the chosen sensor, however the data is related to the CRP. Note that the SimGps, POSITION is used in this dialog as an example only.

Graphics:
If the On radio button is selected, a small square with the name of the device will appear at the output coordinates on the Graphics window.

Position Offset Tab:
As shown in the dialog box below, the 'Offsets From Position Source to Output Position' can also be configured here. This means that any offset entered here will be applied to the position output from the Position Source tab options listed above.



Offset Source:
The Offset Source can be chosen from the list of offsets for the vehicle, or the Manual Entry can be used.

Manual Offsets:
If Manual Entry is chosen under the Offset Source, the offsets must be entered here. Offsets are input similar to all offsets in WinFrog.

TELGRAM SPECIFICATION:
Binary