WinFrog Device Group:	OUTPUT
Device Name/Model:	SIMRAD WPM
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:	Comma delimited ASCII String

FIELD	FORMAT	DESCRIPTION
1	$IIWPM	Message Header
2	f.d	Latitude (ddmm.mmmm)
3	s	Latitude Direction (N/S)
4	f.d	Longitude (dddmm.mmmm)
5	s	Longitude Direction (E/W)
6	d	Waypoint number
7	f.d	Set Speed (knots)
8	"N"	Set Speed Units (knots)
9	f.d	Radius (NM)
10	N	Radius Units (NM)
11	f.d	Heading (degrees)

WinFrog Data Item(s) and their RAW record:	DATA OUTPUT 450

DEVICE DESCRIPTION:
An output device that facilitates the transfer of waypoints from WinFrog to a Simrad dynamic positioning system. The first Waypoint "0" is transmitted. This is a dummy-Waypoint (its location is of no interest) indicating that a new set of waypoints is following. The track is then transmitted with waypoint numbers in increasing order. Waypoint "-9" which is a dummy-Waypoint, indicates the end of the track-table. When this sentence is received, the track table will be accepted and stored in the dynamic positioning systems internal track-table.

DEVICE CONFIGURATION INSTRUCTIONS

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

WINFROG I/O DEVICES > CONFIGURE DEVICE:
This device must be configured at the I/O Device window level. In the I/O Devices window, click the device name to select it, then right-click and select Configure Device. The Configure DP Waypoints dialog box appears, as seen below. Transmission of the line waypoints from WinFrog to the DP is done using the Configure DP Waypoints dialog.
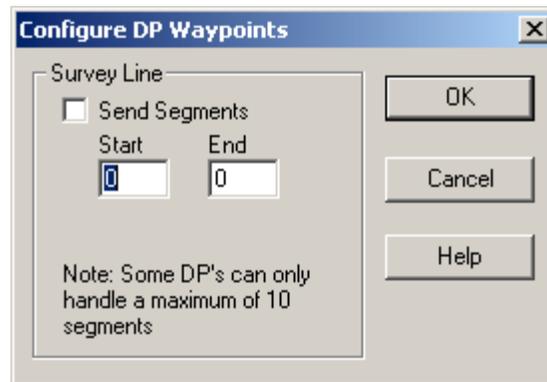
To send waypoints to the DP, select the Send Segments checkbox and then enter in the range of the waypoints to be transmitted. The waypoints will be sent from the line currently being tracked by the vehicle to which the "OUTPUT,SIMRAD WPM,DATA OUTPUT" data item has been added. If the vehicle is not tracking a line, no waypoints will be transmitted. Exiting this dialog box with OK sends the selected waypoints.

Note: The first waypoint in a line is '0'. Therefore, if an entire line consisting of 10 waypoints is to be transmitted the Start value entered would be '0' and the End value entered would be '9'.


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

Data item: OUTPUT, SIMRAD WPM, DATA OUTPUT

The data item can be added to multiple vehicles (e.g. primary and secondary positioning vehicles), with the output. When the DATA OUTPUT data item is edited from the

Configure Vehicle Devices dialog box, the Configure Output Offsets dialog box appears. The content of the dialog box is based on the offsets attached to the vehicle in question.
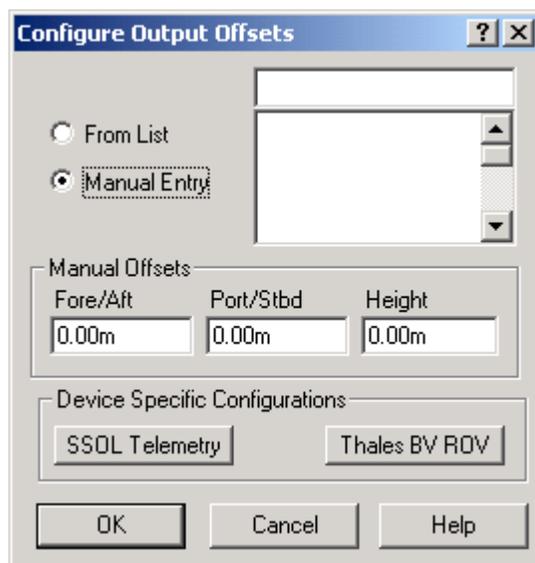
Configure Output Offsets:
Normally the position that is to be output will be the position of the CRP of vehicle. However if another position is required, the offset to be applied to the output position for the DATA OUTPUT data item can either be taken from the list of vessel offsets or a manual offset entry can be input. Select the appropriate radio button (From List or Manual Entry). The offset can now be highlighted from the list, or if Manual Entry is chosen, the offset values can be input. The position data output will now be referenced to the offset location chosen.

Device Specific Configurations:
Under the Device Specific Configurations section, there are two buttons that access dialog boxes, SSOL Telemetry and Thales BV ROV. These dialog boxes are only to be modified for specific applications. You should not modify these items unless you are completely familiar with the outcome.

TELGRAM SPECIFICATION:
See WinFrog Data String(s) Output to Device section above.