

WinFrog Device Group:	OUTPUT		
Device Name/Model:	SIMRAD SDP22		
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	\$GPGGA,	Start of Message
	2	f.d	Time (hhmmss.ss)
	3	f.d	Latitude (ddmm.mmmm)
	4	s	N/S
	5	f.d	Longitude (dddmm.mmmm)
	6	s	E/W
	7	d	GPS Quality
	8	d	Sats used
	9	f.d	Altitude
	10	"M"	Altitude units (meters)
	11	f.d	Geoidal Separation
	12	"M"	Geoidal Separation units (meters)
	13	f.d	Age of GPS data
	14	dddd	Differential Reference station ID
	1	\$GPVTG	Start of Course Over Ground and Ground Speed message
	2	f.d	Course over ground
	3	"T"	Degrees True
	4	f.d	Course over ground
	5	"M"	Degrees Magnetic
	6	f.d	Speed Over Ground
	7	"N"	Knots
	8	f.d	Speed Over Ground
	9	"K"	km/h
	10	s	Mode indicator

WinFrog Data Item(s) and their RAW record:	DP OUTPUT	450
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DEVICE DESCRIPTION:

An output device that provides vessel positioning data to a Simrad SDP22 dynamic positioning system. The messages are sent at a 2 Hertz interval.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

Serial
Configurable Parameters

WINFROG I/O DEVICES > CONFIGURE DEVICE:

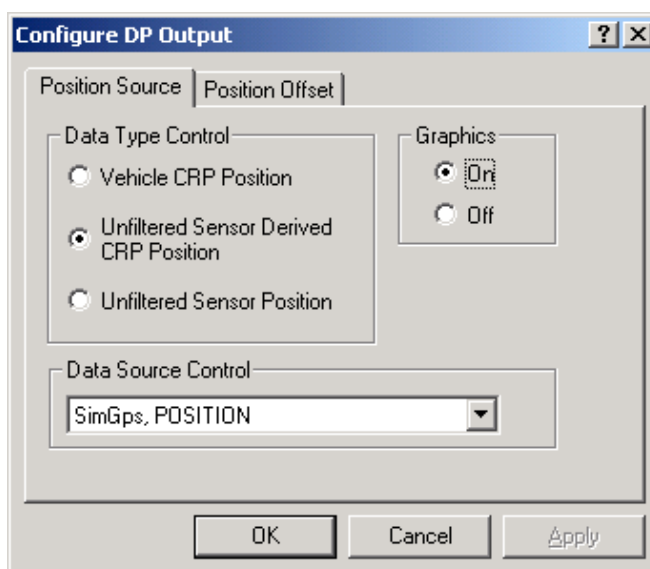
No configuration is required at the I/O Device window level.

WINFROG VEHICLE > CONFIGURE VEHICLE DEVICES > DEVICE DATA ITEM > EDIT:

Adding the SIMRAD SDP22 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, SIMRAD SDP22, 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:

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 input under the Position Offset tab is added to the sensors raw position.

Data Source Control:

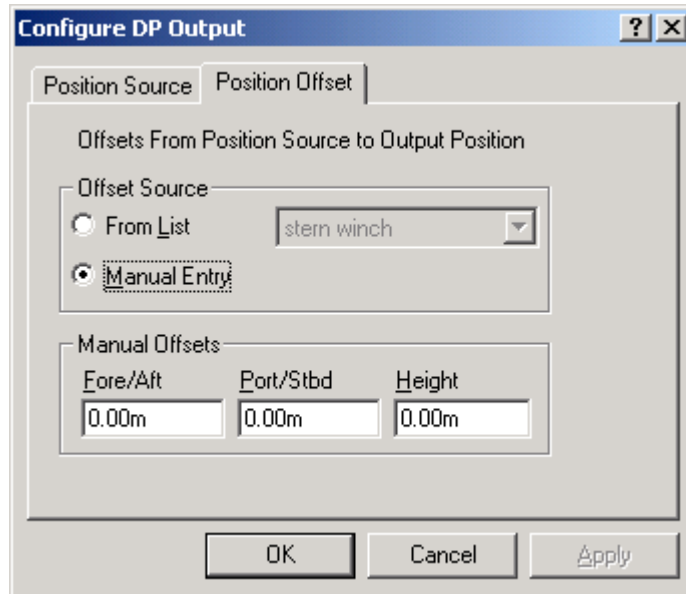
The data source depends on the Data Type Control that was selected. If the Vehicle CRP Position is chosen, the Data Source Control will automatically be set to VEHICLE, CRP POSITION, and the primary positioning sensor data will be used. If either the Unfiltered Sensor Derived CRP Position or the Unfiltered 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 in the Graphics window.

Position Offset:

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 input 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 input here. Offsets are input similar to all offsets in WinFrog.

TELGRAM SPECIFICATION:

See WinFrog Data Strings(s) Output to Device section above.