WinFrog Device Group:	**Sounder**
Device Name/Model:	**Simrad EA200**
Device Manufacturer:	**Kongsberg Simrad Mesotech Ltd.** 1598 Kebet Way Port Coquitlam, B.C. Canada, V3C 5M5 Tel: (604) 464-8144 Fax: (604) 941-5423 **Kongsberg Simrad AS** Postboks 483 3601 Kongsberg E-mail: sales.marketing@kongsberg-simrad.com Tel: 32 28 50 00 Fax : 32 73 59 87 http://www.simrad.ca/
Device Data String(s) Output to WinFrog:	Serial depth telegram: seven-character depth (hexadecimal).
WinFrog Data String(s) Output to Device:	N/A
WinFrog .raw Data Record Type(s):	Depth: Type 411: depth, status & dtime are repeated 15 times

DEVICE DESCRIPTION:
The Simrad EA200 is an older survey echosounder whose production has been discontinued by Simrad. Due to the age of this device, the information for this device is limited to internal documentation only.

The EA200 echo sounder is capable of dual frequency operation. Note, however, that WinFrog is only capable of utilizing single frequency depth data. The probable reason for this is that the lower frequency is not digitally output. One (known) dual frequency transducer capable of operation with the EA200 is Simrad's 38/200KHz unit.
The EA200 outputs data in hexadecimal format.

DEVICE CONFIGURATION INSTRUCTIONS:
Baud Rate: 1200
Data Bits: 7
Stop Bits: 1
Parity: Even

WINFROG I/O DEVICES > CONFIG OPTIONS:
The Simrad EA200 is added to WinFrog from the SOUNDER device category. There is no configuration required or available at the "generic" I/O Device window level.

WINFROG VEHICLE - DEVICE > EDIT OPTIONS:
Adding the EA200 sounder to WinFrog creates a BOTTOMDEPTH data item that must be added to the appropriate vehicle's device list. Once the BOTTOMDEPTH data item has been added to a vehicle's device list, it must be edited to suit the application.

In the vehicle's device list, highlight the SOUNDER, SIMRAD EA200, BOTTOMDEPTH data item and click the Edit button. The standard **Configure Sounder** dialog box appears. See documentation on the NMEA DEPTH Sounder device for more information on configuring this dialog box.

CONFIGURATION DETAILS:

Serial Data Port:
Serial data is sent on pin D related to signal ground on pin DD on plug J106. The interface is RS232C with a baud rate of 1200bps.

Specifications:

Measuring Ranges:	0 – 10,000 metres
Computer Interface:	RS232 (9 pin)
Power Requirements:	21-31 VDC, 187-264 VAC/90-132 VAC (50/60 Hz)
Sound Velocity Setting:	Automatic or manual loading of sound velocity profile

Depth Telegram Format:

- First Bit: Start Bit
- Bit 0 to 6: 7 data bits containing ASCII Code
- Next Bit: Even Parity
- Last Bit: Stop Bit

Byte Contents	Byte Index in Telegram
Head byte, which is an ASCII 'D'	0
1000 m Digit, coded in ASCII	1
100 m Digit, coded in ASCII	2
10 m Digit, coded in ASCII	3
1 m Digit, coded in ASCII	4
Decimal Point, coded in ASCII	5
0.1 m Digit, coded in ASCII	6

Example:
The depth is: 3341.9m

The telegram therefore contains the following hexadecimal bytes:
44 33 33 34 31 E2 39

Which are the ASCII characters for D3341.9 with even parity, giving the depth in decimeters.