WinFrog Device Group:	**Sounder**
Device Name/Model:	**Elac SB3012**
Device Manufacturer:	**ELAC Nautik** Neufeldtstrasse D-24118 Kiel, Germany Tel: ++49 431 883 0 Fax: ++49 431 883 496 E-mail: marketing@elac-nautik.com
Device Data String(s) Output to WinFrog:	See the telegram description at the bottom.
WinFrog Data String(s) Output to Device:	
WinFrog .raw Data Record Type(s):	BOTTOMDEPTH: Type 411 and/or 911 For 411: depth, status & dtime are repeated 15 times

DEVICE DESCRIPTION:
The SB3012 survey echo sounder operates at 12 kHz and can be utilized for both shallow and deepwater bathymetry operations. WinFrog receives and decodes the center depth only. See the device's manual, Appendix-3 Multi Beam Bathy Meter Interface specification for more information.

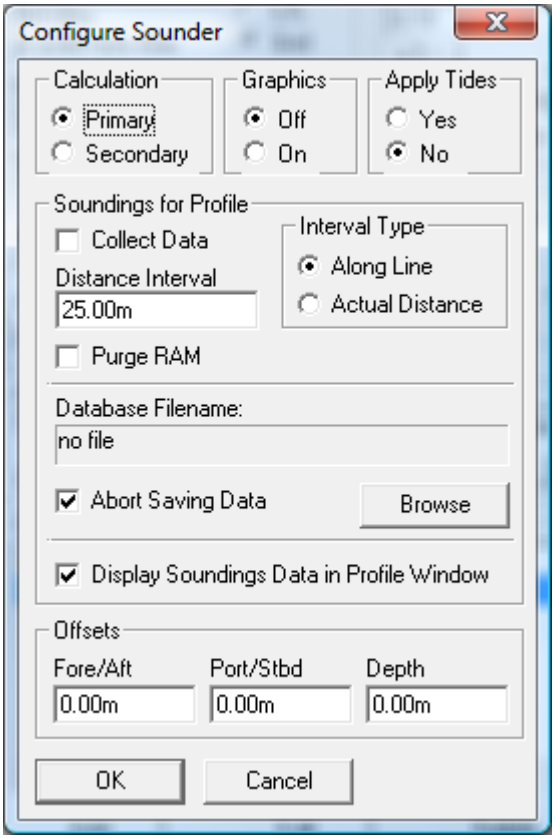
DEVICE CONFIGURATION INSTRUCTIONS

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

WINFROG I/O DEVICES > CONFIGURE DEVICE:
The Elac SB3012 is added to WinFrog from the SOUNDER device types. There is no configuration required or available in the I/O Device window.

WINFROG VEHICLE > CONFIGURE VEHICLE DEVICES > DEVICE DATA ITEM > EDIT:
Adding the ELAC SB3012 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, ELAC SB3012, BOTTOMDEPTH data item and click the Edit button. The standard **Configure Sounder** dialog box appears as seen below.



Calculation:
Set the type of calculation to Primary or Secondary using the appropriate radio button. WinFrog will only use (i.e. display and record) data from a Primary sounder device. If there is more than one Primary sounder attached to a vehicle's device list, WinFrog will not mean the data (as is done with positional devices), but rather alternate between the devices. Data from a Secondary status sounder will simply be monitored and logged to the *.RAW file if logging is enabled.

Graphics:
If the On radio button is selected, a labeled square representing the location of the sounder will be displayed in the Graphics and/or Bird's Eye windows.

Apply Tides:
If the Yes radio button is selected, WinFrog will apply tidal corrections to the observed water depths. Depths displayed in the Vehicle Text window and recorded in automatic event (i.e. .DAT, .SRC, and .RCV) and type 351 raw files will refer to the datum corrected depths. Note that type 411 raw data records will remain truly raw and will not reflect the tide correction.

The tide information can be supplied by a real time telemetry system or by predicted tide files. Either way, the tide "device" must also be attached to the same vehicle's device list. For more information, refer to documentation on Tide devices.

Soundings for Profile:
This section of the Configure Sounder window permits the collection of sounding data to an .mdb database file for display in WinFrog's Profile window. This collection is completely separate from automatic event or raw data collection.

Collect Data
Select this checkbox to enable the collection of data to a .mdb database file.

Interval Type
Select to utilize either Along Line or Actual Distance (i.e. between successive position updates) calculations for data collection intervals. Selecting Along Line requires that you also enable survey line tracking.

Distance Interval
Specify the distance Interval at which the data will be collected.

Purge RAM
Sounding data is stored in the RAM memory of the computer. Any data collected which will not be required at later time can be deleted by checking the Purge RAM button, then clicking on the **OK** button to exit the dialog box.

Database filename
Click on the Browse button to define where and to what filename the .mdb file will be written. The file name and location is displayed in this window.

Abort Saving Data
Select this checkbox to abort saving data to the .mdb file. In other words, to save data to the .mdb file ensure that this box is NOT checked.

Display Soundings Data in Profile Window
Select this checkbox to enable the display of this data in WinFrog's Profile Window.

Offsets
This section of the window allows for entry of Offset values as measured from the vessel's common reference point (CRP). Note that the Fore/Aft and Port/Stbd offsets are used for "cosmetic" visual purposes only; an echo sounder is not a positioning device, and hence its horizontal offsets have no application. If the echo sounder's position is to be recorded in the event files (*.DAT) correctly, you must create and enable a vehicle Tracking Offset for that specific location. The offsets entered here can simply be used as a means of graphically confirming that the Tracking Offset values have been entered correctly.

The Depth Offset should be set to 0 as the ELAC SB3012 corrects for motion and draft.

TELGRAM SPECIFICATION:

Telegram
Vxxxxx<LF><CR>

Where:

V is a fixed character indicating the beginning of the telegram
Xxxxx is the center depth in meters
<LF> is a line feed
<CR> is a carriage return

The depth is corrected for the ships heave, motion, and draft.