WinFrog Device Group:	**LBL ACOUSTIC**
Device Name/Model:	**SIMULATED**
Device Manufacturer:	
Device Data String(s) Output to WinFrog:	None
WinFrog Data String(s) Output to Device:	None
WinFrog .raw Data Record Type(s):	Transceiver (LBL TRANCEIVER): Type 420 Transponder (XPONDER); Type 421

DEVICE DESCRIPTION:
Long base line acoustic driver for demonstration and training purposes including LBL calibration. Used to produce simulated positions of underwater or surface vehicles. Uses fixed, relay, responder and sequential transponders described in the working transponder file to compute the appropriate ranges which otherwise would have been observed. This driver will simulate Sonardyne, Benthos and NS-011 LBL devices. The LBL device simulated depends upon the model of the transponders present in the working file. If they are generic the device simulated will be either the Benthos or NS-011, and if the models are Mk III or Mk IV then the device simulated will be the Sonardyne Pan. Refer to the WinFrog User's Guide for more details, specifically chapter 5 for "WORKING TRANSPONDERS (.XPT) FILE", chapter 17 for "LBL ACOUSTICS" and chapter 20 for "ACOUSTIC CALIBRATIONS".

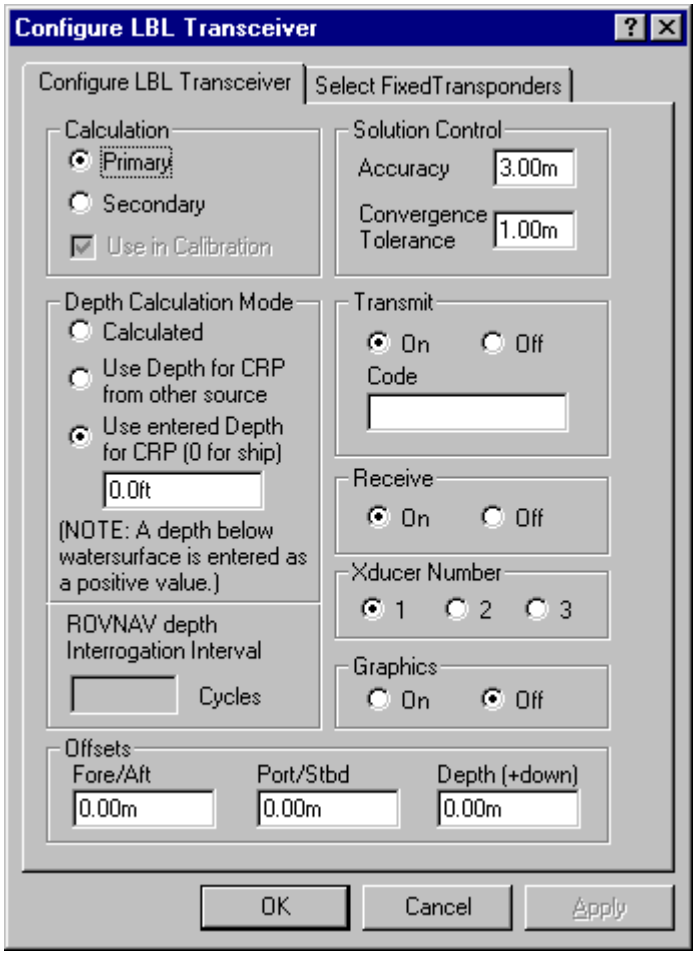
There are two data items created: LBL TRANCEIVER and XPONDER.

WINFROG I/O DEVICES > CONFIG OPTIONS:

There is no configuration for the device.

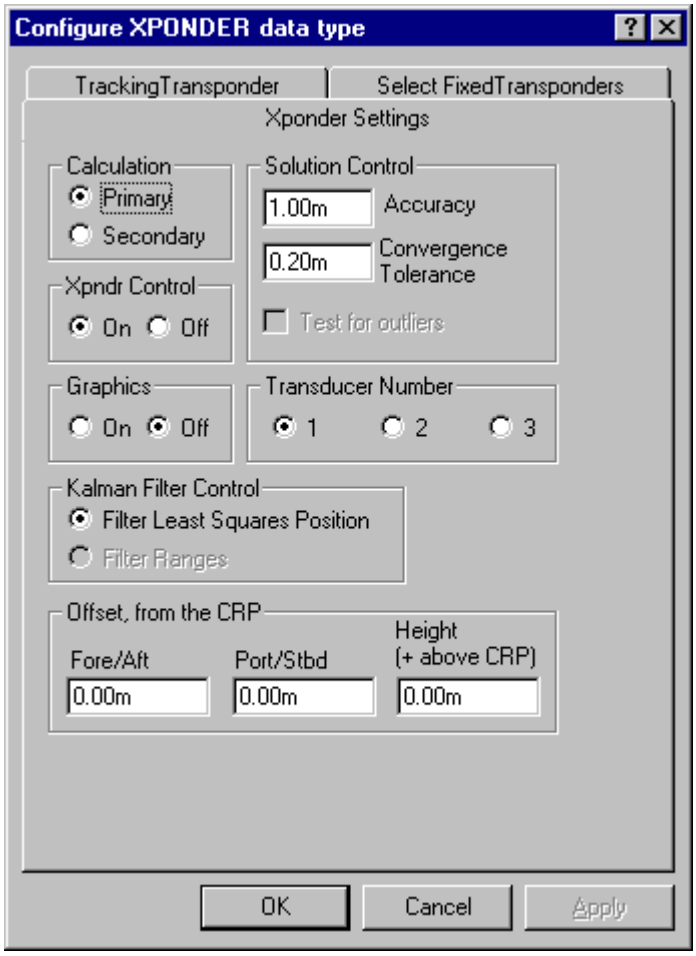
WINFROG VEHICLE TEXT WINDOW > CONFIGURE VEHICLE DEVICES > DEVICE > EDIT OPTIONS:

Data item: LBL,SIMULATED,LBL TRANCEIVER



See the LBL ACOUSTICS chapter for details on setting these parameters. They are the same across all LBL TRANCEIVERS except for the **Transmit Code**. The “transmit code” must match exactly what was entered as the receive value or code for the fixed transponders. Example: 9.0 is not the same as 9.00.

Data item: LBL, SIMULATED,XPONDER



See the LBL ACOUSTICS chapter for details on setting these parameters. They are the same across all transponders (XPONDERS).

Relay Transponder
Currently WinFrog uses an observed range from the transceiver to a fixed transponder to reduce the observed relay transponder's range (which includes the ranges: vessel to relay, relay to fixed transponder and transponder to transceiver, sometimes called sing-around time). Be sure to select this relay transponder as well as the fixed transponders on the tab "Select Fixed Transponders". Consequently the LBL TRANCEIVER must be setup to interrogate with a transmit code. For details on the settings see the LBL ACOUSTICS chapter.

Responder Transponder
Responder mode is essentially the same as relay mode however, the responder transponder is triggered by an electrical pulse instead of acoustic pulse. Again the LBL TRANCEIVER must be setup to interrogate. Be sure to select this responder transponder as well as the fixed transponders on the tab "Select Fixed Transponders".

Simultaneous Transponder
This will simulate Sonardyne's simultaneous COMPATT. It is not necessary to add the LBL TRANCEIVER to the main vessel to accomplish positioning of the simultaneous transponder. Be sure to select all the fixed transponders on the tab "Select Fixed Transponders" but note that the simultaneous transponder will not appear here as it is not necessary to select it.