WinFrog Device Group:	**Sound Velocity**
Device Name/Model:	**Applied Microsystems SVP**
Device Data String(s) Output to WinFrog:	See Telegram Specification section below.
WinFrog Data String(s) Output to Device:	Outputs sound velocity to Reson in 8125/8160/7125 format. See telegram specifications below.
WinFrog Data Item(s) and their RAW record:	CTD SVP: 461

DEVICE DESCRIPTION:

This driver is designed to read the above-mentioned data from the Applied Microsystems SVP and to output the sound velocity in Reson 8125/8160/7125 format. The driver supports the six commands of the AMS SVP; also, it can output an escape character to stop the SVP sending data. It provides a user configurable gate for data to be output and allows off/on control of output.

Only the REAL format as provided by the AMS will be decoded, the raw format will not be decoded. If raw format is being received it will be displayed.

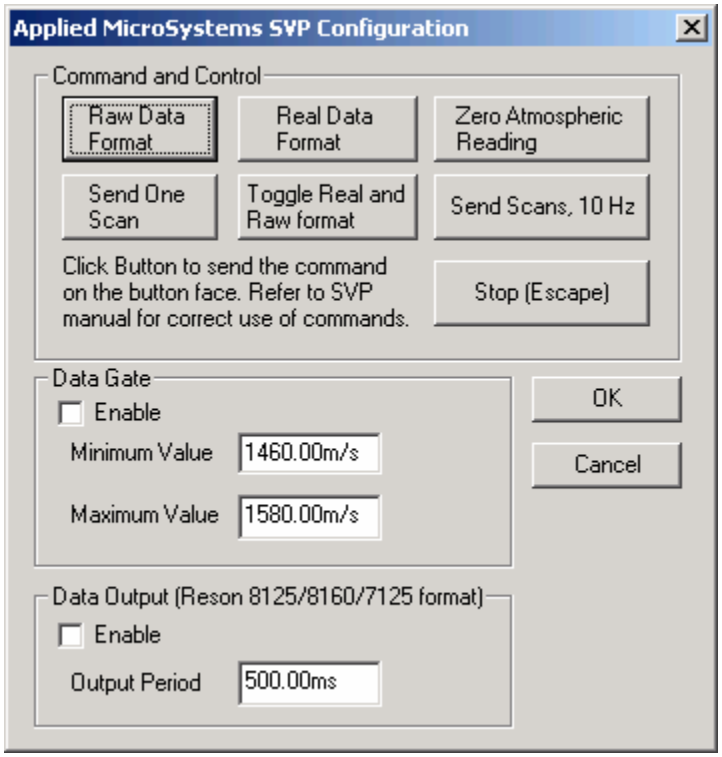
The decoded data section of the I/O Device window has lines to display the last response from the probe and the time of the response. The actual sound velocity and pressure in real format is not displayed here. Note the ">" prompt, carriage returns, and line feeds are not displayed. If data is being output it also will be displayed along with the time.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

Two serial ports
Configurable Parameters

WINFROG I/O DEVICES > CONFIGURE DEVICE:



Command and Control
The six top buttons support the six commands allowed by the AMS SVP. The seventh button will send three escape characters (separated by 50ms). Use this button to stop the SVP from sending data. Note sometimes this must be sent several times before the SVP will stop sending data.

See the AMS SVP manual for detail on the commands.

WinFrog will only decode the **REAL** format.

Enter the speed in metres/second and the output period in milliseconds.

Data Gate
This group allows you to gate the sound velocity that is to be output. The smallest value is 1400m/s and the largest is 1600m/s.

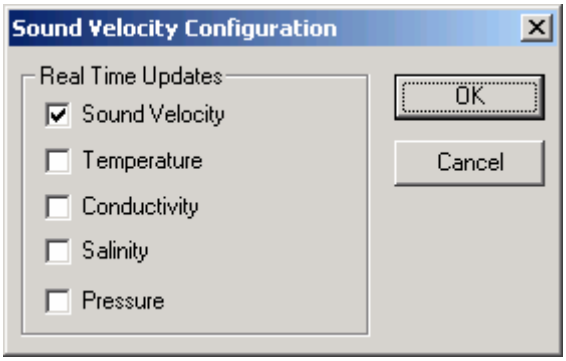
Data Output
This group allows you to control the output.

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

Adding the Applied Microsystems SVP device creates one data item: CTD SVP. Once the data item has been added to the vehicle, it must be edited to suit the application.

Data item: SOUND VELOCITY, Applied Microsystems SVP, CTD SVP

Although you don't have to attach this to a vehicle to cause the sound velocity to be output, if you want the data to be logged you need to attach it to a vehicle.



Checking any of the check boxes will cause the data to be assigned to the vehicle and when events occur the data will appear in the *.dat file. It will also appear in the log file if a manual event is taken.

Note it is not necessary to check the boxes in order to have the data present in the raw file. It will always appear in the raw file if the data item is attached to a vehicle and raw data recording is enabled.

TELGRAM SPECIFICATIONS:

Input telegram from AMS SVP

pppp.ppSvvvv.vv<CR><LF>

Where:

pppp.pp	= pressure in decibars
S	= Space
Vvvv.vv	= sound velocity m/s

Output telegram to Reson

Svvvv.vvS<CR><LF>

Where:

S	= space
Vvvv.vv	= sound velocity m/s