WinFrog Device Group:	**Sound Velocity**
Device Name/Model:	**Applied Microsystems Dual SVP Logger**
Device Data String(s) Output to WinFrog:	See Telegram Specification section below.
WinFrog Data String(s) Output to Device:	Outputs a sound velocity to a text file.
WinFrog Data Item(s) and their RAW record:	none

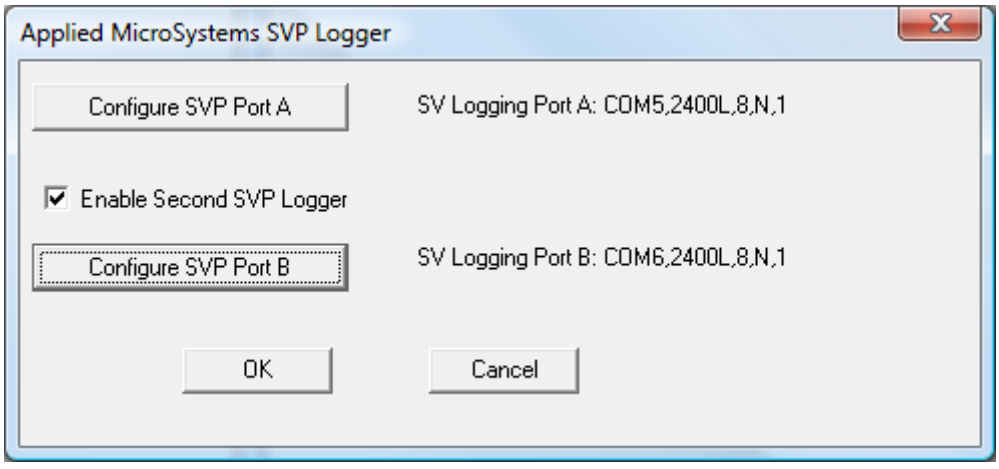
DEVICE DESCRIPTION:

This driver is designed to read the above-mentioned data from one or two Applied Microsystems SVP and to output the sound velocity to one or two text files. The files are created and logging begins when you click the start button in the configuration dialog. Logging is stopped and the file is closed when you click the stop button in the configuration dialog. You may close the configuration dialog while logging.

The decoded data section of the I/O Device window has lines to display the time of the last response, the logging status including the number of active probes, the total number of records logged for each probe, the last depth and sv logged, the last received latitude and longitude and ship speed. The file names of the log files are also displayed. The data will display in the terminal window. If two devices are being logged, the sensors data will be displayed side by side on the same line.

DEVICE CONFIGURATION INSTRUCTIONS

WINFROG I/O DEVICES > EDIT I/O:

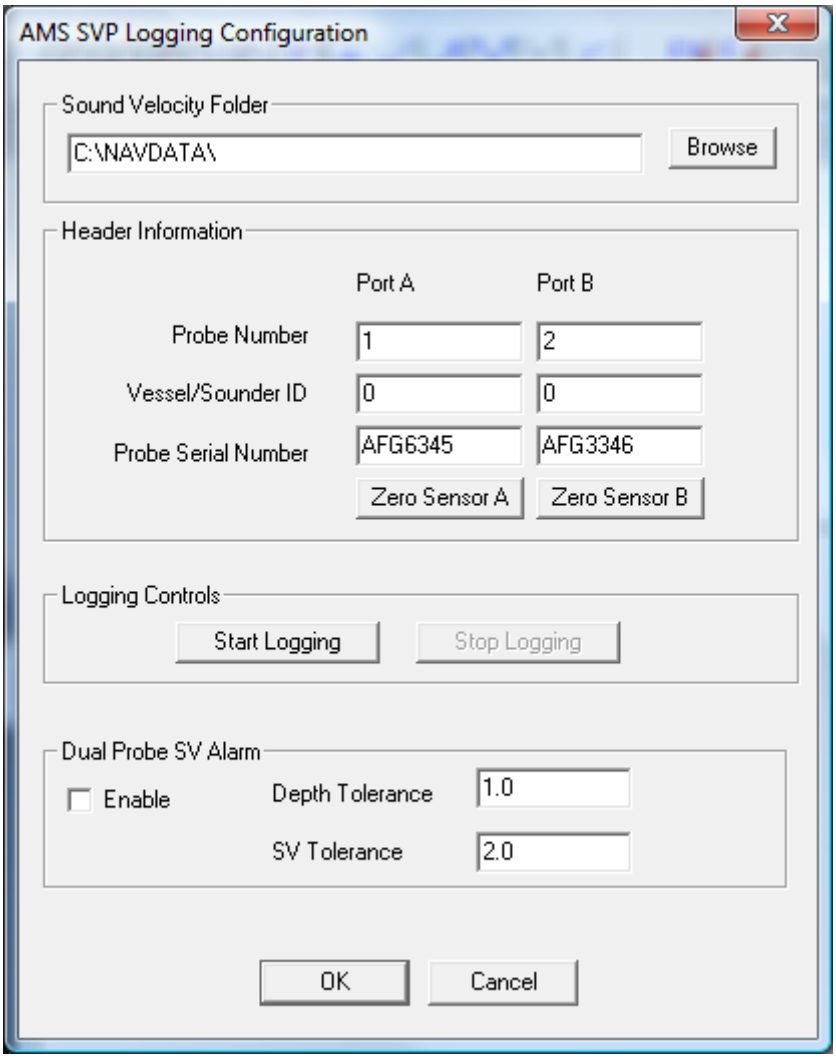


Configure SVP Port A – Setup I/O for the first COM port.

Enable Second SVP Logger – Enable the second SVP probe.

Configure SVP Port B – Setup I/O for the second COM port.

WINFROG I/O DEVICES > CONFIGURE DEVICE:



Browse – Selects the directory into which the sound velocity profile will be logged.

Probe Number – An integer identifying a specific probe. Must be unique to the port.

Vessel/Sounder ID – An integer identifying a specific Multibeam sensor or vessel.

Probe Serial Number – The serial number of the probe. Must be unique to the port.

Start Logging – Creates a file or files and begins logging the output of the device to that file or files.

The file name is programmatically determined as follows:

x-yyyy-ddd-hhmm.SVa

x-Vessel/Sounder ID
yyyy- year
ddd- Julian day
hhmm – hour and minute
a – probe number

A standard header is written to the file prior to data logging.

File Header:

Ship Speed 0.000000 kt	SS.sssssss
Latitude 32.0000000	DDD.ddddddd
Longitude -117.0000000	DDD.ddddddd
09:39:46.2	HH:MM:SS.s
09/03/2009	DD/MM/YYYY

Data is logged in the following format: xxxx.x yyyy.yy

Where:
xxxx.x is depth in meters
yyyy.yy is sound velocity in meters per second

Stop Logging – Logging is terminated and the file is closed.

Zero Sensor A/B – Send zero command to the specified sensor to toggle the automatic zero mode. Each time the command is sent to the device the automatic zero mode is toggled on and off. When the sensor is first turned on the automatic zero mode is off.

Enable Dual Probe SV Alarm – Enables notification in case the depth or sound velocity values reported by the two probes differs by more than a user defined tolerance. A notification will display one time for each logging session.

Depth Tolerance – The minimum difference in depth between the sensors that will generate a one time notification.

SV Tolerance – The minimum difference in sound velocity between the sensors that will generate a one time notification.

Adding the Applied Microsystems SVP logger device does not create a data item. You must attach this device to a vehicle in order to get position updates to complete the header.

TELGRAM SPECIFICATIONS:

Input telegram from AMS SVP

pppp.ppSvvvv.vv<CR><LF>

Where:

pppp.pp	= depth in meters
S	= Space
Vvvv.vv	= sound velocity m/s