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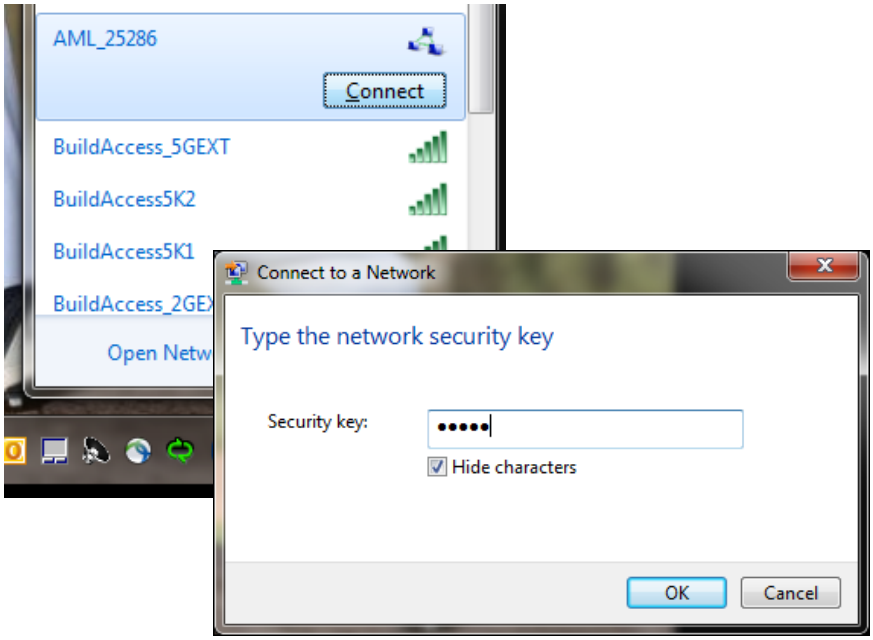
Sounding Better!

AML Base X2 SVP Integration in HYPACK

HYPACK has recently integrated the AML Base X2 SVP (Sound Velocity Profilers) into HYSWEEP® SURVEY and SOUND VELOCITY programs. This gives you the ability to download sound velocity profiles directly from the SVP into HYPACK® via Wi-Fi. It conveniently eliminates the need to run cables or additional software programs in order to download and import SV casts into HYPACK®. All you need to do is connect throughthe Wi-Fi on your PC.

1. **Connect to the Base x2 via your Wi-Fi.** AML provides a USB Wi-Fi adapter, but if you have Wi-Fi built in to your PC, you can use that.
2. **Power up the SVP** by attaching the red shorting plug included with the SVP. The large LED on the SVP turns solid green.
3. **Click the wireless connections icon in your taskbar**. You should see “AML_xxxx” – the “xxxx” — the SVP serial number.
4. **Click [Connect]**. You will be prompted to enter a network security key.
5. **Enter the serial number and click [OK]**.

FIGURE 1. *Wireless AML Connection*

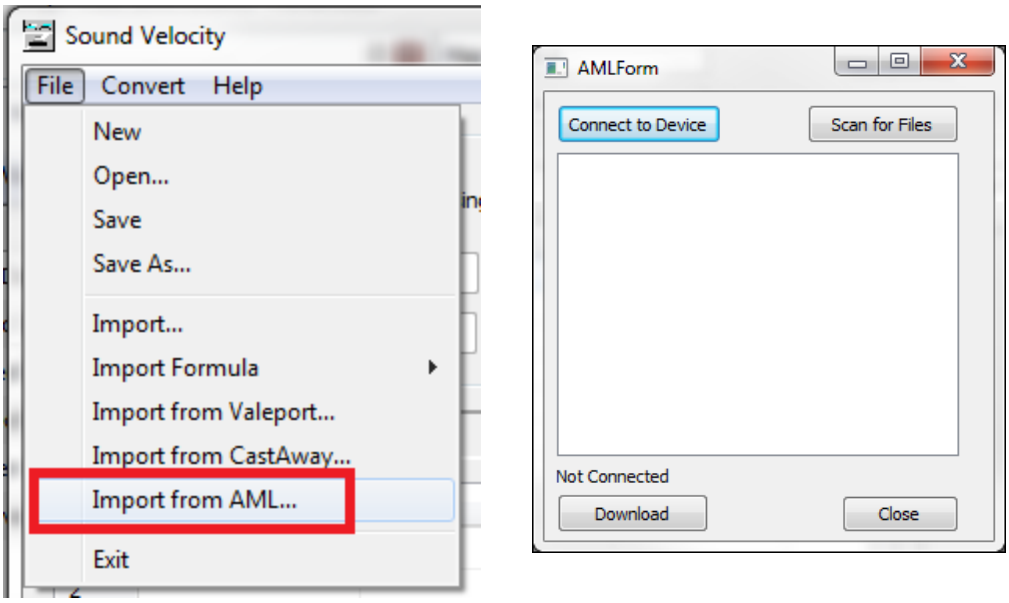


You are now ready to load your cast into HYPACK®. You have two options: you can use the Sound Velocity stand-alone program, or you can add a driver in HYSWEEP®.

Importing Cast Data to the Sound Velocity Program

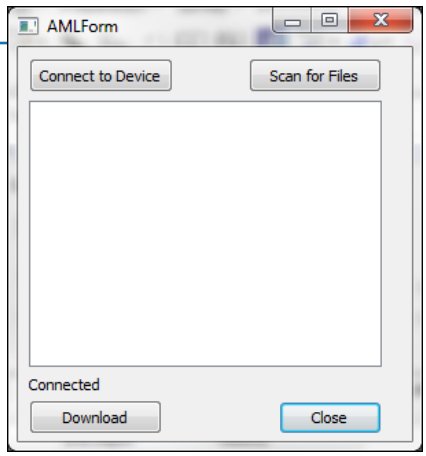
1. **Launch the Sound Velocity program from the HYPACK® Shell.** Select PROCESSING – SOUND VELOCITY- SOUND VELOCITY.
2. Once the program launches, in SOUND VELOCITY, **select FILE - IMPORT FROM AML**. The dialog shown below will pop up. Notice that it says “Not Connected” at the bottom – right of the dialog box.

FIGURE 2. *Importing From the AML SVP*



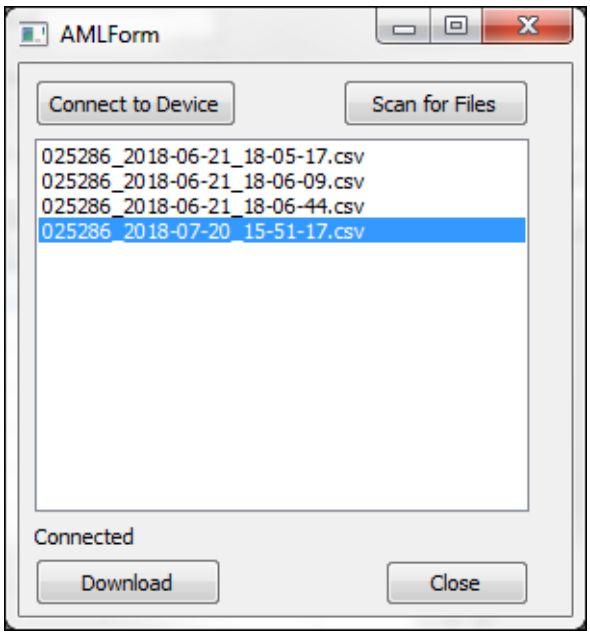
3. **Click [Connect to Device].** The bottom left of the dialog box shows the SVP is connected to HYPACK®.

FIGURE 3. *The AML is Connected*



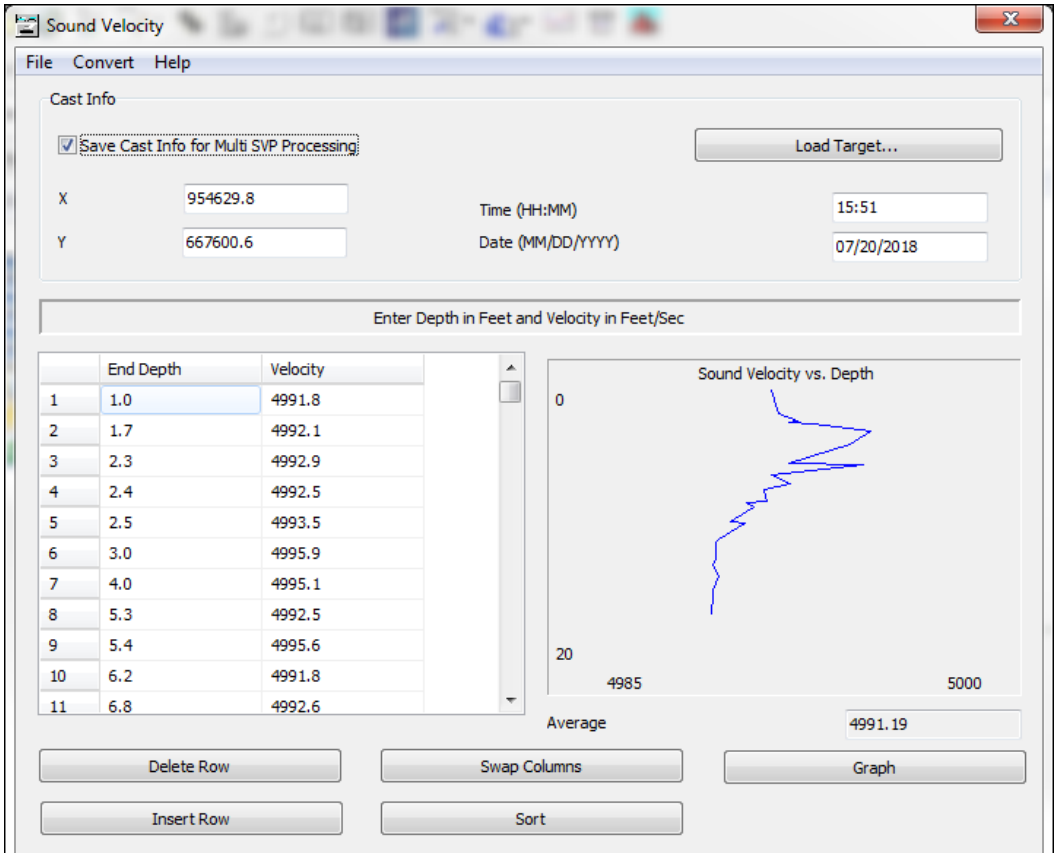
4. **Click [Scan for Files].** The dialog box then displays all the casts stored on your SVP.

FIGURE 4. *SVP Cast List*



5. **Highlight the cast you want and click [Download].** The SOUND VELOCITY program will then be populated with your selected cast.

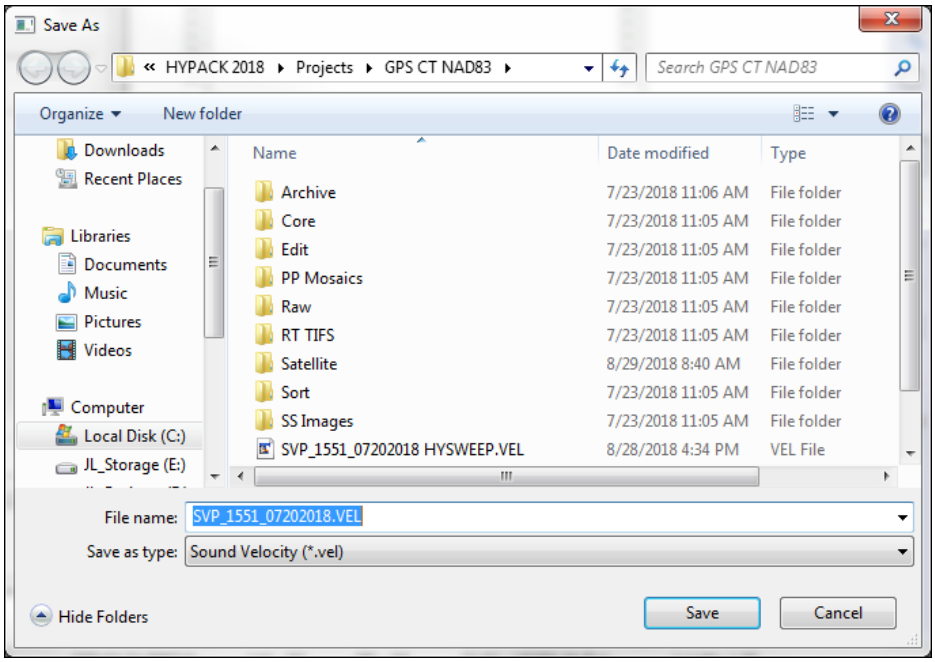
FIGURE 5. *The AML Cast Data in HYPACK® SOUND VELOCITY*



HYPACK® will also import the date, time and position of the cast. (The position is displayed as X and Y based on your project geodesy settings).

6. **Save the cast as a HYPACK® Sound Velocity Corrections (*.VEL) file**. Select FILE – SAVE AS and name your file.

FIGURE 6. *Saving the HYPACK® Sound Velocity Corrections File*

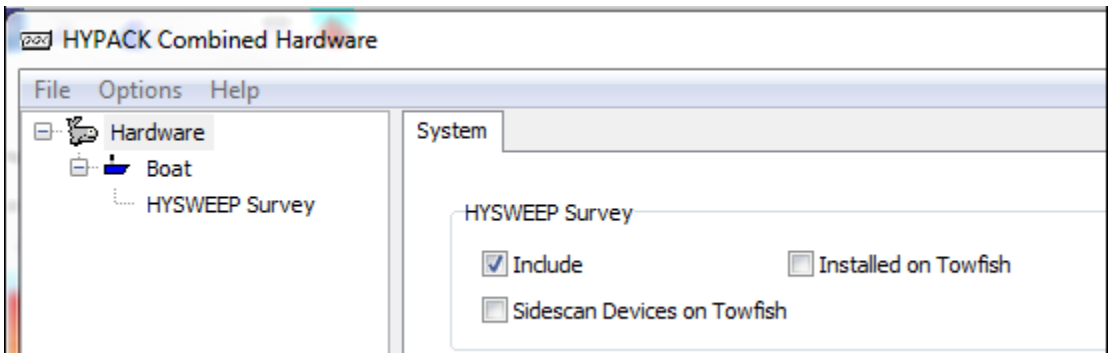


IMPORTING CAST DATA TO HYSWEEP

In order to use the import function in HYSWEEP® SURVEY, you need to load a device driver in the HARDWARE program.

1. In the Shell, **select PREPARATION – HARDWARE SETUP** to launch the HARDWARE program.
2. **Access HYSWEEP drivers.**
   a. **Highlight "Hardware" in the top left corner of the program.**
   b. **On the System tab, check "Include" under HYSWEEP® SURVEY** . You will then see HYSWEEP Survey displayed under the Boat icon.

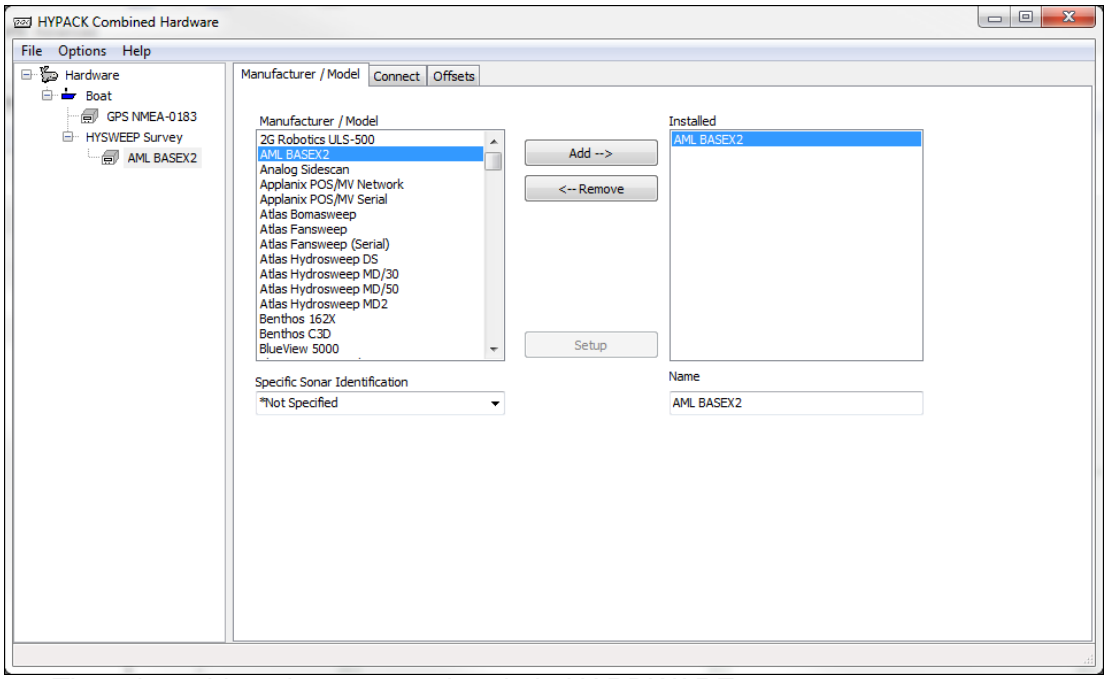
FIGURE 7. *Enabling the HYSWEEP® Drivers*



c. **Select HYSWEEP Survey** to enable the list of HYSWEEP® drivers.

3. **Highlight the AML BASEX2 driver in the list and click [ADD]** to move the driver to the list of installed drivers as shown below.

FIGURE 8. *Installing the AML BA SEX2 Driver*



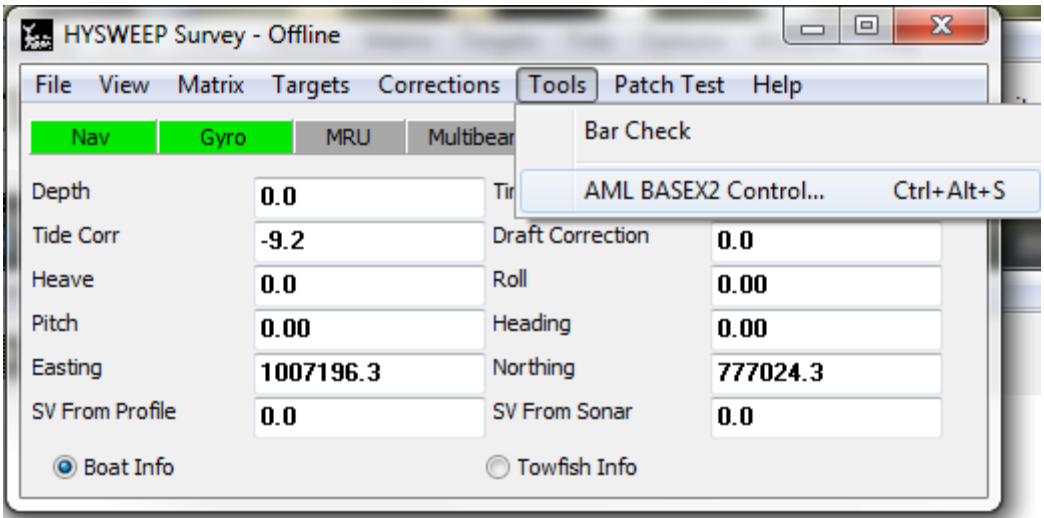
There is nothing else you need to do in HARDWARE.

4. **Launch HYSWEEP® SURVEY**.

5. **In HYSWEEP® SURVEY, import an SV cast**:

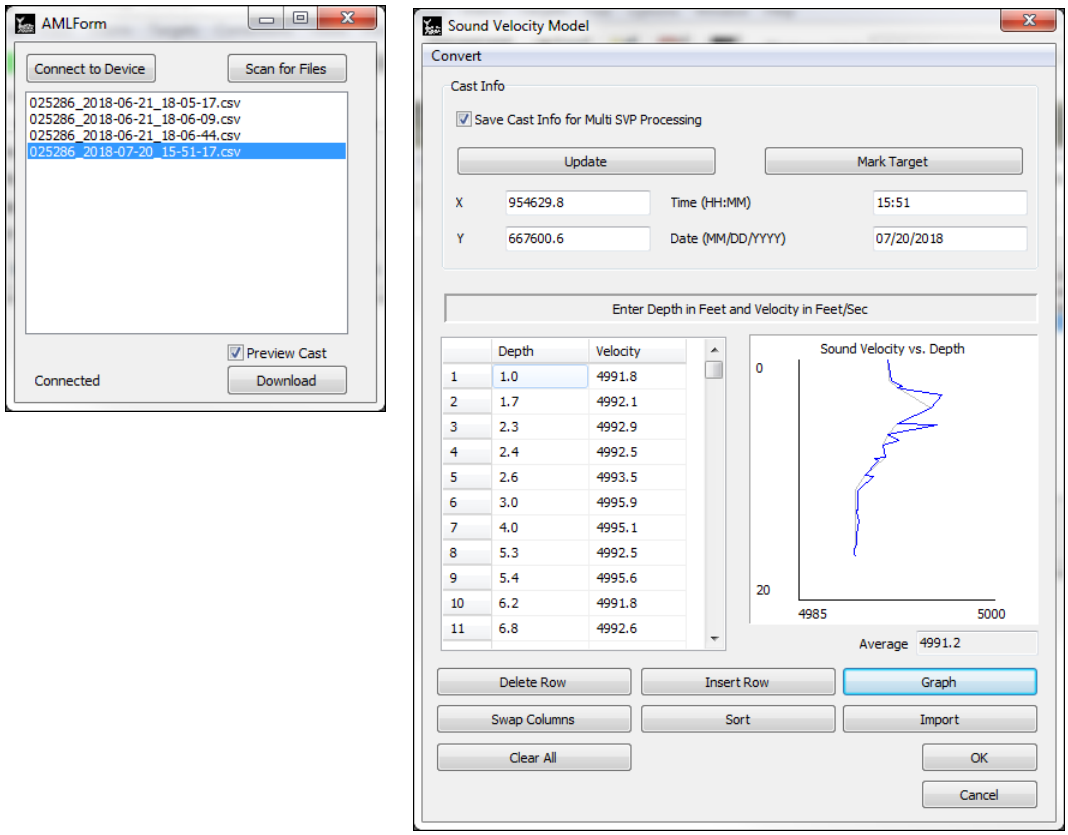
a. **Select TOOLS- AML BASEX2 CONTROL**.You will then see similar dialog boxes as we saw in the SOUND VELOCITY program.

FIGURE 9. *Launching the*



b. **Follow the same steps to import your cast** as described in the "Sound Velocity" section.

FIGURE 10. *Importing Cast Data in HYSWEEP® SURVEY*



c. **Click [OK]** to save your cast to a *.VEL file.

HYSWEEP® SURVEY uses the selected cast for real-time displays, and embeds the cast information into the (raw multibeam) HSX files logged after import.

These new features will be available in HYPACK® 2019, but you can contact Support if you would like to get updates for use in HYPACK® 2018.