



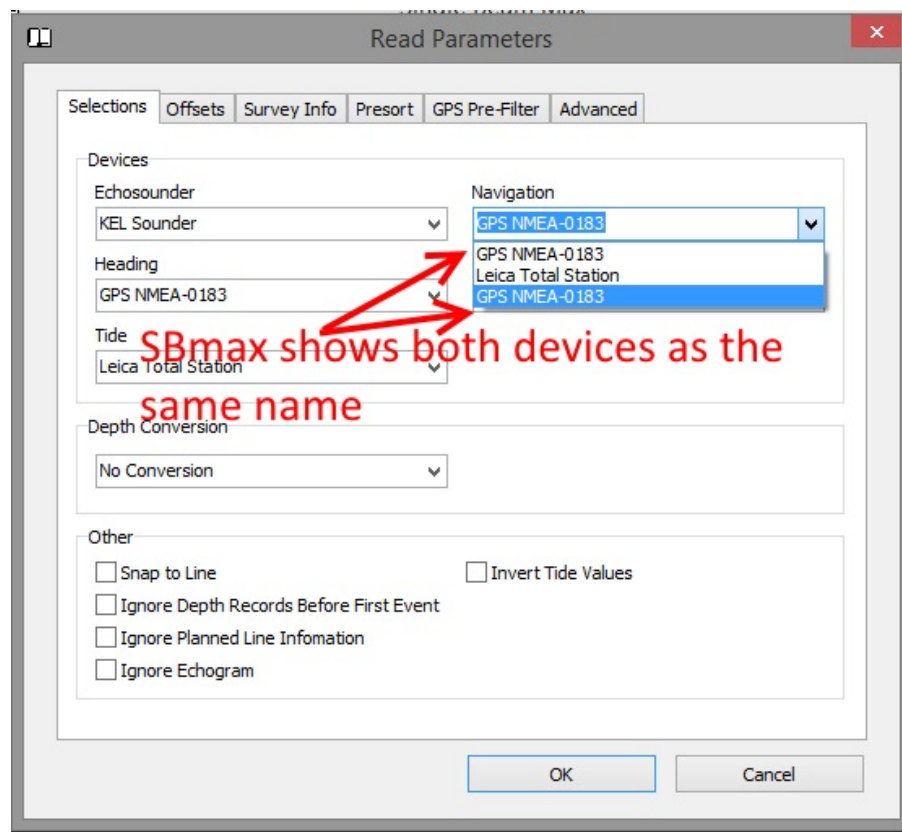
Multiple Devices with the Same Name in HYPACK®

By Bob Glover

We recently had a customer who collected single beam data and was having an issue while processing. There were two instances of the GPS.dll installed: one used for heading while the other was being used for position. This is perfectly acceptable; however, both default device names were unchanged and SBMax (SINGLE BEAM EDITOR) was unable to determine which device should be used. Fortunately, this was very easy to correct using a text editor and resaving the file. The following screen captures explain how to make the needed changes to the file and how to configure HARDWARE to prevent this issue from occurring in the future. We are also currently working on an update to the SINGLE BEAM EDITOR that will remedy this without requiring any changes to the existing hardware configuration.

Figure 1. shows the read parameters device selection tab in SBMax. Notice how there are multiple GPS NMEA 0183 entries.

FIGURE 1. Multiple Instances of Devices with the Same Name



Currently, when the SINGLE BEAM EDITOR encounters two devices with the same name, it reads the information from the first one it sees from the raw file header.

FIGURE 2. Shows the Raw File with Both Devices Using the Default Naming.

```
001_1625.RAW
FTP NEW 2
VER 14.0.9.47
INF "" "" "2014001LAVIOLETTE" "" -4.775651 0.000000 0.000000
ELL WGS-84 6378137.000 298.257223563
PRO TME -73.500000 0.999900 0.000000 0.000000 0.000000 304800.0000 0.0000
DTM 0.00 0.00 0.00 0.00000 0.00000 0.00000 0.00000
GEO "HT2_0.geo" 0.000
HVV 1.000000000000 1.000000000000
TND 16:25:19.06/27/2014 240
DEV 0 33269 "GPS NMEA-0183" 57348 C:\HYPACK 2014\devices\GPS.dll 14.0.12.2
OFF 0 0.020000 0.020000 -1.790000 0.000000 0.000000 0.000000 0.000000
PRD 0 KTD "" "" "" ""
DDT 0 SYN KTC
DEV 1 260 "Leica Total Station" 1 C:\HYPACK 2014\devices\Leica.dll 13.0.6.0
OFF 1 -1.250000 0.000000 -2.670000 0.000000 0.000000 0.000000 0.000000
DEV 2 8208 "KEL Sounder" 512 C:\HYPACK 2014\devices\EchoHypackDLL.dll 2.16.0.0
OFF 2 0.000000 0.000000 0.500000 0.000000 0.000000 0.000000 0.000000
PRD 2 OFF 0.00 0.00 0.00 0.00 0.00 0.00 0.00
PRD 2 OFF 0.00 0.00 0.00 0.00 0.00 0.00 0.00
DEV 3 33141 "GPS NMEA-0183" 57348 C:\HYPACK 2014\devices\GPS.dll 14.0.12.2
OFF 3 0.010000 0.010000 -1.790000 0.000000 0.000000 0.000000 0.000000
PRD 3 KTD "" "" "" ""
DDT 3 SYN KTC
LIN 2
PTS 377328.08 5129796.60
PTS 377497.62 5130004.62
LBP 377328.08 5129796.60
INN 1
EOL
```

In this case, no matter which of the devices was selected, SBMax read the data from the first device written in the header of the file. In the future, we will read the devices based on the device number tag, thus eliminating the need to change default naming. I would suggest that, when you use two instances of the same driver, change the default names to something that reflects the purpose for which the device will be used.

FIXING THE PROBLEM IN COLLECTED DATA

You can correct this issue in files that have already been collected by editing the file headers:

1. **Open the file in a text editor software.**
2. **Find the two devices with the corresponding names in the header.** As you look down the file header, you will see DEV and a number followed by the name of the device in quotation marks.
3. **Choose one of the two devices with the same name and simply add an extra character to the name.** This way the SINGLE BEAM EDITOR can distinguish between the two devices.

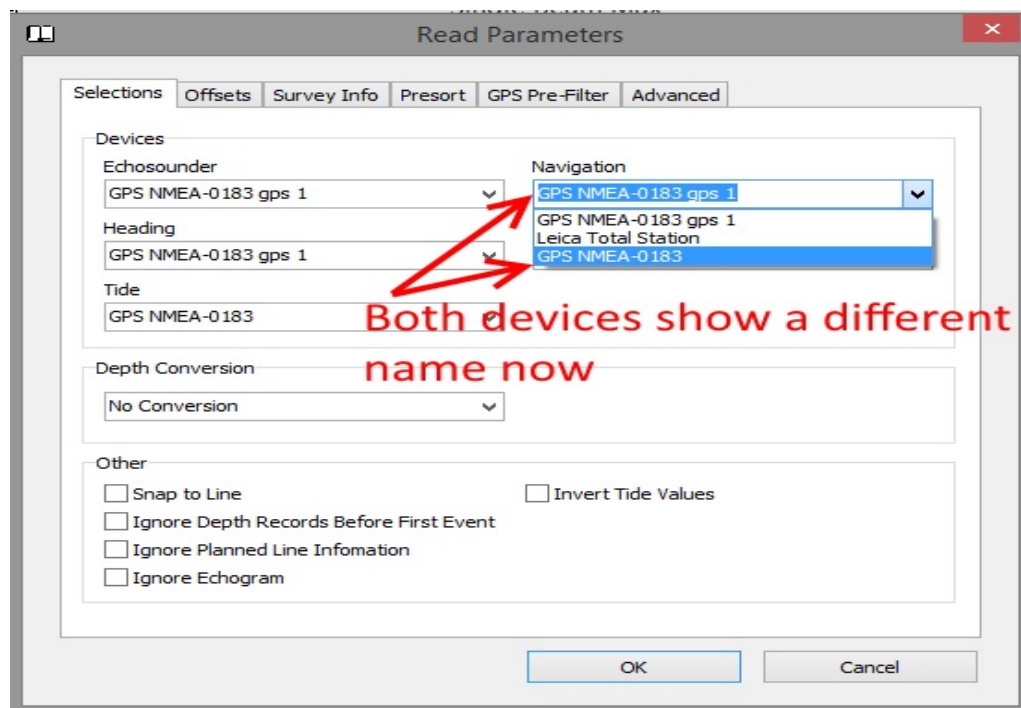
In Figure 3, you can see that we changed the device name by adding “gps 1” to the end of the default name.

FIGURE 3. Device Name for Device # 0 Changed to “GPS NMEA-0183 gps 1”

```
001_1625.RAW
FTP NEW 2
VER 14.0.9.47
INF "" "" "2014001LAVIOLETTE" "" -4.775651 0.000000 0.000000
ELL WGS-84 6378137.000 298.257223563
PRO TME -73.500000 0.999900 0.000000 0.000000 0.000000 304800.0000 0.0000
DTM 0.00 0.00 0.00 0.000000 0.000000 0.000000 0.000000
GEO "HT2_0.geo" 0.000
HVV 1.000000000000 1.000000000000
TND 16:25:19 06/27/2014 240
DEV 0 33269 "GPS NMEA-0183 gps 1" 57348 C:\HYPACK 2014\devices\GPS.dll 14.0.12.2
OFF 0 0.020000 0.020000 -1.790000 0.000000 0.000000 0.000000 0.000000
PRD 0 KTD "" "" ""
DDT 0 SYN KTC
DEV 1 260 "Leica Total Station" 1 C:\HYPACK 2014\devices\leica.dll 13.0.6.4
OFF 1 -1.250000 0.000000 -2.670000 0.000000 0.000000 0.000000 0.000000
DEV 2 8208 "KEL Sounder" 512 C:\HYPACK 2014\devices\EchoHypackDLL.dll 2.16.0.0
OFF 2 0.000000 0.000000 0.500000 0.000000 0.000000 0.000000 0.000000
PRD 2 OFF 0.00 0.00 0.00 0.00 0.00 0.00
PRD 2 OFF 0.00 0.00 0.00 0.00 0.00 0.00
DEV 3 33141 "GPS NMEA-0183" 57348 C:\HYPACK 2014\devices\GPS.dll 14.0.12.2
OFF 3 0.010000 0.010000 -1.790000 0.000000 0.000000 0.000000 0.000000
PRD 3 KTD "" "" ""
DDT 3 SYN KTC
LIN 2
PTS 377328.08 5129796.60
PTS 377497.62 5130004.62
LBP 377328.08 5129796.60
LNN 1
ROT
```

4. **Be sure to save the changes in the file.** We can now open this same file in SBMax, and the read parameters page will show both devices, now named differently allowing you to select either GPS for navigation data.

FIGURE 4. SBMax Read Parameters Displays the New Names From the File Header.

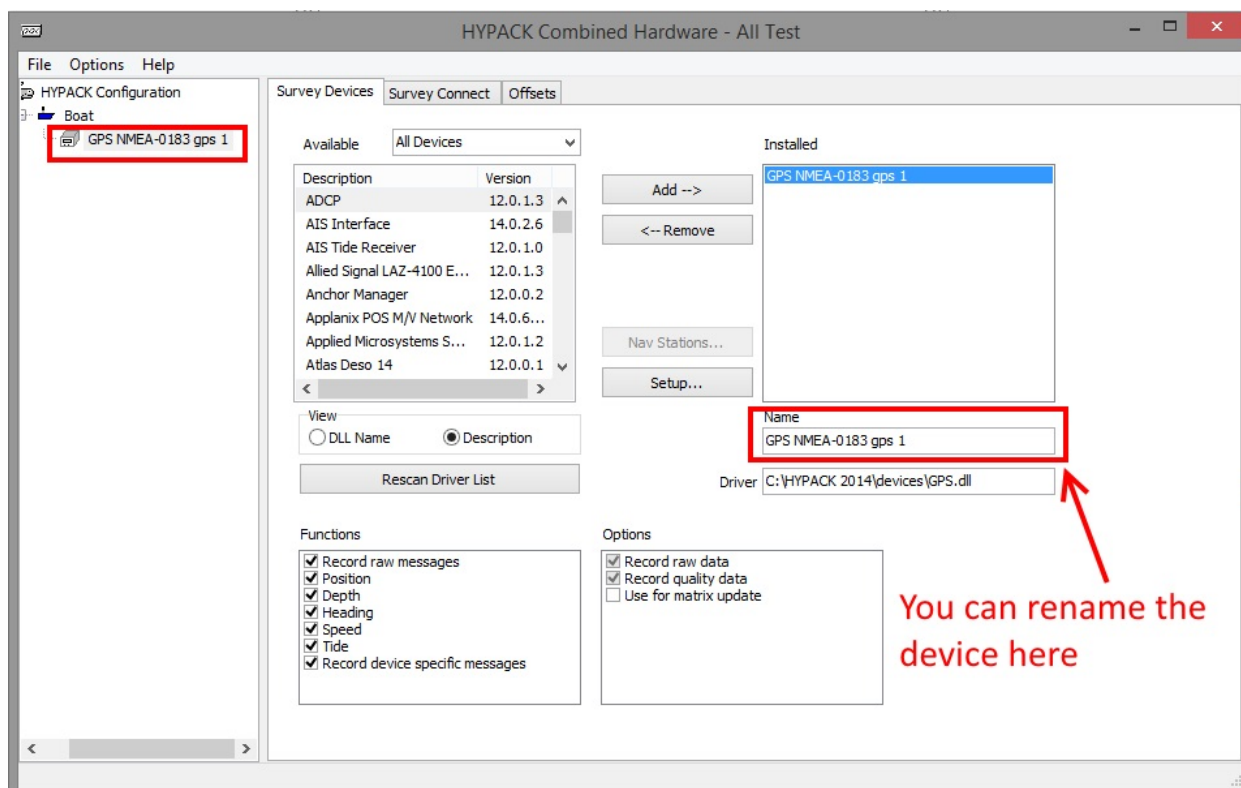


It's recommended that you change the device names *prior* to collection to eliminate any chances of this occurring.

CHANGING THE DEVICE DESCRIPTION IN HARDWARE

1. In the combined **HARDWARE** program, select the device in the device list.
2. Type the custom name description into the **Name** box on the right side of **Survey Devices** tab. This also affects the change in the device list, under the selected mobile.

FIGURE 5. Changing the Device Name in **HARDWARE**.



Files collected with multiple occurrences of the same driver, should be configured in this manner to prevent any issue when opening the files in the SINGLE BEAM EDITOR.

Should anyone have any questions regarding this topic, please feel free to email help@hypack.com.