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Example of switching active navigation sources:
Seapath and POS MV input to an EM122 (SIS 4)

Multibeam Advisory Committee
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photo: LDEO

Active Navigation Sources

Seapath active

POS MV active

EM122 PU Sensor Status

EXAMPLES ONLY; YOUR PORTS MAY VARY!

During MGL2301, the EM122 was configured to receive navigation on the following ports:

COM1: Seapath position (+ZDA if primary)

COM2: Seapath attitude

COM3: POS MV attitude

COM4: POS MV position (+ZDA if primary)

UDP5: Seapath 100 Hz attitude velocity

UPD6: POS MV 100 Hz attitude velocity

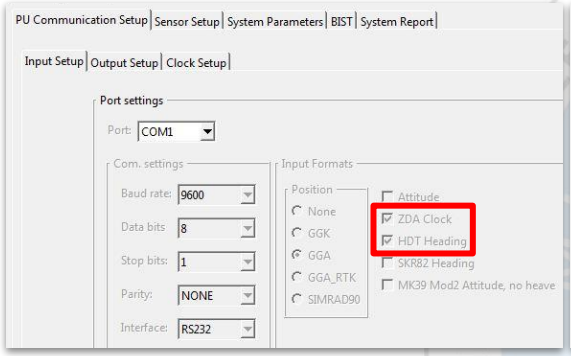
The EM122 PU Sensor Status window is shown for both configurations:

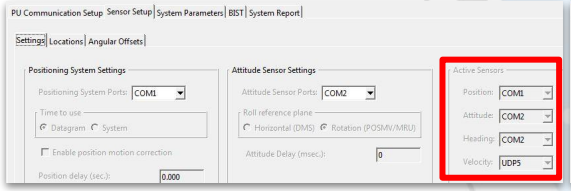
Left: **Seapath** as primary

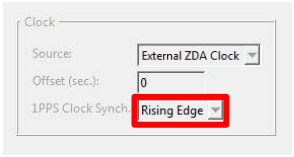
Right: **POS MV** as primary

Active Navigation Sources

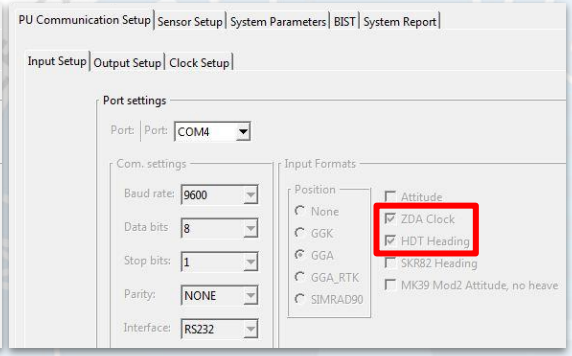
Seapath active

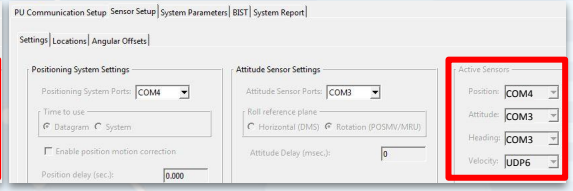


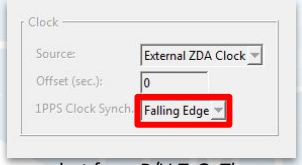




POS MV active







(screenshot from R/V *T. G. Thompson*)

EM122 COM Port Setup

The following **Installation Parameters** are updated to apply the Seapath or POS MV as the EM122 active navigation source:

1. **Input Setup:** select GGA, ZDA Clock, and HDT Heading (backup) for the Seapath (COM1 in this example) or the POS MV (COM4 in this example)
   a. **ZDA Clock and HDT may need to be unchecked for the non-primary source if only one is allowed**
2. **Settings:** select COM1/COM2 for Seapath or COM4/COM3 for POS MV
3. **Clock Setup:** select Rising Edge for Seapath or Falling Edge for POS MV (see PPS formats for more information)