# 1. Simrad Tension Output Device

| Revision History | | | |
|---|---|---|---|
| Revision | Date | Author | Comments |
| 01A | Nov 21, 2024 | G Wright | Initial release |
| | | | |

## 1.1 Overview

The Simrad Tension Output device supports the output of up to 4 cable laying related tensions to a Kongsberg DP system. Messages are comma delimited with 1 message per tension and sent sequentially in groups of 4 at 1Hz.

## 1.2 Message Validation

Not applicable.

## 1.3 Add Device

1. From the Explorer view or Setup ribbon, select Devices to display the IO Devices
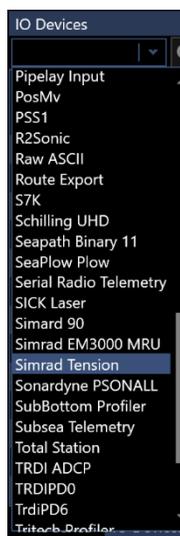2. From the dropdown list, select Simrad Tension and click the **+** button



Figure 1 Select Simrad Tension Device

3. Configure the Device IO parameters and apply them accordingly (refer to the Devices section of the User Guide)

## 1.4 Configure Device

1. Access the Configure Simrad Tension view by either right mouse clicking on the Simrad Tension device in the list and selecting Device Settings or selecting it in the list and clicking the Configure device icon (⬚) in the Device view tool bar
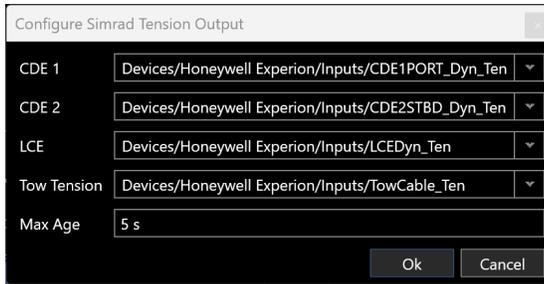
Figure 2 Simrad Tension Output Configuration

2. For each tension, the respective dropdown list presents all available data sources of type Force, select the desired data source for each
3. Enter the maximum age of the data before it is not sent
4. Once configuration is complete click OK

## 1.5    Monitoring

1. Open a Device Status view (see the Devices section in the User Guide)
2. ASCII Decode Tab



Figure 3 Simrad Tension Device Status View

a. Rx Packets/Second: NA
b. Tx Packets/Second: Displays the output rate of transmitted messages
c. Rx Overflow: NA
d. Scrolling list of transmitted (blue) messages

## 1.6    Output Telegram

| NavView to Kongsberg DP Message | | |
|---|---|---|
| **Field** | **Format** | **Description** |
| 1 | $PRPITEN | Header |
| 2 | n | Tension number: CDE1 = 1, CDE2 = 2, LCE = 3, Plow Tow = 4 |
| 3 | d.dd[1] | Tension (kN) |
| 4 | c[2] | Status: A = good, V = bad |
| 5 | <CR><LF> | Carriage Return Line Feed |

Notes:
1. If selected data source does not provide valid data or the selected data source is None or the age of the data exceeds the specified maximum age, this field is empty
2. If selected data source does not provide valid data or the selected data source is None or the age of the data exceeds the specified maximum age, this field is V