1. Simrad Ping ASCII (Sounder) Device

Revision History			
Revision	Date	Author	Comments
01A	Nov 25, 2024	G Wright	Initial release

1.1 Overview

The Simrad Ping (Sounder) device accepts input from Simrad sounders supporting the Simrad - Ping based ASCII datagram. Input messages are comma delimited. In the case of multiple transducers being connected to the sounder, one message per transducer is output.

NavView publishes the depth for each transducer as a Distance Observation. In addition, the user can select one of the transducers to be the primary depth for the sounder. When this data source's observation is associated with Calculations, Text views, etc., the transducer in use can be changed at the device level without having to re-assign a different depth data source everywhere else.

1.2 Message Validation

The input message is tested for valid ASCII alpha and numeric characters.

1.3 Add Device

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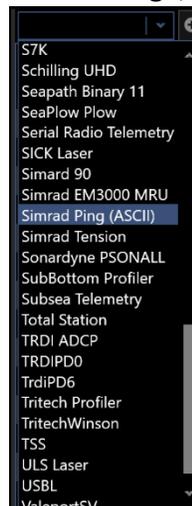2. From the dropdown list, select Simrad Ping (ASCII) and click the **+** button

Figure 1 Add Simrad Ping 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 Ping (ASCII) view from the IO Device view by either right mouse clicking on the Simrad Ping 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
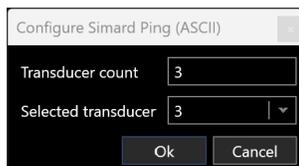

Figure 2 Simrad Ping (ASCII) Configuration

2. **Transducer count**: Enter the number of transducers the EA600 has connected.
    a. The sounder outputs a depth message for each transducer
    b. NavView publishes a Distance Observation for each transducer
3. **Selected transducer**: Select the transducer that is to be used as the primary depth source
4. Click OK

1.5   Monitoring

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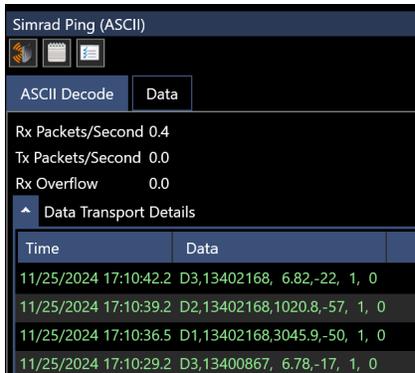2. ASCII Decode Tab

Figure 3 Simrad Ping Device Status View - ASCII Decode Tab

    a. Rx Packets/Second: Displays the input rate of the received messages
    b. Tx Packets/Second: NA
    c. Rx Overflow: Displays the number of bytes in the case of an input buffer flow
    d. Scrolling list of received (green) messages
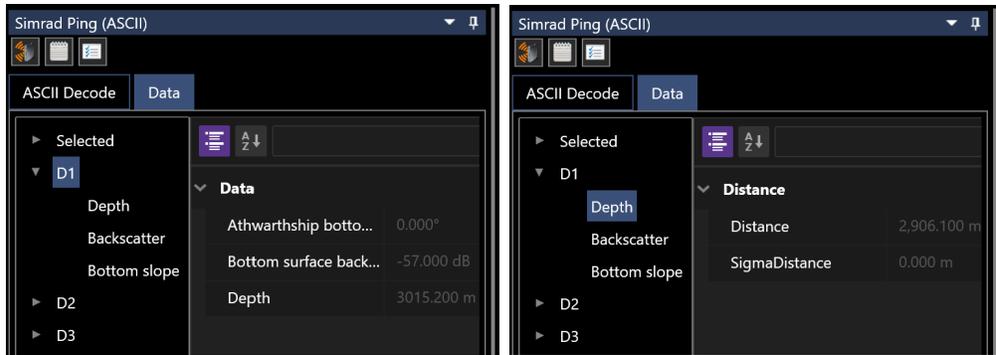3. Data Tab
    a. Displays the decoded and published data

Figure 4 Simrad Ping Device Status View – Decoded and Published Data

b. Selecting the top of the tree (e.g. D1) displays the decoded data in the right panel in the units and number of decimal places expected based on the documentation provided

c. Expanding the branches in the tree (e.g., Depth, Backscatter, etc.) lists the respective observation that are published and available for use elsewhere in NavView such as Text views and Data Recording, selecting one display the published data in the right panel

1.6   Input Telegram

Simard Ping ASCII Message to NavView		
D#,hhmmss.ss,xxxx.xx,zzz,TDN,ABS,<CR><LF>		
Field	Format	Description
1	D	Header
2	#	Transducer #
3	hhmmss.ss	Time of data (not used, data captures do NOT match documentation)
4	xxxx.xx	Water depth (m)
5	zzz	Bottom surface backscattering strength (dB)
6	TDN	Transducer number (never used)
7	ABS	Athwarthship bottom slope (in degrees) (Not used in EA 600)
8	<CR><LF>	Carriage return Line feed