

# **TELEDYNE BLUEVIEW T2250-360 TUNNEL PROFILER IN NAVISCAN**

## **NOTES**

Last update: 22/10/2021  
Version: 9.5

# 1 Guide

Notes on using the BlueView 2250-360 degree profiler Driver and how to access all the beams.

## 1.1 Hardware

BlueView T2250-360

[http://www.teledynemarine.com/BlueViewT2250-360\\_Tunnel\\_Profiler](http://www.teledynemarine.com/BlueViewT2250-360_Tunnel_Profiler)

This profiler has three sonars with two IP addresses (192.168.1.45 and 192.168.1.46). Both are for the sonar heads, it has two IPs but three sonar arrays.

## 1.2 Software

Software version: NaviScan\_9.5-74423-Internal\_trunk

The driver is BV2250-360 BVT RangeProfile.

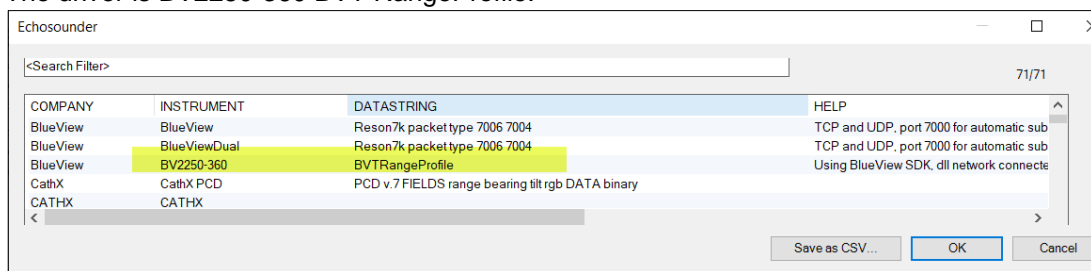


Figure 1 BlueView T2250-360 degree profile driver

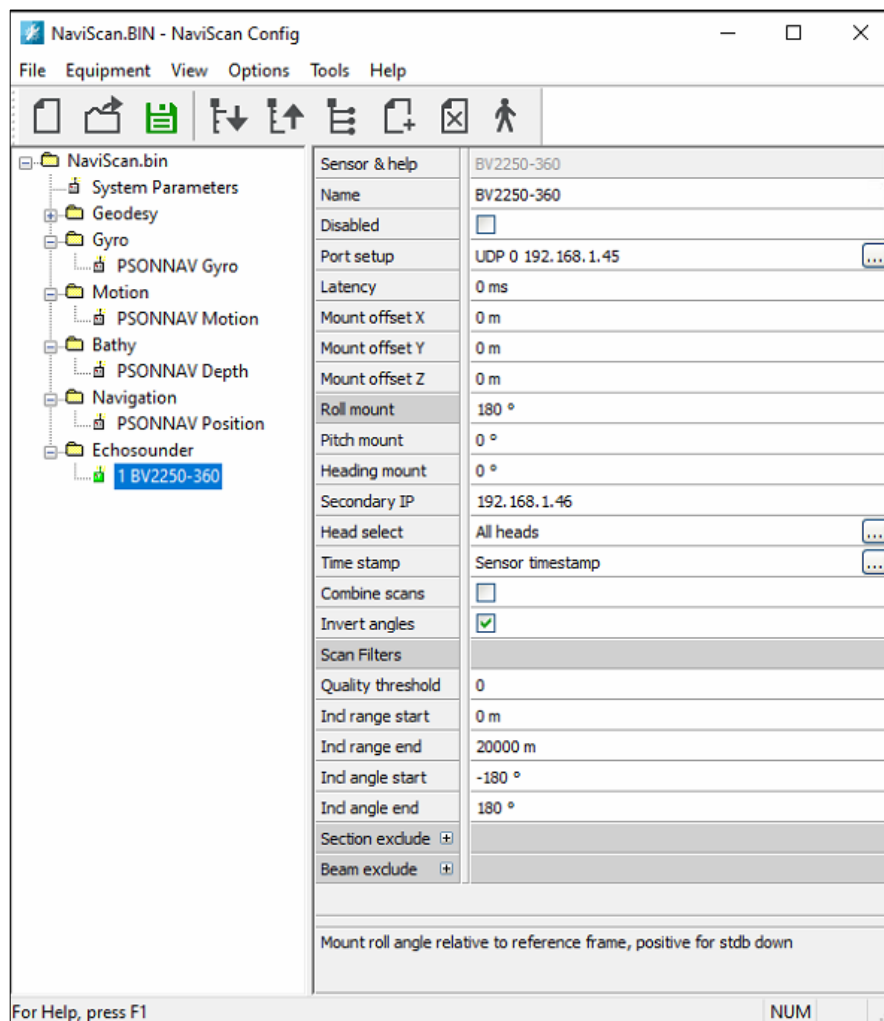


Figure 2 Example of the NaviScan driver

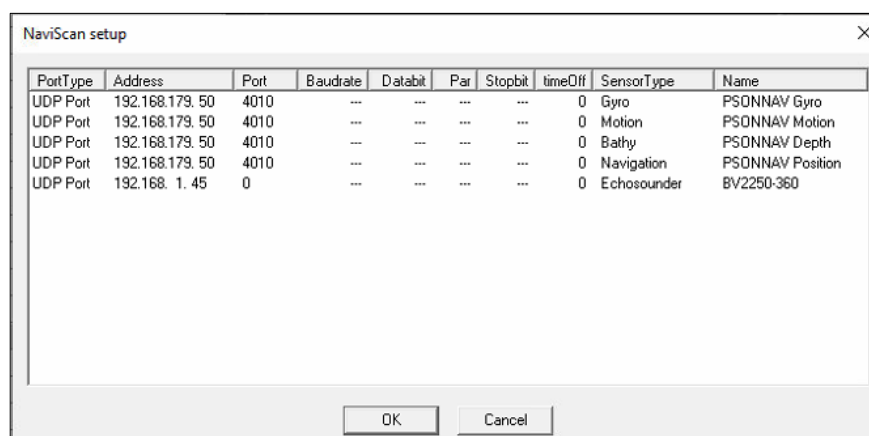


Figure 3 Example setup

- **Combine scans**

Combine all scans from instrument to one scan with the average timestamp, instead of individual partial scans with individual timestamps – which has the best timestamp accuracy.

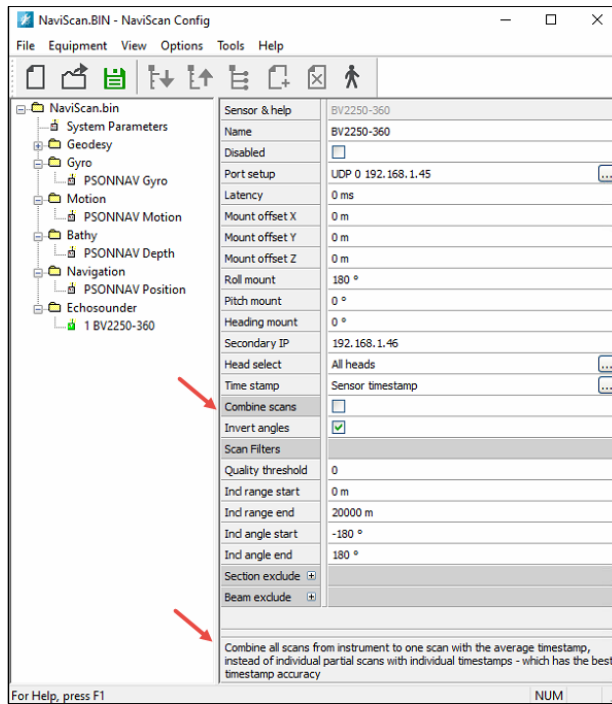


Figure 4 Combine scans

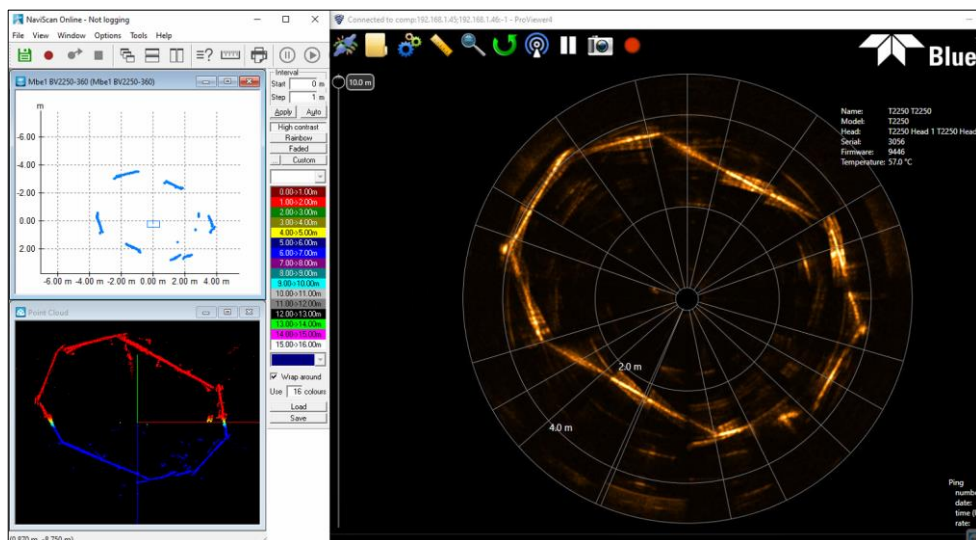


Figure 5 BlueView ProViewer and NaviScan, upper left side: NaviScan MBE1 view with **Combine scans** option in use, shown individual scans with better timestamp accuracy.

- Changing NaviScan Online to show separate beams

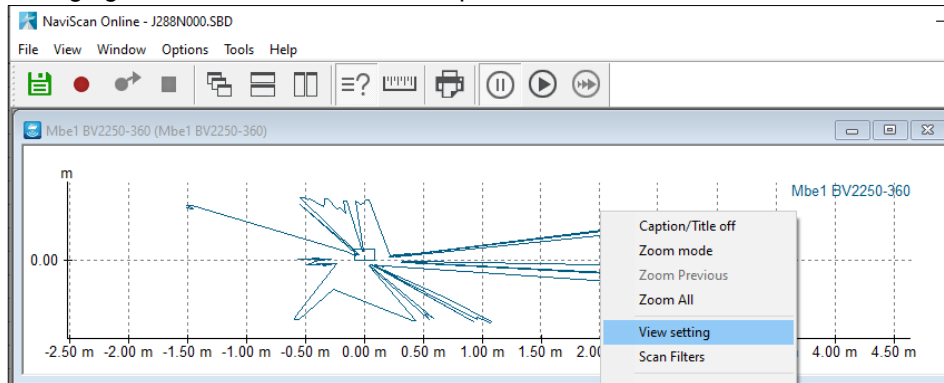


Figure 6 Right mouse click to change View settings

- Go to Data and show as dots

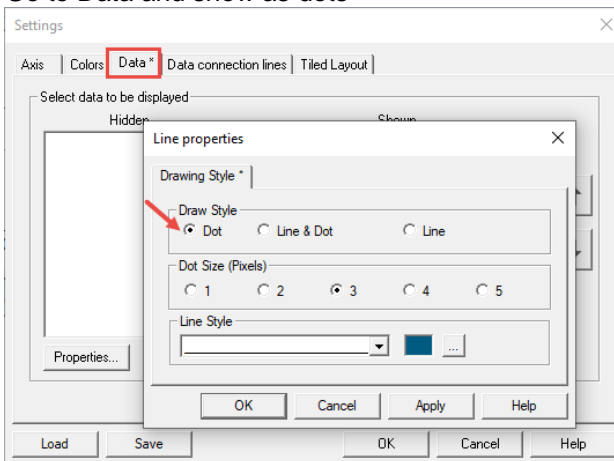


Figure 7 Data view

- Result: separate beams are shown.

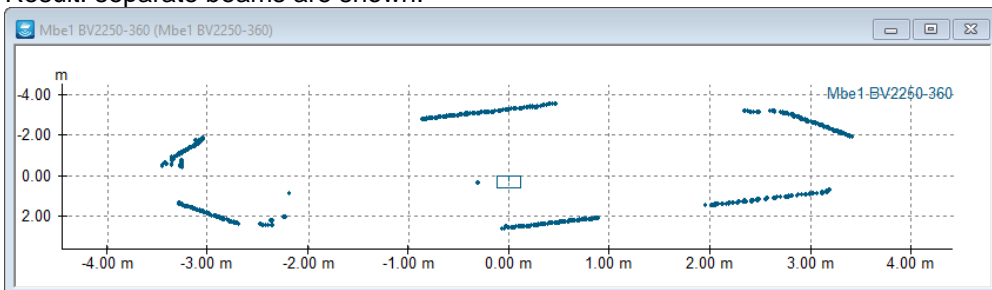


Figure 8 Separate beams

NaviScan Online Sonar controls:

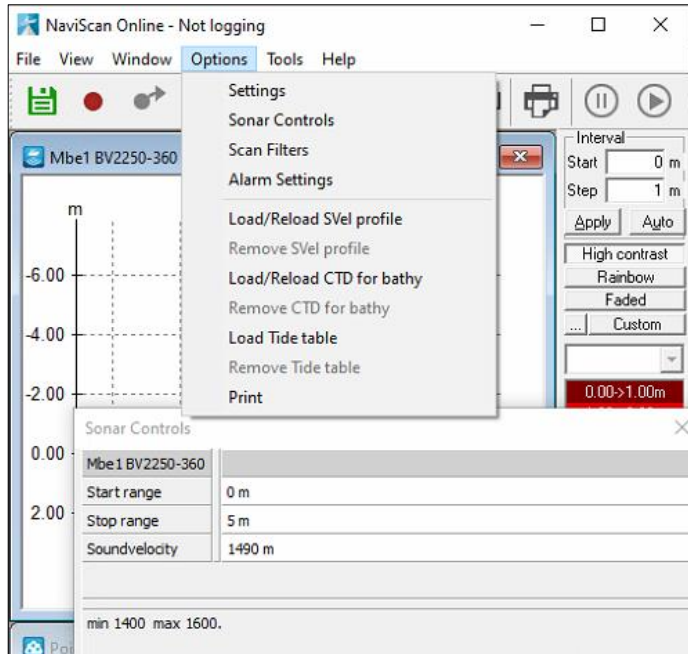


Figure 9 Sonar Controls and Scan Filters

For changing scan filters ranges permanently, use NaviScan Configuration:

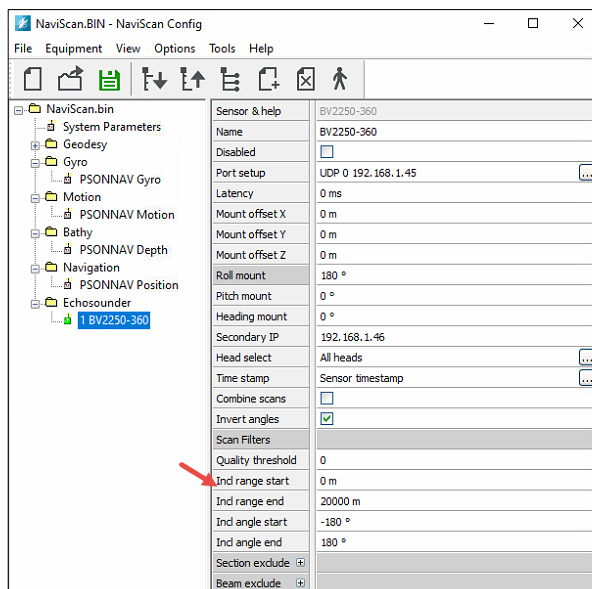


Figure 10 Set permanent scan filters



## What is meant by this driver help?

Using BlueView SDK, dll network connected, but must be defined in setup as UDP, with the IP address of the sonar head, and port can be 0 as it is not used

This is a third party dll,(API), that is provided by Teledyne BlueView and is part of NaviScan. It is used to access the data coming from the profiler.

## How to enter multiple heads with individual mount offsets

NaviScan's BVT2250-360 driver combines many heads into one head and will not be able to apply the different individual head offsets even when only in the forward direction.

If there are multiple mounting offsets, we always need an instance in **NaviScan** for each mounting offset, and then these instances must be setup to accept only the data related to the head offset that are true for the item.

**IMPORTANT:** One of NaviScan Configuration basic functionalities is 'match checking' the IP addresses and ports, in other words **NaviScan Configuration** checks if there are instruments in the **NaviScan configuration** where IP address and port are the same. If they are the same, **NaviScan** combines them.

You want to avoid the match checking, if you want to enter multiple heads with individual mount offsets by adding three BVT2205-360 drivers, and make sure IP addresses and udp ports differ, eg udp port:1, udp port:2, udp port:3.

This is how you must do it then:

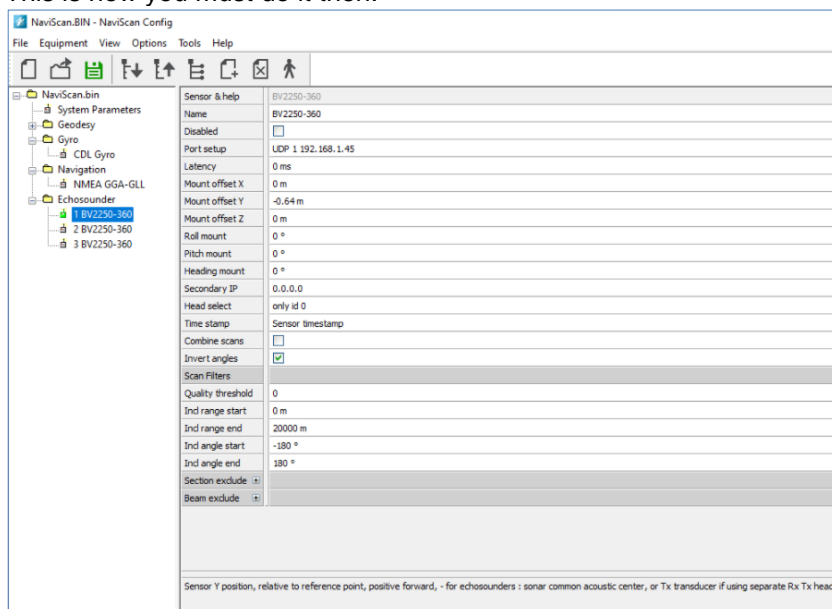


Figure 11 Driver 1

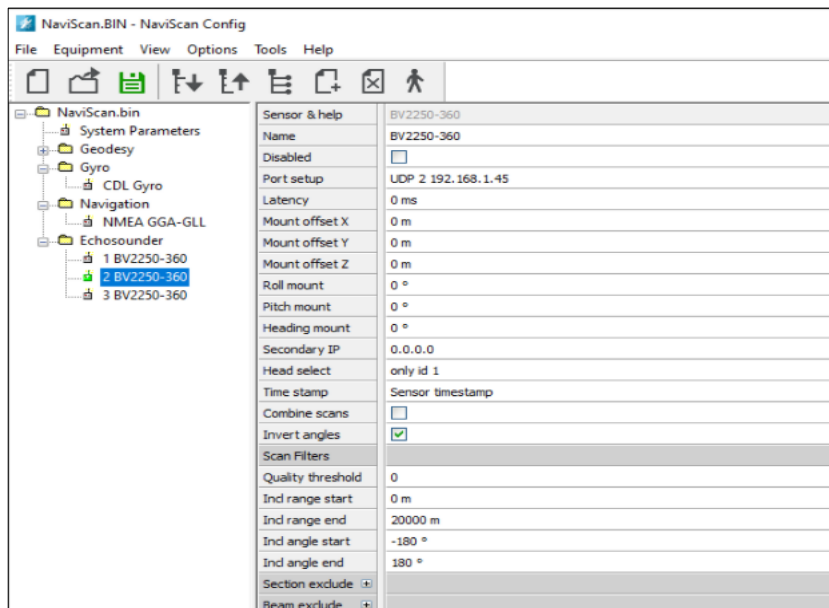


Figure 12 Driver 2

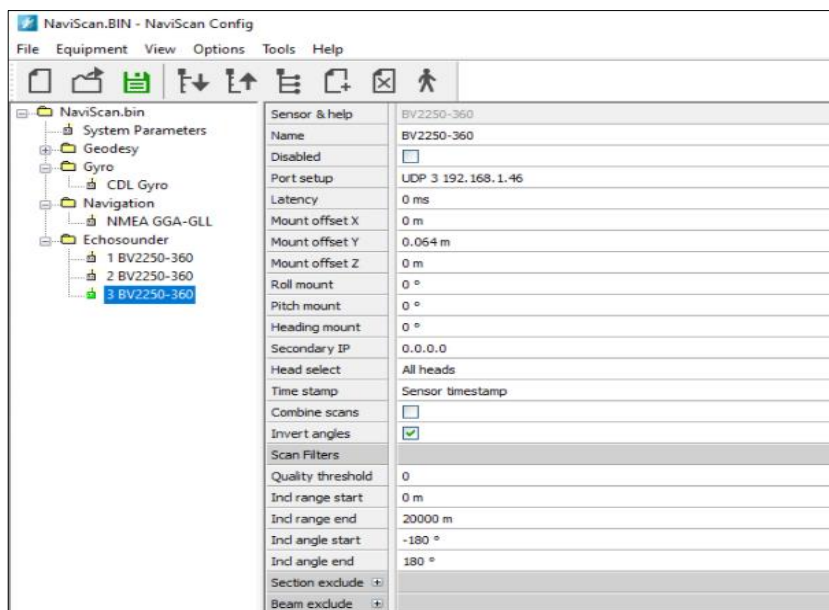


Figure 13 Driver 3