

Multi-Detect

Feature Description

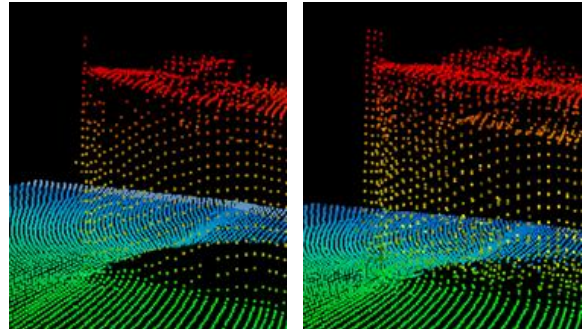


Introduction

Multi-Detect is a feature which provides multiple detections within each beam, including the full water column, which allows the surveyor to capture enhanced detail from a single survey line over a complex feature, or ensure that full detail is captured of any object in the water column, including in noisy environments. Up to five detections may occur anywhere within each beam. Note that Multi-Detect is not equivalent to multiple soundings across a beam footprint on the seabed.

Benefits

- Enhanced detail over complex, small and fine objects
- Improved and faster decision making
- Easier and faster than water column processing
- Increased business potential: more project opportunities



SeaBat Standard Detection

SeaBat Multi-Detect shows enhanced detail on the bow of the wreck

Applications

- Harbour Surveys: safer detection algorithm, e.g. least depth over wreck
- Offshore & Renewables: robust cable catenary determination
- Marine Research: fish school detection
- Dredging: suspended sediment detection

How it Works

The surveyor can control the sensitivity of the Multi-Detect algorithm using three controls:

- **Object Size:** increasing this parameter results in more detections on smaller objects. Decreasing it results in fewer detections and only on larger objects.
- **Amplitude Sensitivity:** increasing this parameter causes more objects to be detected
- **Max Detections:** this control is used to limit the number of detections output for each beam to five

The detections are ordered such that when the Max Detection Control is set to 1, the detection closest to the multibeam transducer is output. When the Max Detections control is set to 2, the next closest detection is output together with the first and so forth. This ordering process, therefore, allows the surveyor choose a single detection, closest to the transducer, and tune the detection sensitivity of it, which is designed to yield safer detection in harbour environments where determine of least depth is critical.

Upgrade Information

Multi-Detect is available for the new SeaBat Series and SeaBat 7125 in Feature Pack 4 (FP4). A software upgrade is required. Please contact your local RESON representative or support@reson.com for further information.

Compatible Systems

SeaBat Series

SeaBat 7125 (FP4)