

Full Rate Dual Head

Feature Description

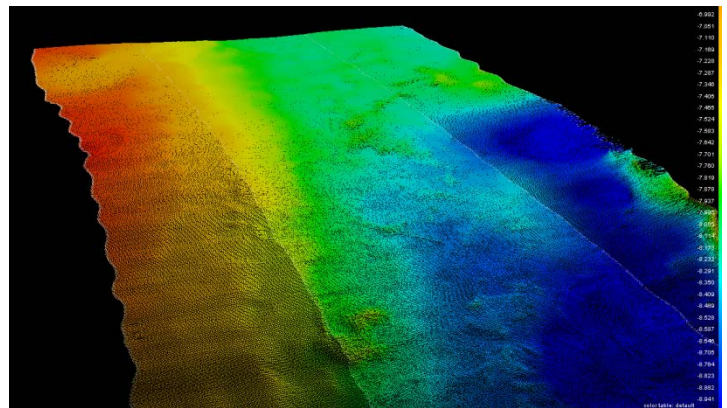


Introduction

Full Rate Dual Head (**FRDH**) can provide up to **100%** increase in swath coverage compared with a single head system, together with full ping rate for maximum data density. The FM technology used for **FRDH** provides a unique acoustic signal for each system allowing them to ping together but also significantly enhances resistance to noise and interference from other sources, as is common in ROV environments.

Full Rate Dual Head Benefits

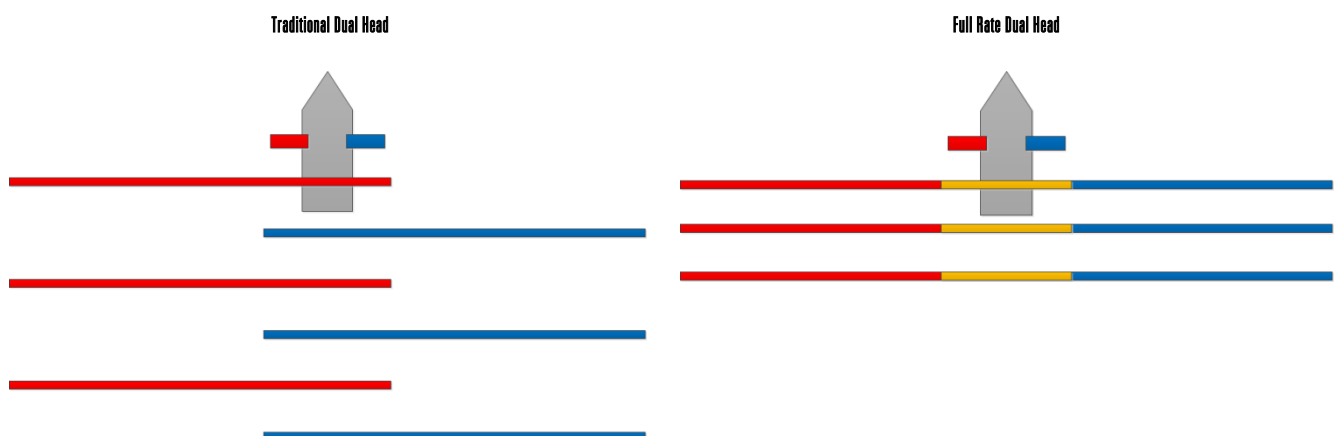
- Maximum data density – 1024 beams
- Enhanced noise resistance
- Up to **100%** wider swath
- Fewer survey lines
- Greater range performance
- Reduced survey time and cost



SeaBat 7125-ROV2 FRDH Data

How it Works

FRDH uses FM technology to achieve simultaneous dual head transmission by acoustically separating the FM signals of each system. Traditional dual head implementation prior to **FRDH** required each system to ping alternately to avoid interference, thus reducing data density.



Upgrade Information

FRDH is available from Feature Pack 3 (FP3). A hardware, software and firmware upgrade is required to applicable existing systems to allow for FM processing and thus **FRDH**. RESON provides well defined upgrade paths for **FRDH** compatible systems. Please contact your local RESON representative or support@reson.com for further information.

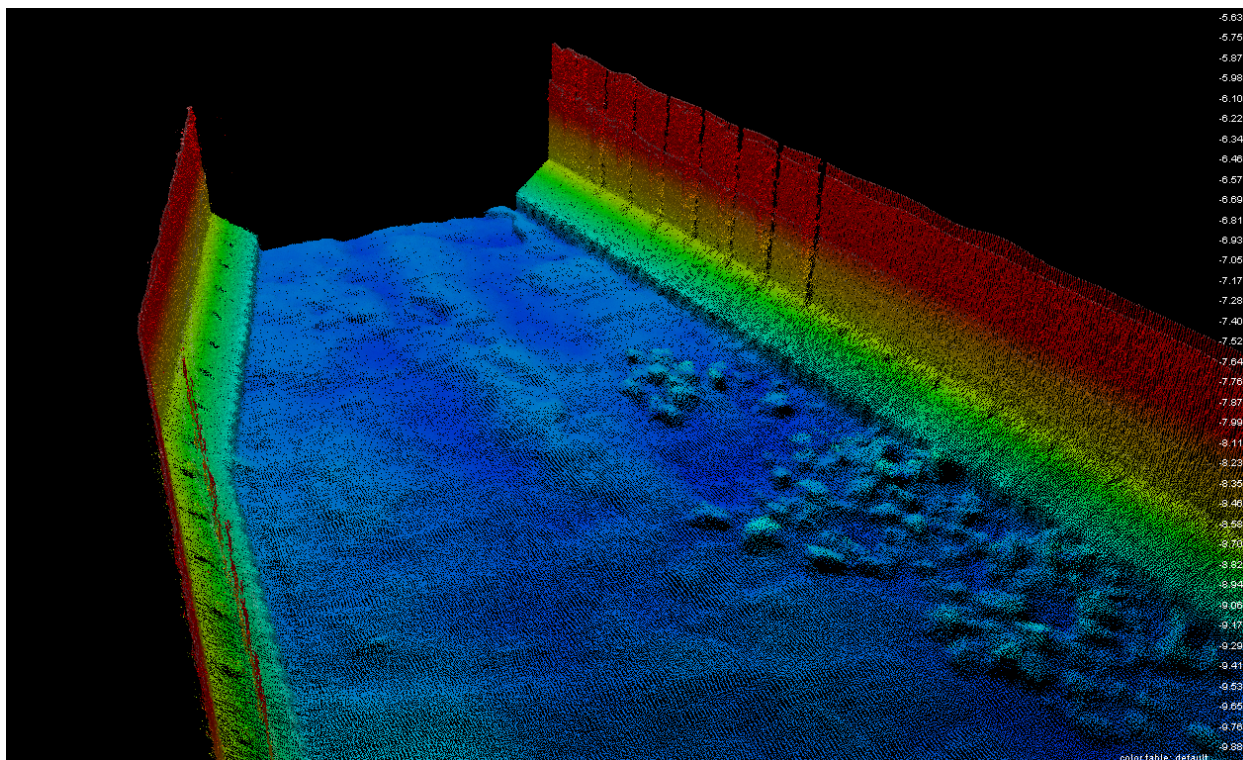
FRDH Compatible Systems

SeaBat 7125-SV2

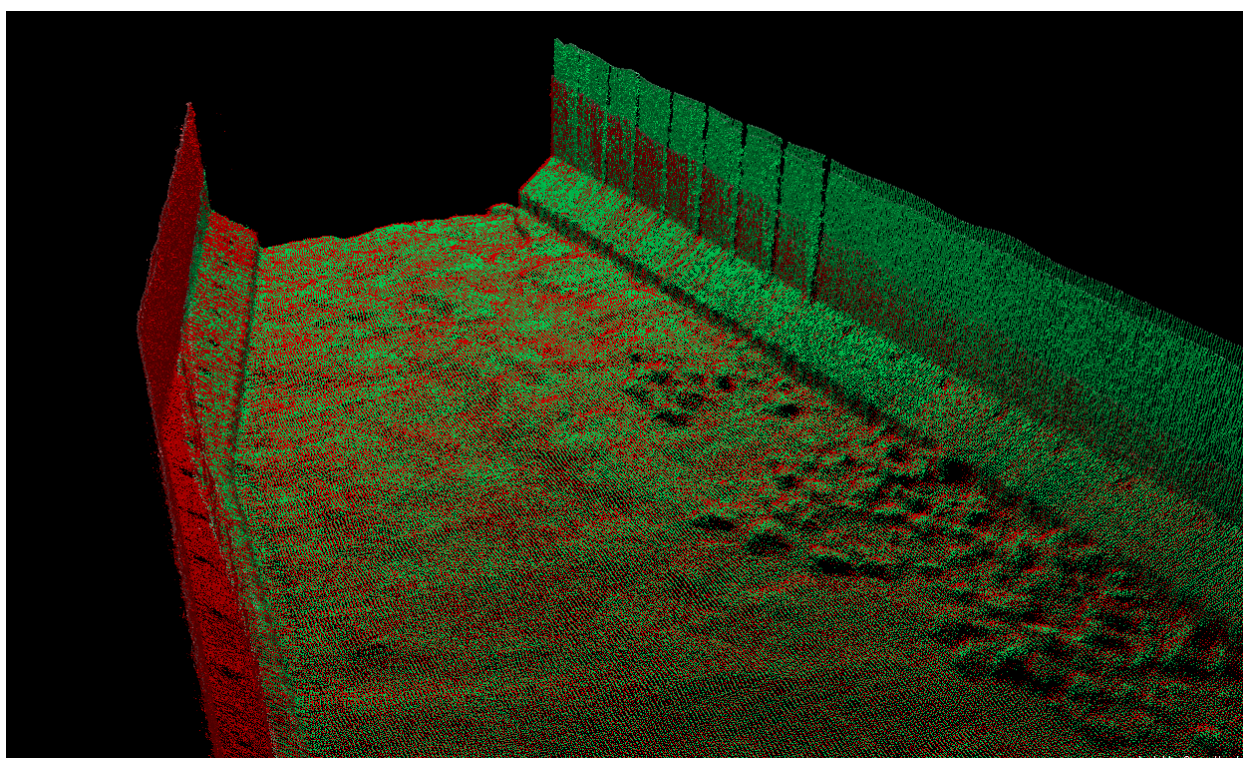
SeaBat 7125-ROV2 (400kHz)

Example Images

The images are of dock walls showing debris round the base. The first image is colour coded by depth, clearly showing the data density. The second image is colour-coded by sonar head, which shows the knitting together of the data. The data has been subject to RESON's quality filters only, resulting in the cleanest possible data set. No manual, or further processing has been carried out.

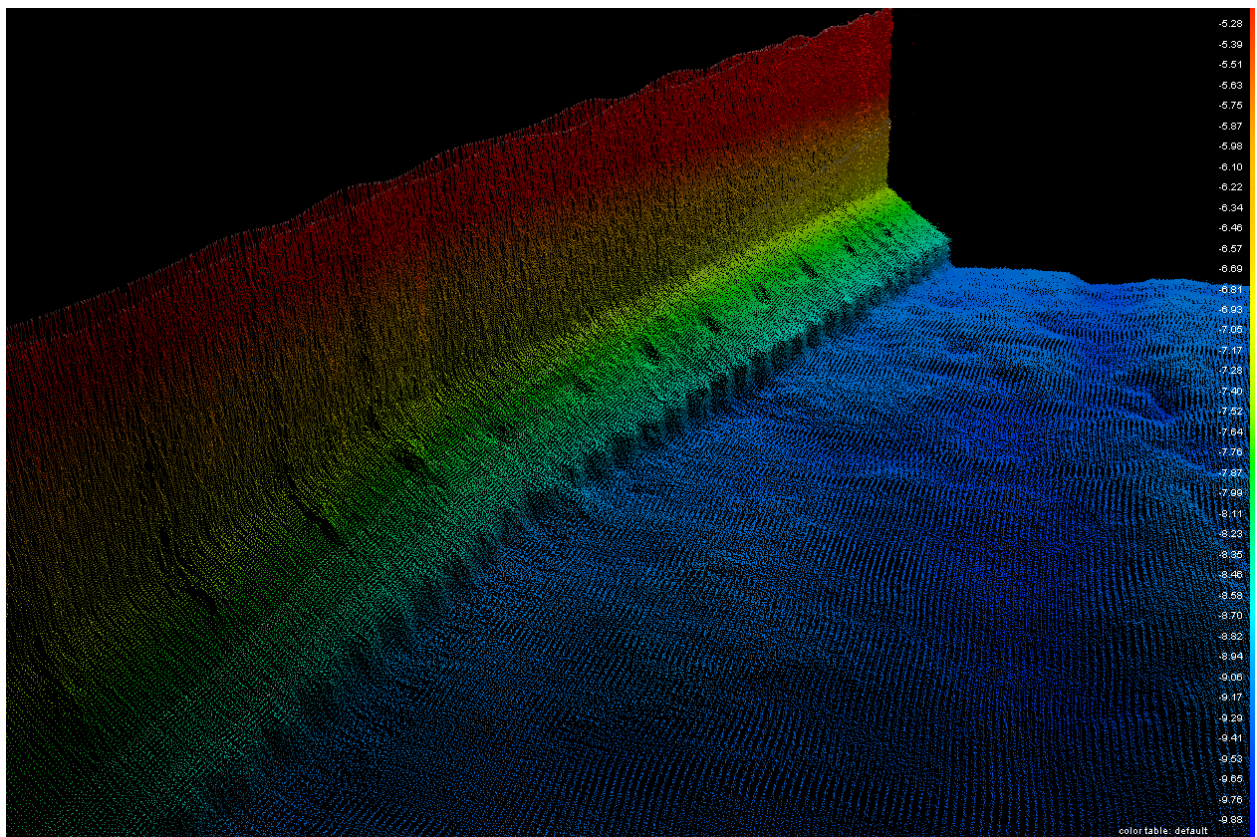


SeaBat 7125-ROV2 FRDH Data: 8m Water Depth – Color-coded by Depth

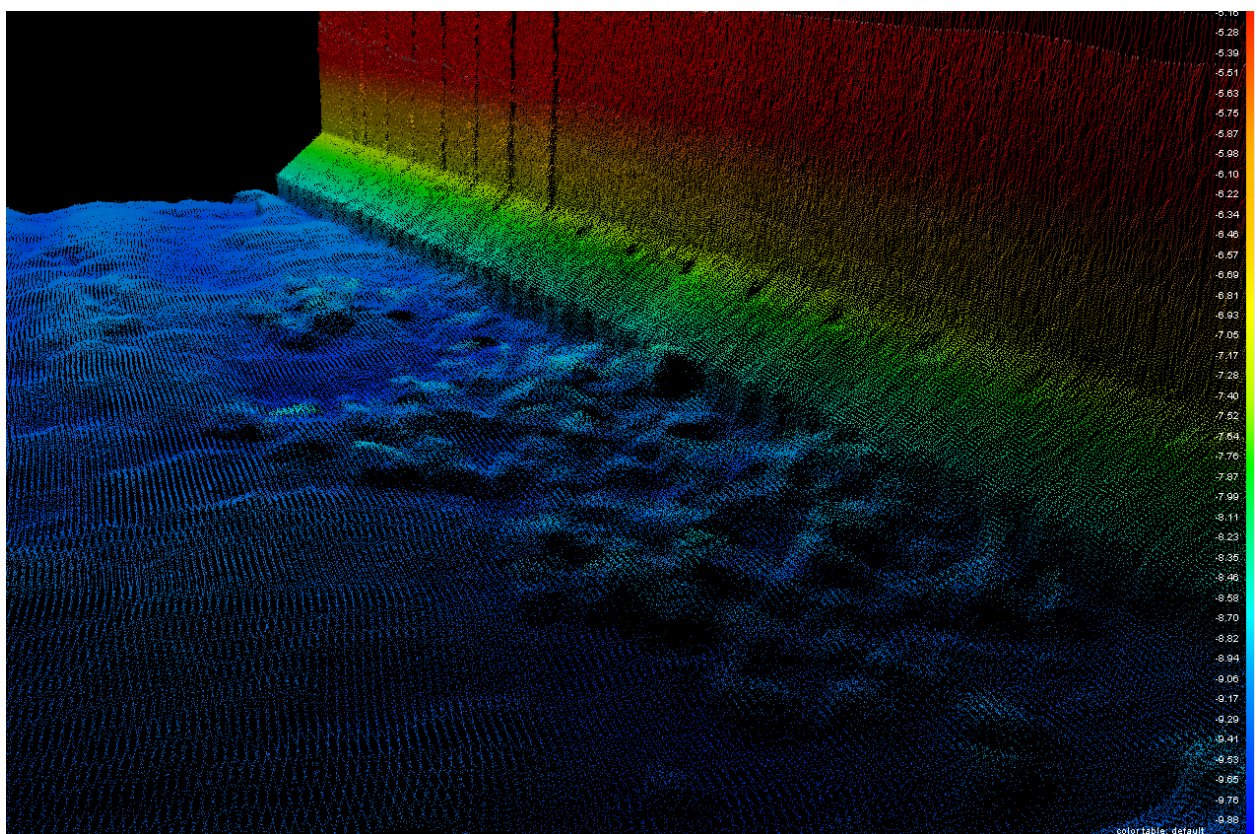


SeaBat 7125-ROV2 FRDH Data: 8m Water Depth – Color-coded by Sonar Head

In the following images, the detail around the base of the wall is clear.



SeaBat 7125-ROV2 FRDH Data: 8m Water Depth – Color-coded by Depth



SeaBat 7125-ROV2 FRDH Data: 8m Water Depth – Color-coded by Depth