

MicroROV Navigation Technology from Subsea Quartet

VideoRay and its partners have shipped the first implementation of VideoRay CoPilot by SeeByte software on a platform consisting of the VideoRay Pro 4 underwater Remotely Operated Vehicle (ROV), BlueView P900 series imaging Sonar, and Teledyne RDI Explorer Doppler Velocity Log (DVL). The first release of the SeeByte solution on a VideoRay ROV follows several months of software and hardware development by VideoRay and SeeByte.

SeeByte adapted its navigation software to VideoRay's ROV control system and hydrodynamics. VideoRay worked closely with Teledyne RDI to adapt the Explorer DVL to a smaller, more hydrodynamic housing well suited to the powerful yet ultra-portable VideoRay Pro 4. BlueView contributed their industry-leading multibeam sonar, with ProViewer Plus advanced target tracking software by SeeByte.

The system, purchased by Defence Science and Technology Organisation (DSTO), is the first observation class ROV system capable of autonomously following a pre-defined mission or maintaining station, regardless of changing currents and rough sea conditions. Using VideoRay Sonar CoPilot by SeeByte, the system can automatically identify underwater objects with the BlueView sonar, then on command fly to them. It can also track moving objects. In an Explosive Ordnance Disposal (EOD) context, this provides effortless automatic navigation to underwater locations, and therefore can remove divers from minefields and hazardous situations.

The DSTO is the Australian government's lead agency charged with applying science and technology to protect and defend Australia and its national interests. DSTO delivers expert, impartial advice and innovative solutions for Defence and other elements of national security to agencies like the Royal Australian Navy. DSTO is a world leader in defence science and technology – indispensable in transforming the Australian Defence Force and Australia's national security.

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