



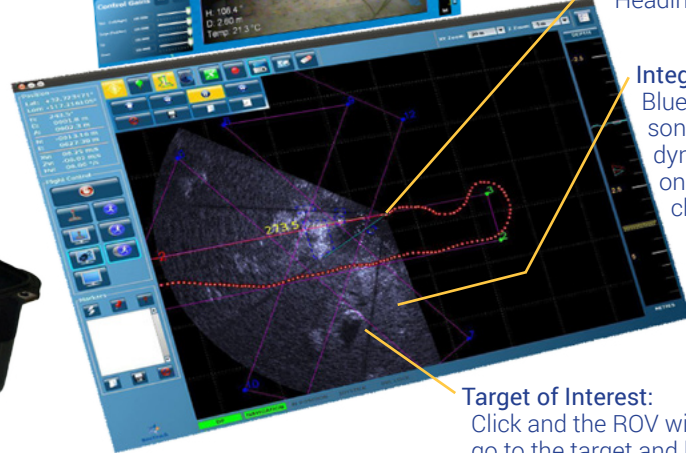
Autonomous Control

VideoRay RI CoPilot by SeeByte

VideoRay RI CoPilot by SeeByte performs target reacquisition and identification missions in support of amphibious landings, EOD MCM operations, harbors and shipping lane (Q-route) clearance.



VideoRay Cockpit:
Provides ROV telemetry including video, water temperature, ROV health indicators and more



ROV Location:
Heading 273.5 degrees

Integrated Sonar:
BlueView V-130 sonar imagery is dynamically overlaid on the operations chart

Target of Interest:
Click and the ROV will automatically go to the target and hover

VideoRay RI CoPilot is Common Operator Interface (COIN) and SeeTrack™ compliant, allowing for the automated geodetic processing of AUV, SSS, diver, and GIS data to maneuver autonomously to pre-designated underwater locations.

Easily transported by small boat or RHIB to a secure GPS launch point, RI CoPilot can safely investigate underwater objects of interest in a Mine Danger Area (MDA). RI CoPilot self-propels and navigates using pre-planned data to commence target reacquisition and identification with high definition sonar and low light video. RI CoPilot allows personnel to maintain a safe standoff distance from hazardous items, keeping the diver out of the water and giving the

operational commander additional capacity of limited diver resources.

While other ROVs provide some limited search capability, RI CoPilot takes this capability to the next level, allowing personnel to specify a particular area to be searched and enables the ROV to perform the search autonomously.



VideoRay RI CoPilot

Autonomous Control

RI CoPilot can perform a wide range of underwater search missions and relay information in real-time to provide the following immediate benefits:

- Autonomous Localization, Identification, and Reacquisition of mine-like threats
- Common Operator Interface Navy (COIN) compliant to provide mission planning, real time monitoring and post-processing software tool kit for rapid on-site analysis and fusion of sensor data, including side scan sonar, imaging sonar, and video from unmanned, towed, tethered systems and autonomous underwater vehicles (AUV)
 - COIN is integrated with the U.S. Navy's Mine Warfare and Environmental Decision Aids Library (MEDAL)
- Pre-programmable to conduct lawnmower trajectories and provide high-resolution sensor data to assure a 100% coverage rate with point and click target marking and reacquisition
- Rapidly assess and mitigate underwater hazards without placing a diver in the water or unnecessarily tagging out a ship
- Removes divers from in water search to reduce personnel "Time-on-Target"
- Frees personnel for other tasks reducing manpower requirements
- Man-portable for rapid, easy deployment
- Low maintenance
- COTS system with 3,500+ ROVs sold and delivered worldwide
- Established logistics and maintenance support capabilities

Configuration includes:

Doppler Velocity Log (DVL)

BlueView V-130 sonar

VideoRay integration (DVL and BlueView sonar)

CoPilot RI software

Software features include:

- Manual, Station-Keeping, Survey, Auto Altitude, and ROV Cruise Modes
- Navigation fuses GPS and Velocity updates from DVL to provide precise position updates
- Simple point-and-click PC interface over charts to command ROV
- One click "Go to Target" automation
- One-click target tracking application launch
- Easy target selection and tracking - user-defined target size parameters
- Streaming target relative velocity data
- Full integration with VideoRay Cockpit software

* VideoRay Pro 4 ROV system required - NOT included.

