QUICK REFERENCE GUIDE

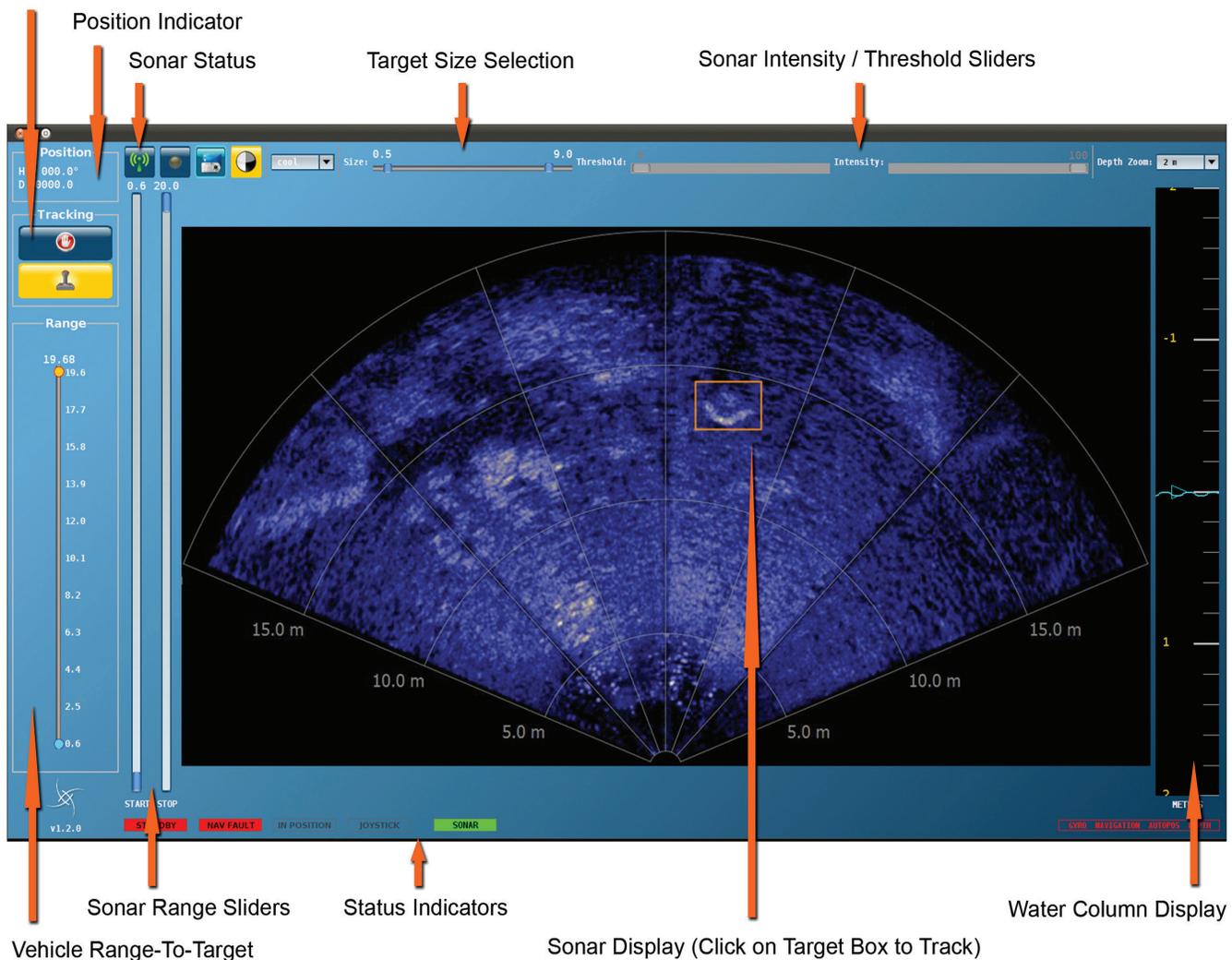## AUTONOMOUS CONTROL
SONAR CoPILOT BY SEEBYTE

VideoRay Sonar CoPilot software is the latest in pilot-friendly ROV automation. Sonar CoPilot Operators are able to utilize the latest in multibeam imaging sonar technology to identify submerged objects suitable for tracking and in turn maintain a stable heading and range to the target desired. Pilots using the VideoRay Pro 4 ROV equipped with Sonar CoPilot will be able to track and hold position reletive to a selected target, whether the target is stationary or moving. Operators should be familiar with Pro 4 ROV controls and interpreting sonar images before use.

Launch CoPilot

Sonar CoPilot Interface

Tracking Buttons

Position Indicator

Sonar Status

Target Size Selection

Sonar Intensity / Threshold Sliders

Sonar Range Sliders

Status Indicators

Vehicle Range-To-Target

Sonar Display (Click on Target Box to Track)

Water Column Display

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Sonar CoPilot Procedures and Tactics

Prepare the system for operations

1. Mount the sonar on the ROV

   - Remove the strain relief (wire cable screwed into bottom of skid) and standard skid by removing 2 small screws front and back - attach sonar skid with same screws.
   - Connect 9-Pin connector to Accessory Port

2. Adjust the ballast and trim by adding/removing weights and adjusting the angle of the sonar head

3. Set the AUX switch on the panel to the Ethernet position (down) and make sure Ethernet cable is connected from the panel to the computer.

Power On the ROV System

1. Start VideoRay Cockpit, test the basic ROV functions, start Sonar CoPilot, test the sonar

Launch the Vehicle

1. Adjust the sonar View Range using the sliders to set the start and stop distances
2. Adjust the sonar Intensity / Threshold to tune the image and improve target recognition

Pilot the ROV to Acquire a Target of Interest

1. Pilot the system to the area of interest where the suspected target is located until a target is acquired
2. Possible targets for tracking will be identified by yellow boxes surrounding the targets' images
3. Select a target of interest for tracking and click on it using the left mouse button – when a sonar lock is acquired, the target's image will be surrounded by a green box
4. Select the Tracking option to lock the vehicle onto the target - use slider for range

Tips for Success

5. The standoff distance from the target can be adjusted by changing the Vehicle Range slider
6. If the target is getting close to the start range of the sonar image, you may need to decrease the start range or increase the standoff distance - reverse for getting too close to the stop range
7. If the target is no longer visible in the sonar image, the target is probably no longer within the vertical spread of the sonar beam. Try to adjust your depth up or down to reacquire the target
8. Don't forget to record snapshots or videos while tracking!

NEED MORE HELP? CALL +1 610 458 3000 OR EMAIL SUPPORT @ VIDEORAY.COM