



# Remotely Operated Vehicles

[www.videoray.com](http://www.videoray.com)



VideoRay is the largest volume producer of Underwater ROVs (Remotely Operated Vehicles) in the world. Established in 1999, VideoRay has worked with technology and mission partners throughout the world to develop and prove the small ROV tool for a wide range of applications.



Photo: Steve Van Meter





# Content

- 4 Company Overview
- 6 Company Vision
- 8 ROV Anatomy
- 10 ROV Applications
- 14 Global Network

© Copyright 2014 VideoRay LLC, VideoRay is a registered trademark of VideoRay LLC

# Company OVERVIEW



WE HAVE OPENED A DOOR THAT  
WILL NEVER BE CLOSED AGAIN

— GEORGES HOUOT + PIERRE WILLM

## VideoRay LLC

VideoRay is the largest volume producer of Underwater ROVs (Remotely Operated Vehicles) in the world. Established in 1999, VideoRay has worked with technology and mission partners throughout the world to develop and prove the small ROV tool for a wide range of applications.

With over 3,000 systems delivered to a wide range of organizations for a wide range of

missions, hundreds of VideoRays work every day throughout the world, underwater, keeping us free from terrorism, finding and retrieving objects, inspecting infrastructure both inland and offshore, and keeping divers safe from hazardous conditions.

We pride ourselves on state-of-the-art customer support, and easily operated and maintained underwater robotic systems.

Photo: Masanobu Shibuya



Search and Rescue teams and First Responders across the world employ the VideoRay ROV in dangerous and dire situations to locate targets of interest, especially drowning victims. To date, rescue personnel have located and/or recovered nearly 100 drowning victims with the assistance of the VideoRay ROV.

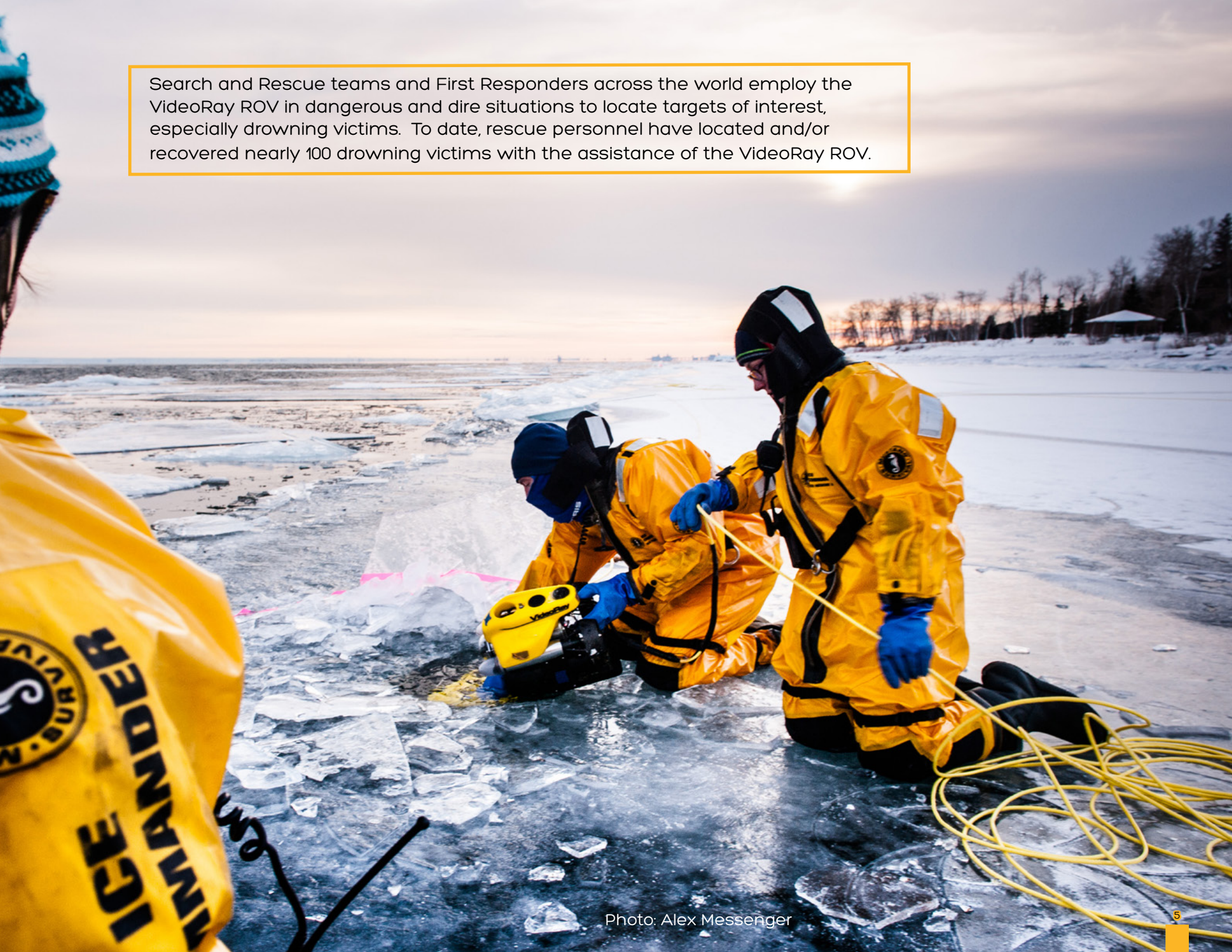


Photo: Alex Messenger

# Underwater VISION

## RELIABILITY

In the world of rapidly developing underwater ROV technology, reliability can be a real challenge. An unreliable ROV is a poor investment if you cannot be certain that it will work when you need it most. VideoRay's reliability is well known throughout the industry and one of the many reasons we are one of the leading ROV manufacturers in the world. Whether you need your ROV every day or shelve it for months at a time, you can be sure that your **VideoRay will work the way you need it to**, every time.

There are VideoRay ROV systems still in service a decade after delivery. Our ROVs require minimal maintenance, and we promise a quick turnaround when your system does need service. We engineer our systems to withstand a wide range of operational environments for extended periods of time. The nearly indestructible float block, Kevlar-enforced tether, and CERAKOTE finishes protect your ROV, ensuring continued success for years to come.

## EASE OF USE

Because we know how valuable the VideoRay ROV is for a variety of operations and industries, we make our systems and software easy to understand, use, and maintain. With minimal training, operators can quickly become seasoned, confident ROV pilots. Our goal is to have **self-sufficient operators** who can conduct successful missions, even if they experience minor setbacks. The easier an ROV is to understand, the easier it is for you to extend ROV capabilities throughout more of your organization. VideoRay has adopted the concept of modularity in our ROVs that makes it even easier for the operator to add or subtract tools as needed.

ROV operators can take advantage of training courses led by certified VideoRay instructors who teach the basic operational skills and maintenance practices. In addition to our comprehensive owner's manual, answers to frequently asked questions and discussion forums can be found on our website, [www.videoray.com](http://www.videoray.com).

## PORTABILITY

Portability is an essential factor in the VideoRay ROV's design. Whether you are operating in remote areas or tight spaces, the ROV's portability allows you to accomplish your mission in otherwise difficult situations. **True portability is more than just the system's total weight.** Factors such as size, packaging, and power requirements determine how quickly you can deploy your ROV and complete your mission successfully.

The VideoRay ROV's compact size and comparatively light weight allow one person to easily transport the entire system by hand, by helicopter (North Sea compliant), in the trunk of a car, or even as checked baggage on a commercial airline. Rugged waterproof cases protect the ROV from the roughest handling. Minimal size and power consumption allow the ultra-portable VideoRay ROV to deploy from unlikely places such as crowded docks, RHIBS, or the back of an automobile. The ideal place for a VideoRay mission? **Wherever you need to go.**

## CUSTOMER CARE

The secret behind the VideoRay ROV's success is not just its cutting edge technology or sleek design. **It's the professionals who use them.** VideoRay is committed to providing our customers with the latest technology and comprehensive customer support. What sets us apart from our competitors who make similar promises? **We develop our products with you in mind.** We understand not only how our products work, but how you need them to work. We anticipate your needs and work to address problems before they arise.

VideoRay believes that success depends in large part on maintaining close customer relationships. Our philosophy is simple: if you are successful using VideoRay, then VideoRay will succeed as a company. **Our focus is on your success.**





# Underwater EXPERTS



# VIDEORAY ROV ANATOMY

## Submersible



## Control Panel



## Tether

Depth Rating: 300 m (1,000 ft)  
Power Requirements: 100-240 VAC



# Underwater TECHNOLOGY

The VideoRay Pro 4 incorporates the latest in small ROV design and technology making it the most advanced, capable, and versatile small ROV on the market today. The basic VideoRay Pro 4 ROV components include the submersible, integrated control panel, and tether. A variety of optional “plug and play” accessories are available including a manipulator arm and high definition imaging sonar.

## SUBMERSIBLE

The VideoRay Pro 4 submersible is easily the most recognizable component of the system. The submersible houses the camera, lighting, internal sensors, and can carry other optional accessories including a manipulator arm, hull crawler, high definition camera, and sonar. Its sleek, hydrodynamically optimized design, small size, powerful thrusters, and minimal mass allow the Pro 4 to complete missions that no other vehicle could perform in conditions that no other vehicle would attempt.

**Depth Rating:** 300 m (1,000 ft)  
**Sub Weight:** 6 kg (13.5 lbs)  
**Speed:** 4.2 knots



## CONTROL PANEL

The integrated control panel contains everything you need to pilot the ROV. The control panel provides power, communications and a video interface between the ROV and the operator through the tether. The integrated computer runs VideoRay Cockpit software to give the operator control over the ROV. The panel also contains power outlets, USB ports, and may accept accessories such as a second display monitor and LYNN real-time video enhancement.

**Power:** 100-240 VAC  
**Panel Weight:** 16 kg (35 lbs)  
**Comms:** RS-485



## TETHER

VideoRay tether offers tremendous reliability and operational flexibility. All VideoRay tether is modular and available in different buoyancies and lengths for different operations, allowing you to easily add or remove sections depending on your operational needs. Infused with a Kevlar® aramid, VideoRay tether is exceptionally rugged unlike more fragile fiber-optic tethers. If the tether does sustain damages, operations can continue simply by removing the damaged section.

**Diameters (mm):** 7.6 / 9.6 / 11.7  
**Breaking Strength:** 454 kg (1000 lbs)  
**Max Length:** 600 m (2,000 ft)



## OPTIONS & ACCESSORIES

The VideoRay ROV system offers the best flexibility in its class and allows the customer to select accessories that work best for each specific operation. All VideoRay ROV systems and accessories are modular, “plug and play” – meaning capabilities can be added or subtracted on-site with a simple hardware add-on or a quick software update.



Autonomous Control & GPS



Manipulator Arm



Multibeam Imaging Sonar



High Definition Camera



Ultrasonic Thickness Gauge

Aquaculture



Infrastructure



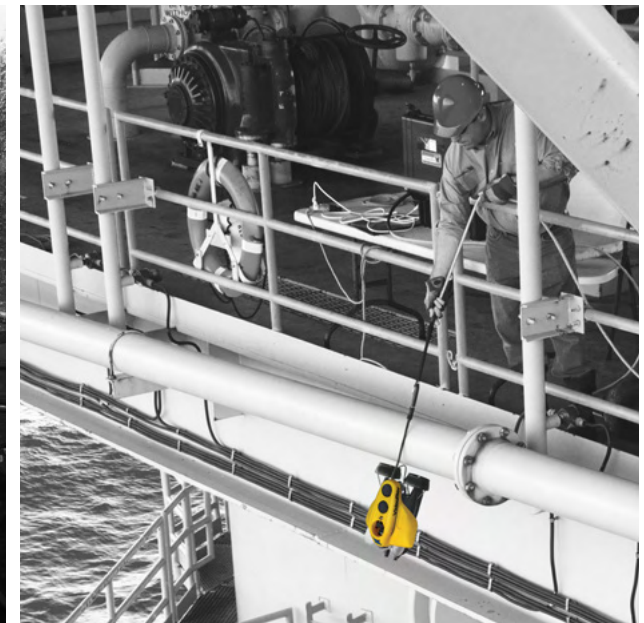
Science & Research



Law Enforcement



Military & Port Security



Offshore Oil & Gas



# Underwater MISSIONS

## Professional ROV Configurations

Because VideoRay has sold over 3,000 ROV systems while maintaining close customer relationships, we have learned an enormous amount about combining the Pro 4 ROV components and accessories into simple base systems and specialized accessory packages tailored to the specific needs of our customers' job tasks. The VideoRay Pro 4 ROV was designed for professionals demanding easy-to-use, portable, versatile, and cost-effective technology that can get the job done right the first time. Whether you are embarking on a search & rescue mission, inspecting infrastructure beyond divers' reach, conducting a compliance inspection on a submerged asset, or exploring for treasures on the ocean floor, there is a VideoRay Pro 4 to help you find exactly what you are looking for.

### OFFSHORE

- Jack-up Rig Inspection
- UWILD Inspection
- Sea Chest Inspection
- Ballast Tank Inspection
- Mooring / Riser Inspection
- Drill Monitoring

### MILITARY

- Explosive Ordnance Disposal
- Mine Countermeasures
- Search & Rescue / Recovery
- Port Security Inspections
- Ship Hull Inspections
- Surveillance & Reconnaissance

### LAW ENFORCEMENT

- Search & Rescue / Recovery
- Drowning Victim Recovery
- Under Ice Search
- Port Security / Harbor Inspections
- Evidence Location / Recovery
- Diver Monitoring

### SCIENCE & RESEARCH

- Environmental Monitoring
- Hydrographic Assessments
- Marine Life Observation
- Habitat Observation
- University Research
- Underwater Archaeology

### AQUACULTURE

- Net Inspection
- Mooring Inspection
- Feeding Assessment
- Fish Husbandry
- Fish Loss Assessment
- Mort Removal

### INFRASTRUCTURE

- Hydroelectric Dam Inspection
- Lock & Dam Inspection
- Potable Water Tank Inspection
- Potable Reservoir Inspection
- Bridge Footer Inspection
- Culvert Inspection

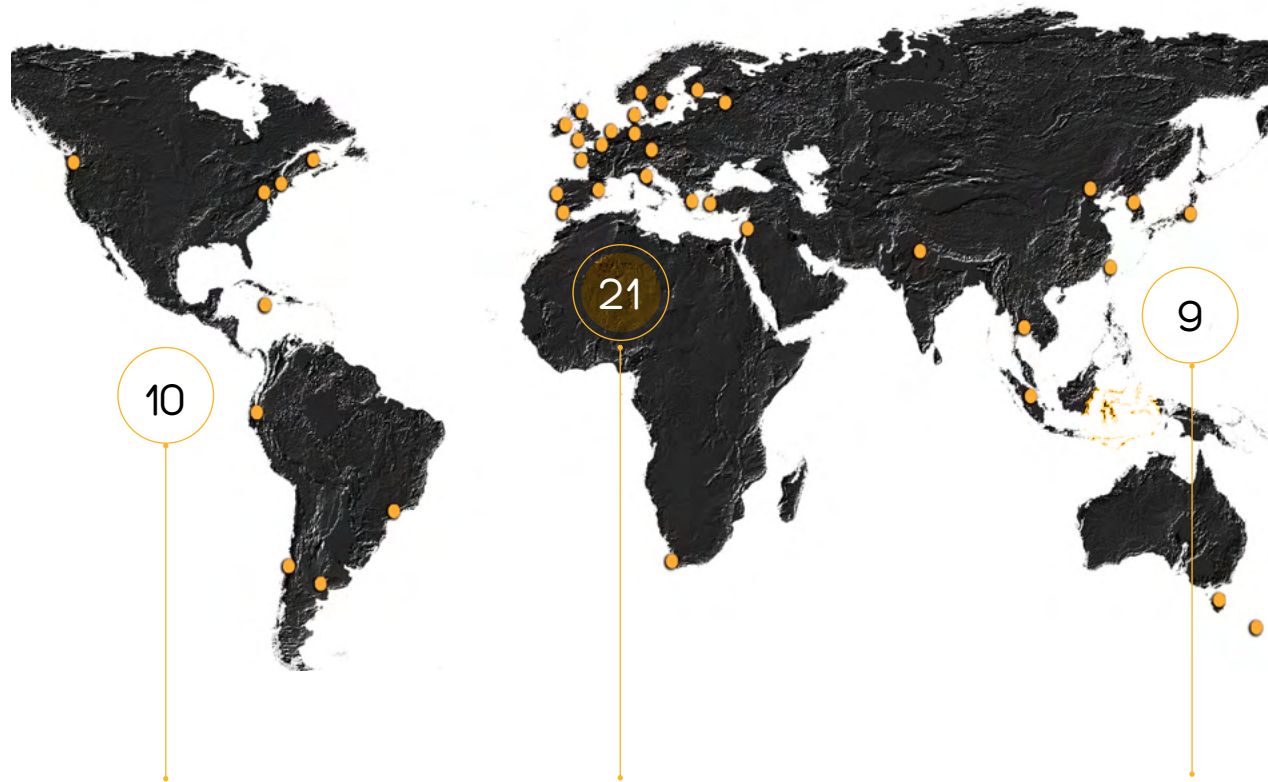
### SALVAGE

- Initial Damage Assessment Report
- Rapid Site Survey Assessment
- Commercial Diver Observation
- Underwater Construction
- Quality Control / Diver Safety
- Confined Area Inspection

### SPORT & WRECK DIVING

- Wreck / Target Location
- Shipwreck Site Assessment
- Interior Wreck Penetration
- Marine Life Observation
- Non-Diver Experience
- Sport Fishing

# Global Network



## Americas

VideoRay Headquarters located in Pottstown, PA.

Dealers in New England, Gulf Coast, Pacific Northwest USA, and 4 in South America.



## Europe, ME, Africa

More than 20 Dealers throughout Europe, South Africa, and the Middle East.

3 full Authorized Service Centers in the UK and Norway.



## Pacific Rim

Dealers located in Singapore, Japan, Malaysia, India, and New Zealand.

Full Authorized Service Center in Australia.

## VideoRay Professionals

VideoRay has assembled a sprawling global network of Dealers and Partners fully capable of providing the highest quality sales, support, and service. These companies represent the finest products in underwater technology around the globe with unparalleled knowledge and professionalism.

Each VideoRay Dealer will:

- Obtain the latest VideoRay ROV demonstration equipment
- Perform on-site demonstrations
- Answer any questions about parts, options, and accessories
- Be able to either perform ROV service or direct you to the nearest Authorized Service Center
- Maintain the highest level of professionalism.

## Authorized Service Centers

VideoRay has strategically placed fully Authorized Service Centers (ASCs) throughout the world to accommodate our global clientele. ASCs have been trained to quickly diagnose and repair any issues with your VideoRay ROV. They keep an inventory of parts and spares for quick turnaround in an effort to minimize downtime.

VideoRay Authorized Service Centers:

- United Kingdom (England) - Atlantas Marine
- United Kingdom (Scotland) - Buccaneer Ltd.
- Norway - Miltronic as
- Belgium - De Zeeman Pro NV/SA
- Australia - Imbros Pty Ltd
- United States - VideoRay LLC





VideoRay ROVs replace (or augment) the use of divers for underwater inspection tasks in hazardous environments such as minefields. Military, government, and force protection personnel have found VideoRays useful for a variety of underwater inspection tasks including explosive ordnance disposal (EOD), meteorology, port security & ship hull inspection, mine countermeasures (MCM), and maritime ISR (Intelligence, Surveillance, Reconnaissance).





## Contact Us

### **VideoRay LLC**

212 East High Street  
Pottstown, PA 19464 USA

Ph. +1 610 458 3000

Fx. +1 610 458 3010

email: [sales@videoray.com](mailto:sales@videoray.com)

[www.videoray.com](http://www.videoray.com)



Visit our website  
[www.videoray.com](http://www.videoray.com)