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Data Sheet

SeaLion-2
Remote Operated Vehicle



- Pan and Tilt Front and Rear Color Cameras
- 1,000 feet (~304m) Depth Rated Housing
- Spare Wires in Umbilical
- 15 Inch Ultra Bright Color Monitor
- 4 Hi Output Motors, Vairable Speed, Reversible
- Two 2200 Lumen LED Lights
- Power Boost Circuit
- 4 Knot Forward Speed
- Highly Portable System
- Leak Detection Circuitry

Performance/Descriptions

- Camera/Lens 1/3" Super HAD CCD II color day/night, 4mm, 55 deg vertical by 70 deg horizontal lens, 700 lines, .0001 lux, 90 degree pan and tilt, auto iris.
- Monitor 15 inches, high resolution, ultra bright, color.
- Lighting 2 dimmable, high intensity LEDS (2200 lumens each) on front,
 Ultra bright LED ring in rear
- Motors Four DC PM type, reversible, variable speed, proportional controlled, 7+lbs. thrust each motor, 4 knots.
- Operating Depth 1,000 feet (~304m)
- **Sealing** Five separate housings, O-ring sealed, a leak detector in each housing, motors use "no maintenance" rotary seals.
- Power requirements 120 vac, 8 amps, 900w max.
- On screen display basic display for time, date and GPS comes standard

Dimensions / Weights

- SeaLion 23"L x 16"W x 12"H 43 lbs.
- Control Box 17"L x 12"W x 8.5"H 23 lbs.
- Cable 0.6"D x 250' to 1500' 30/60 lbs., neutrally boyant
- Monitor (built into case) 15"

Options

- Up to 1,500 feet (~457m) of cable
- Cable reel with slip ring
- Spare parts kit
- Manipulator arm
- SCAN-650 scanning sonar
- Video Text Overlay
- 220vac (Europe)

- External DVR Recorder
- Built-in DVR Recorder
- Attached metal detector (RMD-1)
- Auto Distance Off Bottom
- Auto Depth
- PAL camera and monitor (Europe)
- GoPro® HD camera

The SeaLion-2 is the next generation of Fishers very popular SeaLion ROV. More powerful than our SeaOtter, it has more options available, and can handle 1,000 foot depths and operate with up to 1,500 feet of cable. With pan and tilt cameras in both front and rear (with optional side cameras available), it is perfect for pipeline inspections, river and ocean searches, dam inspections, oil and gas work, fish farms, oceanographic re-search, inspection of hazardous sites, and almost every type of underwater search or inspection operation. This ROV can dra-matically reduce search time and the high costs associated with diver based inspections. With the Sealion-2 your team can locate, inspect, and video tape a target without entering the water. The SeaLion can also narrow the search area so when divers are required, their time is spent on the target, instead of swimming grid patterns. When outfitted with a metal detector (JW Fishers RMD-1), the ROV can search for weapons, unex-ploded ordnance, pipelines, anchors, buried treasure, or other metallic objects.



The ROV has a powerful and sophisticated four motor propulsion system; two motors for forward and reverse, and two motors for vertical and lateral thrust. The high output motors are reversible and operate at variable speeds. An off-the-shelf PS2 controller (supplied) operates the system. A joystick controls the horizontal motors (forward/reverse and turning) - it can hover "in place" and rotate 360 degrees; and the second joystick controls the vertical motors (up/down and lateral movement). A wireless PS2 control-ler can also be us

When a high water current situation arises where extra power is needed, a button on the controller increases the maximum power available by 30%; significantly increasing thrust.



A PS2 Controller's joystick and buttons control the ROV

The SeaLion-2 sends its video picture to a topside 15", high resolution, ultra-bright color monitor which is built into the Control Box cover. A video output in the Control Box allows an additional remote monitor to be used simultaneously. An adjustable video amplifier on the Control Panel allows operator adjustment of the video picture to optimize picture quality for water clarity. An optional built-in DVR or external DVR recorder can be connected to the control cox to create a permanent record. The Control Box also contains an audio amplifier with an input jack on the Control Panel for audio recording.



Control box cover with built-in monitor can be removed for custom positioning or mounting

The system has two color cameras (front and back) with 4mm wide angle lens. The camera's 90 degree tilt allows a full 140 degree vertical viewing. The camera's 90 degree pan allows an additional 140 degrees of horizontal viewing. Both pan and tilt is controlled by pushbuttons on the PS2. Camera selection, front or back, is operator selectable from the Control Panel.

The Control Panel also contains a LCD readout which displays the overall status of the system.



ROV Carry Case included with system

Control Panel's switches, controls and Interface connectors



Illumination is provided by two 2200 lumen, high intensity LEDs for the front camera and an "ultra-bright" LED cluster for the rear camera.



At 43 pounds the ROV is highly portable and very "user friendly". With the optional spare parts kit, the ROV is completely field maintainable. JW Fishers SeaLion-2 ROV system represents a major breakthrough in cost/performance for a commercial grade ROV. This high performance system competes with ROVs more than twice the price.

Fishers ROVs are in use around the world by US and foreign military, state and federal agencies, universities, search and rescue groups, and many commercial diving companies. These high performance underwater camera systems can make public safety search operations less dangerous by assisting in the location of drowning victims and recovery of evidence. They help eliminate the need to dive in difficult or dangerous conditions, whether it be a low visibility environment or a dive beyond no-decompression limits.