

ROV Downunder Presents:-

SEABOTIX LBV 200L²



ROV Downunder is proud to use the intuitive and highly capable Seabotix LBV200L Remotely-Operated Vehicle.

With a 250 meter (810ft) umbilical, and a depth rating to 200m, powerful Brushless DC Thrusters, 480-lumen internal LED Lighting, fibre optic video and FSK electronics.

The LBV200L is an exceptionally well equipped mini-ROV.



With a range of peripheral equipment, housed in a high endurance shock resistant shipping container, ROV Downunder offer our customers an all purpose, portable, robust and cost effective ROV inspection system.

Fibre-Optic Umbilical

The **LBV200L²** operates at its full 200 meter depth with a generous 250 meters of our revolutionary small diameter umbilical. Managing the long umbilical is simple with the heavy duty reel. Use of fibre optics in the umbilical provides excellent video quality and by using a special FO transmitter potted into the umbilical, only a wet-mating connector is used to connect the umbilical to the vehicle. The extremely small-diameter of our umbilical presents a minimum of 25% less drag than other systems meaning the vehicle is controlled by the operator, not the umbilical.

Seabotix LBV 200L²

Powerful Thrusters

The **LBV200L²** is equipped with four powerful oil-compensated Brushless DC Thrusters. With 1-lateral, 2-forward, and 1-vertical thrusters manoeuvrability is enabled in four axes just like a helicopter. The additional lateral thruster adds the capability to fly sideways allowing the operator to keep a camera on target while piloting along a ship hull or dam surface. On-the-fly 10-step variable power control to each axis allows for smooth video and sensor recording. For added reliability, serviceability, and peace of mind each thruster is identical and independent of the vehicle enclosure, ensuring no dynamic seals penetrate the vehicle's electronics enclosure.



Intuitive Controls

Operation of the **LBV200L²** is simple with the standard Integrated Control Console featuring the acclaimed LBV Hand Controller. Standard Auto-Heading, Depth and Trim, as well as all system functions are at your fingertips in a logical and simple layout. Added features include the 38 cm monitor behind a waterproof panel, sunshade for direct light operations and sealed components for harsh environment operations. The programmable Video Overlay displays heading, depth, temperature, thruster gain settings, auto settings, cable turns, and time/date.



High-quality video and sensor data

The fibre optic video system provides crystal-clear images from the standard high resolution colour and low-light B/W cameras. Both cameras have a total 270° field of view through 180° rotation of the camera enclosure. The internal, fully adjustable LED lighting array provides brilliant white light as it tracks with the colour camera. The system includes an additional RS232 channel for options such as sonar for harsh environment operations.

Features of the inspection system

- All items shipped in shockproof plastic shipping cases
- Electronics housed in shock mounted 8U plastic shipping case
- Industrial PC for sonar, video overlay and record keeping
- High resolution nNovia Digital Video Recorder c/w spare media pack
- 15" Dell rack mount VGA monitor and keyboard/trackball
- 15" Samsung NTSC video monitor
- Video overlay unit for displaying penetration distance and other annotation on video
- 2 channel audio intercom system for communications with line handler and audio commentary.
- 2 Headsets for ROV pilot station and belt-pack with headset for remote station
- 115Vac or 220/240Vac operation



LBV 200L² Applications

The LBV sets a high standard in diverse small ROV operations and applications. With the high level of capability, intuitive control system, compact dimensions and extensive range of options come a broad range of uses

In the past large ROVs have been required to accomplish many tasks. Unlike other small ROVs the LBV can often match the performance of the larger ROV systems. LBV systems are continually finding their way into large ROV companies as a more cost effective and portable means of inspections. Every week somebody discovers a new use for LBV and we are sure there are many more to come. Look through the various applications and see which one comes closest to fitting your need. If you have a unique application please do not hesitate to contact ROV



For pricing and more information contact:-
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Seabotix LBV 200L²

LBV	
Depth Rating	200 Meters Seawater (MSW) - 660 Feet Seawater (FSW)
Length	530 mm - 21 in
Width	245 mm - 9.65 in
Height	254 mm - 10 in
Diagonal	353 mm - 13.9 in
Weight in Air	12 kg - 26.5 lbs
Thrusters	
Thruster configuration	Four (4) Brushless DC thrusters - Two (2) forward, one (1) vertical and one (1) lateral. Each thruster is identical and isolated
Bollard Thrust (forward)	7 kgf - 15.4 ft/lbs
Bollard Thrust (vertical)	3 kgf - 6.6 ft/lbs
Bollard Thrust (lateral)	3 kgf - 6.6 ft/lbs
Speed at surface	3 knots - 3.45 mph - 1.54 m/s
Max Operating Current	2 knots
Cameras & Lighting	
Camera Tilt	180 degrees - internal chassis rotates
Range of View	270 degrees - 180 degrees from tilt, 90 degrees from camera lens
Camera - Primary	570 line Ex-View HAD colour - 0.2 Lux
Camera - Secondary	430 line B/W - 0.03 Lux
Transmission Type	Fibre Optic
Internal Lighting	700 Lumen LED array tracking camera. Variable intensity via hand controller.
Control System	
Data Channels	1 RS-232 for LBV controls and one spare 115K
Sensors	Heading, depth, temperature
Auto Functions	Depth, heading, trim
Additional Controls	Membrane keypad - thruster gain control, trim, auto depth, auto heading, camera tilt, camera focus, camera switch, light On/Off, light intensity, accessories, video overlay position, power On/Off, programming keypad
Power Requirement	1,000 Watts maximum, 100-130 VAC or 200-240 VAC
Umbilical	
Diameter	8 mm - 0.3 in nominal
Length	250 meters - 820 feet
On-Screen Information Display	
Information Displayed	Thruster gain settings, light level, Trim On/Off, heading, depth, turns counter, camera angle, water temperature, time, date, user text



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