



LBV200L²

Where the performance and capability of the LBV150² require that extra umbilical and depth capability.

Now with 24 Month Limited Warranty



EXTENDED REACH

The LBV200L² system adds to the impressive capability of the LBV150² series by increasing the umbilical length to 250 meters (840ft), on a reel, upgraded to the more powerful Brush-Less DC thrusters, adding fiber optics for crystal clear video transmission, including a spare 115K baud data channel and increasing the depth rating to 200 meters (660ft).

STABILITY CONTROL

What makes the rugged, reliable LBV200L² so different than the competition is its exceptional balance between vehicle weight, small diameter umbilical and powerful thrusters. This combination permits the LBV to fight strong currents and maintain a stable position without undue influence from the umbilical.

One of the most important aspects of a small ROV is its umbilical. Often overlooked or misunderstood the umbilical can represent the biggest obstacle in a ROV system - until LBV. The LBV200L² is supplied with 250 meters (840ft) of the revolutionary small 7.6mm (0.29") diameter umbilical reducing drag by more than 24% over its competitors. This reduction enables the LBV150L² to operate in higher current with the full length of umbilical.



The LBV is a small ROV controlled by its operator and NOT its umbilical.

PERFORMANCE DRIVEN

The LBV200L² takes small ROV performance to the next level with four very powerful Brush-Less DC thrusters (2 forward, 1 vertical and 1 lateral). Adding the fourth thruster (lateral) greatly improves control and inspection capabilities. The superior thruster layout enhances exceptional thruster performance. Each thruster has an impressive Bollard thrust of 3.9kgf (8.6lbs). The two forward thrusters provide a combined forward thrust of 7kgf (15.4lbs) propelling the vehicle along the surface at 3 knots. With the higher performance also comes lower maintenance.



INTUITIVE CONTROL SYSTEM

LBV is widely regarded as the simplest small ROV to operate. This is largely due to the intuitive control system. With all functions in a small hand controller operators quickly become expert LBV operators. Added is the convenience of the integrated control console, power supply and monitor.



SO MUCH MORE...

A long list of standard features further LBV's ability to perform, with ease. Such as the comprehensive video overlay, auto control functions, 270° field of view and 2nd camera. This, however, is only the beginning as LBV has an equally long list of options. Customize LBV to meet your exact requirements.

STANDARD FEATURES

- 200 MSW Depth Rating
- Brush-Less DC Thrusters
- 4 Thruster Configuration
- Ideal Weight/Mass (11kg)
- 7.6mm Diameter Umbilical
- 270° Field of View
- 570 Line Color Camera
- LEDs Tracking Camera
- Ultra Low Light B/W Camera
- Intuitive Control Console
- Auto Heading, Depth & Trim
- Fiber Optic Video
- Spare 115K Data Channel
- Video Overlay
- much more...

SYSTEM INCLUDES

- LBV200² Vehicle
- Protective Bumper Frame
- 4 Brush-Less DC Thrusters
- 570 Line Color Camera
- 480 Lumen LED Array
- Ultra Low Light B/W Camera
- 250m/840ft Umbilical on reel
- Integrated Control Console
- Hand Controller
- 38cm/15in Color Monitor
- Basic Spares Kit
- Spare Thruster
- Protective Cases
- Manuals and CD-ROM
- 24 Month Limited Warranty

LBV	LBV200L²	
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	11 kg - 24.25 lbs	
Thrusters		
Thruster configuration	Four (4) thrusters - Two (2) forward, one (1) vertical and one (1) lateral. Each thruster is identical & isolated	
Motor Type:	Brush-Less DC	
Bollard Thrust (forward)	7 kgf - 15.43 lbs	
Bollard Thrust (vertical)	3 kgf - 6.61 lbs	
Bollard Thrust (lateral)	3.2 kgf - 7.05 lbs	
Speed at surface	3.0 knots - 3.45 mph - 1.54 m/s (forward)	
Max Operating Current:	2.0 knots - 2.31 mph - 1.03 m/s (forward)	
Cameras & Lighting		
Camera Tilt	180 degrees - internal chassis rotates	
Range of View	270 degrees per camera	
Camera - Primary	570 line Ex-View HAD color - 0.2 Lux	
Camera - Secondary	430 line - 0.03 Lux B/W	
Focus	Manual focus control via hand controller. 90mm to infinity	
Video Format	NTSC or PAL	
Output Signal	Composite	
Transmission Type	Fiber optic	
Internal Lighting	480 Lumen LED, pure white light - variable intensity & tracking primary camera	
Integrated Control Console, Surface Power Supply and Monitor		
Length	444.5 mm - 17.5 in	
Width	297 mm - 11.7 in	
Height	180 mm - 7.1 in	
Weight	12 kg - 26.46 lbs	
Data Channels	2 x RS-232 (1 for LBV controls, 1 spare up to 115K baud)	
Sensors	Heading, depth, temperature	
Auto Functions	Depth, heading, trim	
Output Connections	BNC (video), Switchcraft connector for software update	
Input Voltage	100-130 VAC or 200-240 VAC	
Power Requirement	1,000 Watts maximum	
Safety	Isolated input power, circuit breaker, line insulation monitor, leak detector. Meets and exceeds "Code of Practice for the Safe Use of Electricity in Water"	
Water Proofing	I.P. 64 - Splash proof	
Monitor	38 cm - 15 in color LCD monitor mounted in lid	
Sunshade	Crush texture hood for monitor	
Hand Controller - Built into Integrated Control Console		
Length	195 mm - 7.68 in	
Width	135 mm - 5.3 in	
Height	140 mm - 5.5 in	
Weight	625 grams - 1.38 lbs	
Joystick	Single - forward, reverse, rotate left, rotate right, lateral left, lateral right	
Number of Steps (joystick)	32	
Vertical Thruster	Proportional control knob	
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	
Umbilical		
Diameter	7.6 mm - 0.3 in nominal	
Length	250 meters - 820 feet	
Working Strength	45 kgf - 100 lbs	
Breaking Strength	318 kgf - 700 lbs	
Buoyancy	Neutral in fresh water - slightly positive in Seawater	
Conductors	Twisted pair with shield and fiber optic strand	
Video Overlay		
Information Displayed	Thruster gain settings, light level, Trim On/Off, heading, depth, turns counter, camera angle, water temperature, time, date, user text	
User Text	Up to 28 Characters	
Positioning (on screen)	Bottom, top or off	
Menus	Quick menu, setup, calibrate, diagnostics, options	
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