



## LBV150SE<sup>2</sup>

**The best all round ROV in its class.  
Powerful, portable and incredibly  
versatile. The Perfect Balance.**

Now with 24 Month Limited Warranty



### **VERSATILE SOLUTION**

The LBV150SE<sup>2</sup> system is the best selling small ROV. Easy to see why with its well balanced specifications and affordability. The perfect balance between power, size, capability, umbilical length and intuitive controls. An ideal solution for a wide variety of applications both inshore and offshore.

### **STABILITY CONTROL**

What makes the rugged, reliable LBV150SE<sup>2</sup> 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 LBV150SE<sup>2</sup> is supplied with 175 meters (574ft) of the revolutionary small 7.6mm (0.29") diameter umbilical reducing drag by more than 24% over its competitors. This reduction enables the LBV150SE<sup>2</sup> to operate in higher current with the full length of umbilical in the water. Added simplicity is the heavy duty umbilical reel.



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

### **PERFORMANCE DRIVEN**

The LBV150SE<sup>2</sup> takes small ROV performance to the next level with four very powerful 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 2.9kgf (6.4lbs). The two forward thrusters provide a combined forward thrust of 5.5kgf (12.13lbs) propelling the vehicle along the surface at 2.75 knots.



### **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**

- 150 MSW Depth Rating
- Powerful Thrusters
- 4 Thruster Configuration
- Ideal Weight/Mass (10.4kg)
- 7.6mm Diameter Umbilical
- 270° Field of View
- 570 Line Color Camera
- Lamp Tracking Camera
- Ultra Low Light B/W Camera
- Intuitive Control Console
- Auto Heading, Depth & Trim
- Variable Thruster Gain
- Video Overlay
- much more...

### **SYSTEM INCLUDES**

- LBV150<sup>2</sup> Vehicle
- Protective Bumper Frame
- 4 H.P. Thrusters
- 570 Line Color Camera
- 50 Watt Halogen Lamp
- Ultra Low Light B/W Camera
- 175m/574ft Umbilical
- Heavy Duty Umbilical Reel
- Integrated Control Console
- Hand Controller
- 38cm15in Color Monitor
- Basic Spares Kit
- Spare Thruster
- Protective Cases
- Manuals and CD-ROM
- 24 Month Limited Warranty

LBV	LBV150SE <sup>2</sup>	
Depth Rating	150 Meters Seawater (MSW) - 500 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	10.4 kg - 22.93 lbs	
<b>Thrusters</b>		
Thruster configuration	Four (4) thrusters - Two (2) forward, one (1) vertical and one (1) lateral. Each thruster is identical & isolated	
Type	Brushed DC motor, one atmosphere housing with double o-ring shaft seal and grease gallery	
Bollard Thrust (forward)	5.5 kgf - 12.1 lbs	
Bollard Thrust (vertical)	2.2 kgf - 4.85 lbs	
Bollard Thrust (lateral)	2.5 kgf - 5.51 lbs	
Speed at surface	2.75 knots - 3.16 mph - 1.41 m/s (forward)	
Max Operating Current	2.0 knots - 2.31 mph - 1.03 m/s (forward)	
<b>Cameras &amp; Lighting</b>		
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	Copper	
Internal Lighting	50 Watt Quartz Halogen tracking primary camera. Variable intensity via hand controller.	
<b>Integrated Control Console, Power Supply &amp; Monitor</b>		
Length	444.5 mm - 17.5 in	
Width	297 mm - 11.7 in	
Height	180 mm - 7.1 in	
Weight	10 kg - 22 lbs	
Data Channels	1 RS-232 for LBV controls	
Output Connections	BNC (video), Switchcraft connector for software update	
Sensors	Heading, depth, temperature	
Auto Functions	Depth, heading, trim	
Input Voltage	100-130 VAC or 200-240 VAC	
Power Requirement	650 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	
<b>Hand Controller - Built into Integrated Console - Removable</b>		
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	
<b>Umbilical &amp; Reel</b>		
Diameter	7.6 mm - 0.3 in nominal	
Length	175 meters - 574 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	
Reel	Heavy duty reel with slip ring	
<b>Video Overlay</b>		
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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