



LBV600XL²

The ultimate deep water free flying small ROV system available.

Now with 24 Month Limited Warranty



LONG DISTANCE

The LBV600XL² is an unprecedented combination of deep water depth rating, long umbilical length and powerful performance. A free flying rapid response system that packs a tremendous amount of features into a small package. Enhanced with the latest Prizm fiber electronics, LED lighting and Brush-Less DC thrusters.

STABILITY CONTROL

What makes the rugged, reliable LBV600XL² 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 LBV600XL² is supplied with 750 meters (2,460ft) of the revolutionary small 8.4mm (0.33") diameter umbilical reducing drag. This reduction enables the LBV600XL² to pull that extra length of umbilical at depth.



PERFORMANCE OVERLOAD

The LBV600XL² takes small ROV performance to the next level with six (6) very powerful Brush-Less DC thrusters (4 forward, 1 vertical and 1 lateral). Adding the sixth thruster (lateral) greatly improves control and inspection capabilities while the added two forward thrusters give the awesome forward power to fight strong currents. 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 12.7kgf (28lbs) propelling the vehicle along the surface at 4 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.



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

- 600 MSW Depth Rating
- Brush-Less DC Thrusters
- 6 Thruster Configuration
- Ideal Weight/Mass (16kg)
- 8.4mm 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
- Video Overlay
- much more...

SYSTEM INCLUDES

- LBV600-6² Vehicle
- Protective Bumper Frame
- 6 Brush-Less DC Thrusters
- Prizm MicroMux Electronics
- 570 Line Color Camera
- 480 Lumen LED Array
- Ultra Low Light B/W Camera
- 750m/2,460ft Umbilical
- Umbilical reel with slip ring
- Integrated Control Console
- Hand Controller
- Monitor with Sunshade
- Surface Power Supply
- Basic Spares Kit
- Spare Thruster
- Protective Cases
- Manuals and CD-ROM
- 24 Month Limited Warranty

LBV		LBV600XL ²	
Depth Rating	600 Meters Seawater (MSW) - 2,000 Feet Seawater (FSW)		
Length	530 mm - 21 in		
Width	484 mm - 19.07 in		
Height	270 mm - 10.6 in		
Diagonal	554 mm - 21.8 in		
Weight in Air	16.3 kg - 35.9 lbs		
Thrusters			
Thruster configuration	Six (6) thrusters - Four (4) forward, one (1) vertical and one (1) lateral. Each thruster is identical and isolated.		
Motor Type	Brush-Less DC - Oil Compensated		
Bollard Thrust (forward)	12.7 kgf - 28 lbs		
Bollard Thrust (vertical)	3 kgf - 6.61 lbs		
Bollard Thrust (lateral)	3.2 kgf - 7.05 lbs		
Speed at surface	4 knots - 4.6 mph - 2.05 m/s (forward)		
Max Operating Current	3.0 knots - 3.45 mph - 1.54 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 electronics		
Internal Lighting	480 Lumen LED, pure white light - variable intensity & tracking primary camera		
Integrated Control Console and Monitor		Surface Power Supply	
Length	444.5 mm - 17.5 in	508 mm - 20 in	
Width	297 mm - 11.7 in	289 mm - 11.37 in	
Height	180 mm - 7.1 in	311 mm - 12.25 in	
Weight	12 kg - 26.46 lbs	18.8 kg - 41.6 lbs	
Output Connections	BNC (video), Switchcraft connector for software update		
Data Channels	3 RS-232 (1 for LBV, 2 spare)		
Sensors	Heading, depth, temperature, audio		
Auto Functions	Depth, heading, trim		
Input Voltage	100-240 VAC		
Power Requirement	3,000 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			
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	8.4 mm - 0.33 in nominal		
Length	750 meters - 2,460 feet		
Reel	350 meter capacity with slip ring		
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 & optical fiber		
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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