

SeaBotix vLBV with BlueView BV5000

Mobile Solution for 3D Scanning

Teledyne Marine has combined the power of these two industry-leading systems into a unique solution for high-resolution sonar imaging from a remote, mobile platform.

With the combined system from Teledyne Marine, you can take high-resolution sonar images of underwater structures from a remote location without putting divers in high-risk environments. Move from site to site with ease using the ROV's powerful-vector thrusters and cover multiple sites faster.

The SeaBotix vLBV represents an evolution in small, capable vectored MiniROV systems. Four powerful 100 mm (4 in) horizontal thrusters, arranged in a vectored format, offer nearly equal horizontal thrust in all 360-degrees of flight. The horizontal thrusters can be manually adjusted to bias thrust in the forward direction for extreme pulling power. This works well in applications such as high forward currents.

BlueView's BV5000 3D mechanical scanning sonars create high resolution imagery of underwater areas, structures and objects. With the touch of a button, these 3D mechanical scanning sonars create 3D point clouds of an underwater scene with minimal training required. The compact, lightweight units are easily deployed on the ROV, allowing for rapid repositioning of the 3D sonar and highly efficient inspection deployments.

The SeaBotix vLBV300 ROV combined with a BlueView 3D scanning sonar can make your next Civil Engineering project safer, faster, and more cost effective.

The solution is ideal for applications such as 3D site survey and structure inspection, rig decommissioning, bridge inspections and underwater metrology



PRODUCT APPLICATIONS

FEATURES

- 3D site survey
- 3D structure inspection
- Rig decommissioning
- Bridge inspections
- Underwater metrology

BENEFITS

- Maneuver safely and easy into or around complex structures
- Cover multiple sites faster
- High-resolution and accurate data save time on survey and post-processing



TELEDYNE MARINE
SEABOTIX
Everywhereyoulook™



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TECHNICAL SPECIFICATIONS

vLBV MiniROV Systems

GENERAL	
Depth Rating	300 m (1,000 ft) & 950 m (3,100 ft)
Length	625 mm (24.6 in)
Width	390 mm (15.4 in)
Height	390 mm (15.4 in)
Weight in Air	18 kg (39.9 lbs)
THRUSTERS/PERFORMANCE	
Configuration	4 horizontal vectored, 2 vertical
Vector Angle	Adjustable 45°/35°, 35°, 18° or combination
Motor Type	Brushless DC direct drive
Prop Diameter	100 mm (4.0 in)
Bollard Thrust	See matrix below
Speed at Surface	3 knots (1.54 m/sec)
CONTROL SYSTEM	
Configuration	Dual rugged cases, with monitor, OCU & SPS
Monitor	Color LCD, daylight readable
Power Requirements	3300 W, 85-265 VAC (vLBV300) - typical 4500 W, 85-265 VAC (vLBV950) - typical
Safety	Isolated power, circuit breaker, LIM, leak monitor
Auto Functions	Depth, heading, trim (speed)
Video Overlay	Depth, heading, lights, thruster gain, turns counter, camera angle, time, date & user programmable characteristics, options status
TETHER REEL	
Diameter	8.9 mm (0.35 in) nominal
Length	250 m (820 ft) standard
Working Load	100 kgf (220 lbf)
Breaking Strength	700 kgf (1,543 lbf)
Buoyancy	Neutral in fresh water Slightly positive in salt water
Reel	Heavy duty with slip ring

BV5000 - 3D Scanning Sonar

	BV5000-1350	BV5000-2250
SONAR AND SOFTWARE		
Sonar & Software	45 - 360	45 - 360
Sector/Spherical Scan Area (°)	45 x 1	45 x 1
Sonar Field of View (°)	Up to 40	Up to 40
Frequency (MHz)	1.35	2.25
Maximum Range	30 m (98 ft.)	10 m (32 ft.)
Optimum Range	1 - 20 m (3.2 - 65 ft.)	0.5 - 7 m (1.6 - 23 ft.)
Number of Beams	256	256
Beam Width (°)	1x1	1x1
Beam Spacing (°)	0.18	0.18
Time Resolution	0.015 m (0.59 in.)	0.010 m (0.39 in.)
Data Output Format	.son, .off, and .xyz files	.son, .off, and .xyz files
MECHANICAL		
Size (L x W x H in inches)	10.5 x 9.2 x 15.4	8.9 x 8.6 x 15.4
Weight in Air/Water (lbs.)	21.7/8.2	19.1/6.0
Depth Rating	300 m (1,000 ft.)/ 4,000 m (13,123 ft.)	300 m (1,000 ft.)/ 4,000 m (13,123 ft.)
Coms (Sonar/Pan & Tilt)	Ethernet/RS485	Ethernet/RS485
Power Consumption (W)	45 max.	45 max.
Power Requirement (V DC)	20 - 29	20 - 29

Standard Equipment and Available Options

HARDWARE	SOFTWARE
MB1350-45 or MB2250-45 Sonar	RS485 to USB drivers
Pan & Tilt w/ mounting hardware	ProScan 1.3 (or current)
Sonar, Pan & Tilt junction box	MeshLab (included w/ ProScan)
Shipping case	
Accessory kit*	
20 - 29	



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