



Teledyne SeaBotix

# LBV300-5 & LBC

Little Benthic Vehicles

## Highly Versatile MiniROV Systems

### LBV300-5 MiniROV Systems

The SeaBotix LBV300-5 is one of the most accomplished, versatile, and proven MiniROV systems on the market today. Compact and incredibly stable, the LBV300-5 supports a wide range of application possibilities.

Powerful brushless DC thrusters offer increased vertical lift and current handling capabilities, allowing for an extensive selection of sensor packages. Standard features include high resolution color camera, LED lighting, Integrated Control Console (ICC), and 4-axis maneuverability including dual vertical and 4 lateral thrusters. For operations using multiple sensors, upgrading the ICC to an Integrated Navigation/Control Console (INC) is recommended.

Combined with SeaBotix' industry leading low drag tether, the LBV300-5 offers an outstanding inshore and offshore capable solution.

All systems are offered with a 2-year limited manufacturer's warranty. 24-hour technical support and service by factory staff and authorized service centers across the globe are standard.



### LBC Crawler Systems

Unmatched in versatility, the SeaBotix LBC is a revolutionary approach to ship hull and infrastructure inspections for a wide range of military and commercial applications. With no magnets or thrusters (churning the water, impeding visibility), SeaBotix Crawlers employ the patented Vortex Generator to attach to any relatively flat, hard surface with 22+ kgf (48+ lbf) of attraction force. With no relative motion between the inspection surface and the sensors, output data is the highest quality possible and operator fatigue is greatly reduced.

The patented Wheeled Crawler Skid is attached to a standard LBV300-5 MiniROV in minutes, converting it from a 4-axis ROV to a 5-axis hull and infrastructure crawler.

No other system provides such a complete solution for quality underwater inspection and light work.



## PRODUCT FEATURES

### LBV300-5 MINIROV

- High Resolution Color Camera
- 300 Meter (1,000 ft) Depth Rating
- Tether Length - 250 to 350 m (820 - 1148 ft)
- Flexible Sensor Platform
- 5 Powerful Brushless DC Thrusters
- High Intensity LED Tracking Camera
- 4-Axis Maneuverability
- Low Drag Tether - 8.9 mm (0.35 in)
- Extensive Range of Options

### LBC MINIROV

- Simple hull/infrastructure attach mode via patented Vortex Generator
- Operates in currents over 5-knots in attach mode
- Four wheel drive
- ROV & Crawler in one system



**TELEDYNE SEABOTIX**  
Everywhereyoulook™

## TECHNICAL SPECIFICATIONS

### LBV300-5 MINIROV SYSTEMS

#### GENERAL

Depth rating	300 m (1,000 ft)
Length	520 mm (20.5 in)
Width	445 mm (17.5 in)
Height	260 mm (10.2 in)
Weight in air	13 kg (28.7 lbs)

#### THRUSTERS/PERFORMANCE

Configuration	2 forward, 2 vertical, 1 lateral
Motor type	Brushless DC direct drive
Bollard Thrust	Forward - 7 kgf (15.4 lbf) Lateral - 3 kgf (6.6 lbf) Vertical - 7.5 kgf (16.5 lbf)
Speed at Surface	2.8 knots (1.44 m/sec)

#### CAMERAS/LIGHTING

Camera	650 TVL high resolution color
Camera Tilt	180 Degrees
Focus	Manual (90 mm to infinity)
Format	NTSC or PAL
Lighting	Internal 700 Lumen LED array, tracks color camera
Sensitivity	.01 Lux @ f2.0

#### CONTROL SYSTEM

Configuration	Single rugged case w/monitor, OCU & power supply
Monitor	38 cm (15 in) LCD
Power requirements	1,200 Watts max, 100-130/200-260 VAC - typical
Safety	Isolated input, 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 characters, options status

#### TETHER REEL

Diameter	8.9 mm (0.35 in) nominal
Length	250 m (820 ft) standard, 350 m (1148 ft) available
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

#### OPTIONS

Tether Lengths	250 m (820 ft)
Grabber	Three jaw, interlocking small, interlocking large, parallel and cutter
Sonars	Multi-beam, scanning, profiler
Tracking	USBL positioning system
Lights	Multiple head ultra bright LED
Console	Integrated Navigation/Control Console
Other	Crawler Skid, thickness gauge, CP, laser scaling, zoom camera and more

### LBC CRAWLER SYSTEMS

#### GENERAL

Length	530 mm (21.6 in) with skid
Width	500 mm (19.7 in) with skid
Height	400 mm (15.7 in) with skid
Diagonal	565 mm (22.2 in)
Weight in air	28 kg (61.7 lbs) with skid

#### DRIVE MECHANISM

Drive Train	Wheeled drive with single axle, Dual motor/gearbox
Pulling Force	Up to 12 kgf (26 lbf)
Speed	30 m/min (99 ft/min)

#### ATTRACTION DEVICE

Type	SeaBotix Vortex Generator
Attraction	22+ kgf (48+ lbf)
Surface Capability	Any relatively flat, hard surface
Clearance	25 mm (1 in)

#### SPARES, TOOLS AND MANUALS

Spares Contents	Spare impeller and hardware
Manuals	Operator's Manual Addendum - LBC



Wheeled  
Crawler  
Skid

#### Crawler Skid Attachment (CSA) Contains:

- Crawler Skid Assembly
- SeaBotix Vortex Generator
- 4-wheel, dual axle system
- Connection cables
- Transit case
- Spare Impeller & Hardware
- Operator manual addendum for LBC



**TELEDYNE SEABOTIX**  
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