



Long Distance Remotely Operated Vehicle (LDROV)

SeaView Systems' Long Distance Remotely Operated Vehicle is a custom ROV fitted with a fiber optic telemetry system and power handling equipment. It is driven by four 300W brushless DC thrusters (vector configuration) giving a total forward thrust of 72lbs. The ROV is built into a custom plastic frame fitted with freewheeling wheels on the top surface to provide smooth running along the crown of pipelines and tunnels.



Data Playback

- SeaView 3D PipeWalk software. In-house developed software allowing user to virtually 'walk through' a 3D model of the pipeline while viewing 3 channels of recorded video.

Sonar Options

- Imagenex 881a profiler
- Imagenex 851 imaging sonar

Tooling Options

- Single function, three jaw grabber
- Rotating actuator

Video Overlay

- Configurable video overlay display showing such parameters as heading, depth, temperature, time and date, penetration distance pipeline number and station number

Distance Measurement

- Friction-driven wheel line counter on umbilical
- Accurate to 0.2% or better of the penetration distance
- Penetration distance logged to disk for post-processing and displayed on center tilt camera video

Recording

- All three video channels recorded independently to DVR
- Audio commentary recorded as required throughout
- Sonar/profile data recorded continuously for report generation



Depth Rating:	500ft/152m
Dimensions:	17"/430mm height
	18"/460mm width
	41"/1040mm length
ROV Weight	100lbs/45kgs
Umbilical	10000ft/3000m x 0.6"/15mm neutrally buoyant fiber optic
Lighting	4 x 70W high intensity LED lamps
Thrust:	5 x Tecnadyne Model 300 brushless DC motors
	Max forward thrust 72lbs/32kgf
	Max lateral thrust 12lbs/5.4kgf
	Max vertical thrust 18lbs/8kgf
Cameras:	1 x pan/orbit/zoom color camera (capable of 360° orbit)
	2 x 530 Line/0.3 Lux color CCD cameras
Other Sensors:	Heading, Pitch and Roll, Depth
Telemetry:	3 x video channels
	4 x RS232 channels
	2 x RS485 channels (one for ROV, one for sonar)

SeaView Systems, Inc. designs, manufactures and operates remotely operated vehicles, electronics and other custom hardware/software tools, including oceanographic instruments, custom remotely operated vehicles and tooling systems, to meet oceanographic and underwater robotic applications.

For more details or supplemental media, please email SeaView Systems at info@seaviewsystems.com.