

Confined Space Remotely Operated Vehicle (CSROV)

The Confined Space Remotely Operated Vehicle (CSROV) has been designed at Research & Development Establishment (Engineers), Pune, a premier laboratory under Defence R&D Organisation. The CSROV has been designed to traverse through confined spaces within train compartments and aircrafts, reach onto the berth or the cabin baggage space and extract any suspected object. The CSROV can also assess the treat by using an on-board X-Ray scanner and thereafter defuse using a water jet disrupter.

The CSROV can be deployed remotely from a distance of 200m and can traverse through aircraft and railway aisles. The CSROV has an endurance of two hours using a rechargeable battery. The CSROV shall be used for the extraction of the suspected objects or IED from the cabin baggage storage area or the berths inside the compartments. The back-pack based Master Control Station provides the operator the mobility to approach the suspected object from close by. An X-ray system can be deployed using the ROV to confirm the presence of an IED. The Water Jet Disrupter fitted on the Manipulator of the robot can then be used to defuse the IED.



Salient Features

- Range: 200m LOS
- Endurance: 2 hrs
- Manipulator reach 2 m vertical, 1m horizontal
- Degrees of Freedom: 06
- Payloads: Recoilless Water Jet Disrupters
- Aiming Devices : Lasers along with high resolution CCD Camera with 10X zoom
- Command & Control: Remote through RF link
- Video: Real Time Transmission through RF link
- Vision: Multiple CCD cameras
- Master Control Station: Backpack based