

Design and development of a remotely operated vehicle with new maneuvering method

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ABSTRACT

In this paper, a remotely operated vehicle (ROV) consisting of four thrusters is designed and developed called X4-ROV. X4-ROV is a micro observation class ROV to be used mainly for visual observation of underwater structure or environment by utilizing a high definition web camera. The designed vehicle structure was aims towards portability and maneuverability in attitude motions of roll, pitch, and yaw, and the translational motion forward/reverse/lateral. This work explains the use and modification of an open-source platform (OpenROV) into X4-ROV system.

KEYWORDS:

Underwater vehicle;X4-ROV;OpenROV;Thruster's configuration