

RONGZHEN KAIWU

Rong Zhen Kai Wu
First year competing in MATE ROV
Competition and Ranger class.

Beijing Bayi School, China
Beijing-Alpena City
Michigan: 10583KM

COMPANY SPECS

OUR COMPANY



ROV Specs

- ROV Name: OctaXplore
- Weight: 8.60kg
- Length with Arms: 57.4cm
- Length without Arms: 40cm
- Width: 40cm
- Height: 60cm
- Total Cost: 12703.7RMB
- Total Hours Spent: one month

Safety Features

- Input voltage of 12 V.
- Waterproof pressure-reducing module.
- We have designed a zero-buoyancy cable.
- The robot is equipped with anti-stretching devices at both the connection points from the cable to the controller and from the cable to the robot to prevent direct pulling of the cable and reduce the risk of cable damage.
- The ROV has no sharp shapes.
- We have set up a double-layer waterproof wiring panel at the connection between the cable and the machine and applied Vaseline at the connection for double-layer waterproofing.
- We used a 3d printer to make a fixing device for the sealed cabin and fixed it on the cross-shaped PVC pipe on the top of the machine.
- All propellers will have a 3D printed propeller shroud, a secure and hard shell (less than 12.5mm in diameter).

Special Features

- The motor position is adjustable.
- The frame shape is similar to the turtle shell.
- The frame shape can reduce the water resistance.
- The overall structure is mainly PVC water pipe environmental protection and low consumption.
- The flight control system enables the aircraft to maintain a stable underwater posture during operation.
- The flexibility of the fin bar claws enables them to more securely grasp the target object.
- Affordable price, high value for money.