AC-ROV 2

Function Manipulator

The market leading AC-ROV Underwater Inspection System is available with a 2 function manipulator.

Inline with the AC-ROV ethos of mobility, portability and robustness the solution is an integrated arrangement. The outcome retains the clean, robust and snag free shape of the AC-ROV, while maintaining the single operator aspect of the system. The Manipulator could not be easier to deploy, with no modifications required to the AC-ROV system and no specialist training for integrating the arm to the vehicle.

- Robust, Serviceable and fully Integrated Design
- Simple ‘no modification’ retrofit*
- AC-ROV mobility, portability and robustness

During ROV operations, there are many situations where you need to hold on or recover objects to the surface. A single function manipulator is no use for either of these applications which is why AC-CESS developed a two function manipulator providing both Grip and Continuous Rotate. Use the manipulator to anchor the AC-ROV to something stable and then rotate it to get the viewed image in the correct plane. The AC-ROV can be left to watch a target and the pilot can take a rest or carry out other duties. Alternatively, and perhaps the more obvious application of a manipulator is to pick-up or deploy objects. If the weight and size of an object is beyond the capability of the manipulator then use it to run a line and hook or other secondary recovery device to the target. The rotation function of the manipulator is a big benefit when using a looped line to ‘snare’ a target. Once a line or hook is released onto a target the AC-ROV is there to monitor target recovery.

- Grip and continuous two way rotation
- Single operator
- Override fail-safe release

Vehicle and manipulator operations can be simultaneously carried out by one person. The AC-ROV is controlled with one hand while the manipulator is operated via a thumb controlled joy stick in the other hand. Supplied in its own custom case, the manipulator can be specified with 2 or 3 jaws and has an override fail-safe release mechanism in case of power failure, ensuring the vehicle can be recovered safely.
SPECIFICATION

2 Function Manipulator Integrated to AC-ROV Base Block

Materials Acetyl, Stainless Steel, Titanium
Style 2 jaw or 3 jaw
Jaw Grip 50g x 45mm maximum (golf ball)
          5 seconds full open to full closed
Jaw Rotate Continuous CW or CCW
          5 seconds per rev

CONFIGURED AC-ROV:

Length 285mm
Width 151mm
Height 152mm
Vehicle Fly Through 200mm

The manipulator is supplied in its own custom case.