Hand Controller Device

Ultimate remote handling.

Technology

European Space Agency (ESA) developed technology designed for a hand controller device with haptic feedback to remotely control slave robotic hands.
The sensor and control pathways are separated, which enables improvement in the quality of the force feedback and greater sensing of hand and finger locations for dexterous remote handling.

Potential Application

The solution is well adapted to industrial challenges. The hand controller device can be used in environments not safe for humans such as under water, in nuclear zones, war zones, in natural disasters or for chemical handling. Other applications include general remote handling, medical (surgery, training, rehabilitation) and video gaming control. .

Uniqueness

1. The human-centric design fits any hand and is relatively simple.
2. The design is customizable depending on the level of control required.Total sensor volume can be as low as 5 cm3, a 50 times improvement over its closest optical competitor.
3. It can control a wide variety of slave robotic hands.