



# Application Note

C&K Components  
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## The Challenge

A leading manufacturer of control grip products needed assistance with an IP67 sealed push-button switch. They provide module solutions to numerous OEMs with distinct design layouts and cap colors.

## The C&K SOLUTION

The customer needed a flexible solution to integrate numerous pushbuttons with different cap colors and styles into a control module for an off-road joystick. Through extensive Voice of Customer interviews we were able to develop a flexible solution that allows the caps to be added to the switch after they are integrated into the control module. The numerous cap colors and styles allow the flexibility needed by the customer to solve their design challenges. The flexibility to add caps after the installation of the switch allows the customer to order one basic switch, while having the ability to mix and match colors and cap styles. This allows the customer to leverage the pricing on the basic switch and have the flexibility to change cap colors and styles as needed in their design. We were also able to incorporate the manufacturers desire to ensure that the cap could not be removed in the assembly after the install and to ensure that the cap did not spin once installed. The cap has an orientation feature designed into the actuator to ensure proper installation.

## Technical Assistance

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## Product Features - AP Pushbutton

The AP Series is cost competitive and has a flexible design allowing it to be easily configured for a particular design.



- IP67 sealing
- Illuminated and non-illuminated options available
- Multiple cap configurations and colors
- Variety of termination styles
- Threaded or snap-in mounting
- SPST Circuit, normally open
- Mechanical and electrical life: 1,000,000 cycles
- Caps available separately
- 2N and 4N operating force options
- RoHS compliant

## Market Opportunities

- Joystick Control Modules
- Off-Road Transportation
- Outdoor Harsh Environments
- Medical Applications
- Gaming
- Military
- Transportation
- Food & Beverage Applications
- Industrial Applications
- Test & Measurement Equipment
- Marine Applications

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