



SOLUTIONS SPOTLIGHT

Uniquely poised to meet the needs of a range of industries.

OFF-HIGHWAY

- Construction
- Agriculture
- Forestry/Mining

MILITARY & AEROSPACE

- Commercial Aviation
- Military Ground Control
- Military Air Control

MATERIAL HANDLING

- Dock Loading
- Warehousing

INDUSTRIAL

- Manufacturing
- Telecommunications
- Utilities/Power

MEDICAL

- Medical Equipment
- Diagnostic Systems
- Assistive Devices

SPECIALTY APPLICATIONS

- Marine
- Public Transportation
- Sports & Recreation

Design with Certainty. Deliver with Confidence.

Best-in-Class Controls

OTTO Controls designs and manufactures thousands of precision operator controls in the U.S. that serve global customers in many markets, such as: **Construction, Defense, Aerospace, Mining, Utilities, Agriculture, Material Handling, Medical, Forestry, Marine and Industrial.**

As a vertically integrated manufacturer, OTTO manages the entire production cycle, delivering high-quality solutions and value-add services. Our capabilities include manufacturing, design, development and testing, plus in-house molding, machining, milling and stamping.

Count on our strong in-house technical expertise and responsive customer support, coupled with our global network of sales representatives and distributors, for human machine interface solutions and services that enable our customers to excel.

State-of-the-Art Test Lab

OTTO's comprehensive onsite quality lab conducts audio, electrical, environmental and mechanical testing and test/design analysis to ensure solutions perform in demanding applications. Visit www.otto-controls.com/quality to learn more about OTTO's testing, non-destructive analysis capabilities and lab credentials, including American Association for Laboratory Accreditation.

Custom Built for You

In addition to thousands of standard products, OTTO works alongside customers worldwide to develop countless custom-engineered solutions that meet their unique requirements.

Let's talk about what we can build for you.

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CERTIFICATIONS

AS 9100D



Certified FAA Part 145 Repair Station



EASA Part 145



ISO 14001: 2015 | ISO 9001: 2015



A2LA | ISO/IEC 17025



OFF-HIGHWAY

Major heavy equipment manufacturers in construction, agriculture and related markets specify OTTO Controls for their machinery. Our solutions perform for the long haul in bulldozers, tractors, harvesters, excavators, trenchers, drillers, concrete mixers and other equipment that regularly face water, dirt, sand, extreme temperatures, shock and vibration, and rough usage.



Program varying operational values for the center encoder with pushbutton and for each button of the CANbus-enabled CAN Keypad module.



The JHM joystick with many compatible grips and handles is a solid choice for customizable armrest solutions.



ELECTROMECHANICAL SWITCHES



K1S: Sealed, Triple Throw Redundant Rocker



P6-4: Sealed, Commercial Grade Limit Switch



K5: Sealed, Illuminated Rocker



T7: Sealed, Single or Double Pole Toggle

PUSHBUTTON SWITCHES



P3: Sealed, Momentary Action or Push-Pull



LP30M: Large Sealed LED Illuminated



P7-D/P9: Sealed, Dome Style, Momentary Action

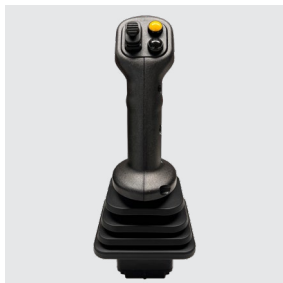


LP3-V: Ring Lit, Momentary Action, Vandal Resistant

JOYSTICKS & GRIPS



JHLN: Single-Axis Joysticks with Five Handle Options



HJLG3-M: JHL Joystick with G3-M Grip



HJLG3-D: JHL Joystick with G3-D Grip



JHT Z-Axis: Mini Z-Axis Joystick with Pushbuttons

HALL EFFECT CONTROLS



HTWS: Thumb Paddle Wheel with Seal Boot



HJFC: Foot Pedal



HFNR: Forward / Neutral / Reverse Rocker



HPW: Return-to-Center, Single Axis Paddle



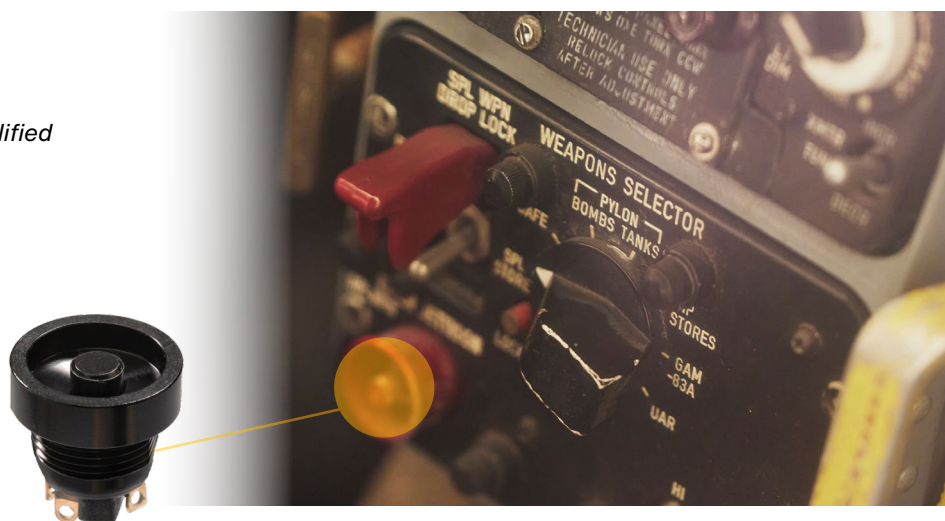
MILITARY & AEROSPACE

Mission-critical defense and commercial applications require precise, reliable systems. OTTO Controls works closely with customers to design solutions to specification and then manufactures and rigorously tests these systems in-house to perform as required under extreme conditions. Meet military specifications with OTTO grips, joysticks and thousands of military-qualified control switches.



This sealed, strain gauge-based force J2-S5 transducer is suitable for functions such as cursor control and target acquisition.

The protective cup is one of the custom features of this subminiature, MIL-qualified P7 pushbutton.



ELECTROMECHANICAL SWITCHES



B2-5: Single Break, Basic Switch with Integral Lever



P7: Momentary Pushbutton (MIL-PRF-8805/110)



T4-T: Tactile 4-Way, Momentary Mini Trim



T9: Sealed Toggle Qualified to MIL-DTL-3950

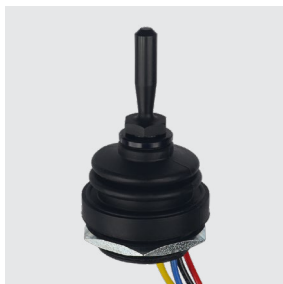
FINGER JOYSTICKS



HTL2: Single Axis, Linear Hall Effect



HTL4: Dual Axis, Linear Hall Effect



HTLT4: Dual Axis with Tall Metal Bat Handle



HTLT2: Single Axis External Boot with Pushbutton

TRANSDUCERS & LIMIT SWITCHES



P6-3: Sealed, Single Pole Limit Switch, Roller Lever



P6-3: Sealed, Double Pole Limit Switch, Roller Lever



J2-S2: Strain Gauge Transducer



J4: Hall Effect Transducer

GRIPS



G2: Commander Grip



G2: Helicopter Flight Control Grip



G2: Cobra Grip



G3 Dual Grip: Game-Style Grip with USB Output



MATERIAL HANDLING

Move material goods and manage crucial functions on side loaders, forklifts, automated guided vehicles, container handlers, winches, cranes and other equipment with confidence. OTTO switches, joysticks, grips and more handle tough work in rough environments, day after day.



Offered in both single- and double-pole options, P6-3 limit switches offer a choice of four actuators, including this roller lever style.

Operators gain just the right touch with the JHL joystick and its numerous gating selections.



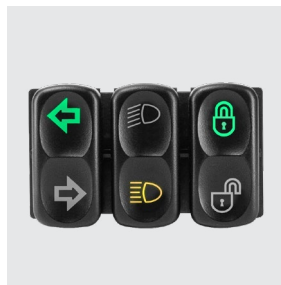
ELECTROMECHANICAL SWITCHES



K5: Sealed Illuminated Rocker with Legends



TC: TC Switch Module 5-Button Version

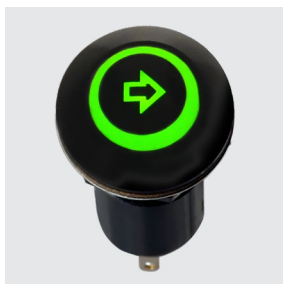


CAN Rocker: CANbus-Enabled Rocker Module



T3: Commercial and Military-Qualified Toggle

PUSHBUTTON SWITCHES



LP5-V: Sealed, Illuminated, Vandal Resistant



P8: Sealed, Subminiature, Momentary or Push Pull



P9M: Sealed, Latching, Flush or Dome Style



P3-D: Sealed, Dome Style, Momentary Action

JOYSTICKS & GRIPS



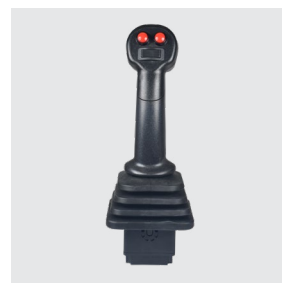
JHM: Industrial Joystick with Rocker Handle



JHL: Rugged Joystick with Many Grip Options



HTL4: Dual Axis, Linear Finger Joystick



HJLG3-A: JHL Joystick with G3-A Grip

HALL EFFECT CONTROLS



HTWF: Single Axis, Friction Hold Thumbwheel



HP7C: Momentary Action Pushbutton Switch



HTWS: Paddle Wheel with Seal Boot

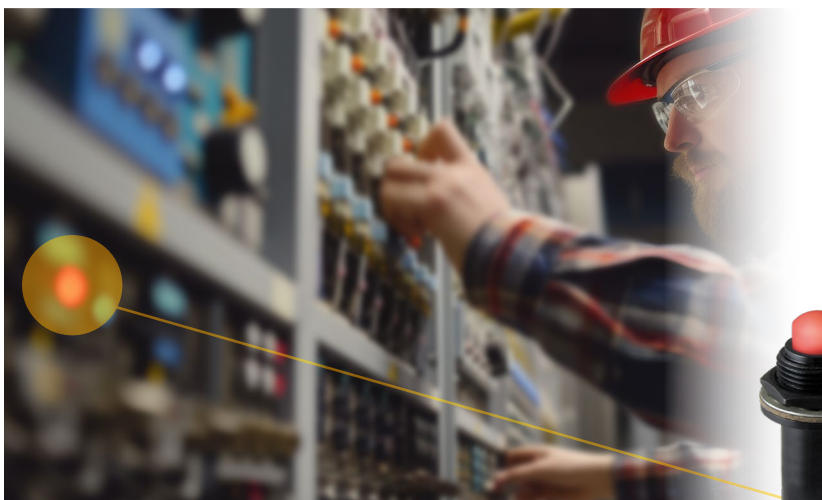


HFNR: Forward / Neutral / Reverse Rocker



INDUSTRIAL

Our controls precisely and reliably manage systems in industrial environments, such as manufacturing, communications, warehousing, electrical transmission and power plants. Choose sealed grips, joysticks and switches, as well as many other long-lasting solutions, for equipment exposed to water and harsh conditions.



Indicator lights for control panels and instrumentation offer a visual on/off reading of process conditions.



Snap-in rotary switches provide up to three positions in all combinations of momentary and maintained action.



ELECTROMECHANICAL SWITCHES



K1: Sealed, Illuminated Rocker Switch



B3S-5: Sealed, Basic Switch with Integral Lever

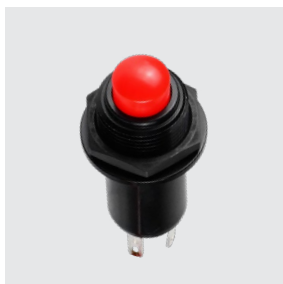


P6-4: Sealed, Commercial Grade Limit Switch



K4: Illuminated Toggle with Snap-in Rocker Case

PUSHBUTTON SWITCHES



LP3: Sealed, Illuminated, Momentary Action



LP5-V: Sealed, Ring Lit, Vandal Resistant



P7-D / P9: Sealed, Dome Style, Momentary Action



LP9: Sealed, Lightpipe, Momentary Action

HALL EFFECT CONTROLS



HP7: Raised Dome Style, Momentary Pushbutton



HPW: Return-to-Center, Single Axis Paddle



HTWS: Knurled Wheel with Return-to-Center Actuator



HTWF: Single Axis, Friction Hold Thumbwheel

JOYSTICKS & GRIPS



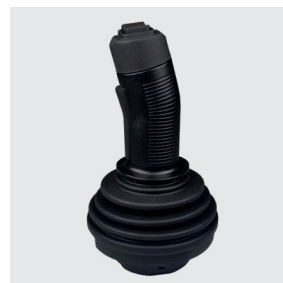
JHLN: Single-Axis Joysticks with Five Handle Options



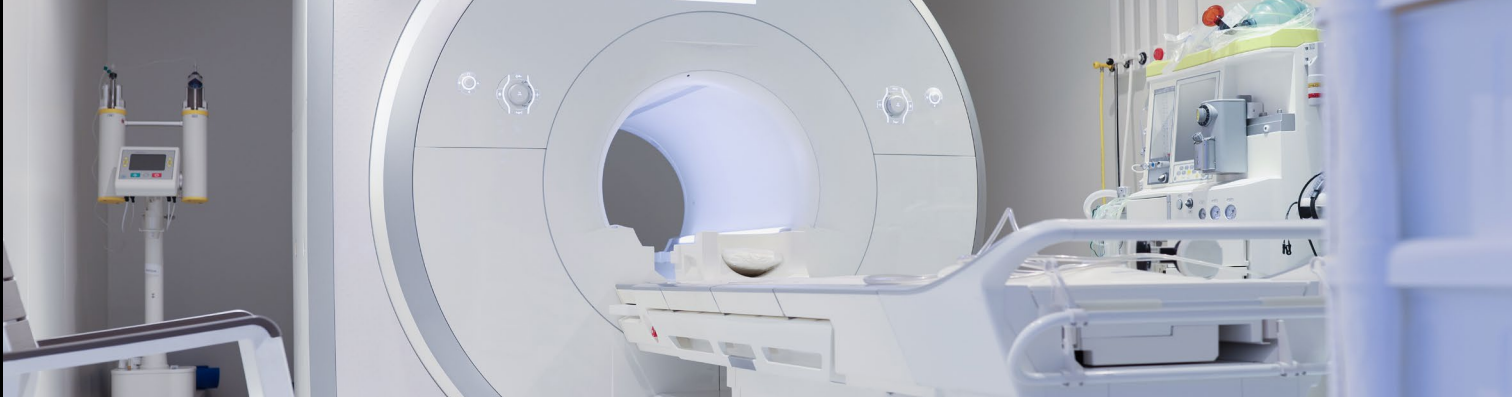
JHT Z-Axis: Mini Z-Axis Joystick with Pushbuttons



G3-C: Customizable Full-Size Grip



HJMG3-D: JHM Joystick with G3-D Grip



MEDICAL

Operate surgical, laboratory testing equipment and other critical medical systems, plus healthcare equipment such as motorized scooters, with OTTO Controls. Our high-quality, high-performing products are designed for long life and precision control in demanding applications and are customizable to meet unique requirements.

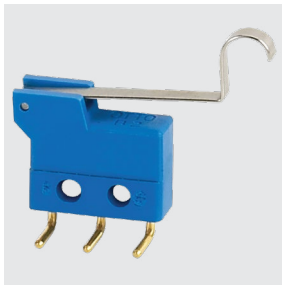


The miniature JHT joystick fits in tight spaces and rotates up to 60° with the Z-axis mechanism.

Finger joysticks, such as the HTLT4 with a tall bat handle, come with multiple gating options to support functional needs.



ELECTROMECHANICAL SWITCHES



B2-5: Subminiature, Basic Switch with Integral Lever



P6-3: Sealed, Double Pole Limit Switch, Roller Lever



K1: Sealed, Illuminated Rocker Switch



T4: 4-Way Mini Trim with Bat Handle

PUSHBUTTON SWITCHES



P7: Subminiature, Sealed, MIL-PRF-8805/110



P5-V: Sealed, Vandal Resistant, Alternate Action



LP5-V: Sealed, Ring Lit, Vandal Resistant



P3: Sealed, Momentary Action or Push-Pull Button

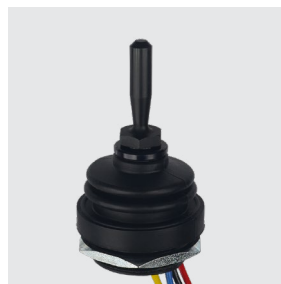
HALL EFFECT CONTROLS



HPL: Linear Output Pushbutton Switch



HTL4: Dual Axis, Linear Finger Joystick



HTLT4: Dual Axis Finger Joystick with Bat Handle



J4: Hall Effect Transducer

JOYSTICKS



JHT: Miniature Joystick with Pushbutton Switch



JHT Z-Axis: Mini Z-Axis Joystick with Pushbuttons



JHM Joystick: Full Size Joystick w/Ball Handle



SPECIALTY APPLICATIONS

It's OK to work hard and play harder when OTTO Controls' solutions are on deck. Customers in specialty markets such as marine, security, and sports and recreation select our standard and custom products to gain feature-rich functionality and rugged, reliable performance.

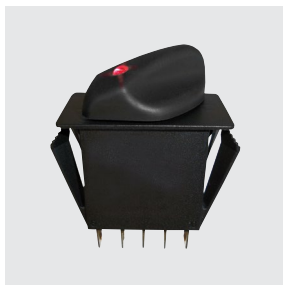


Watertight K2 rockers withstand extreme shock and vibration and offer LED, neon and incandescent lighting options.

LP3-V pushbuttons are UL 1500 ignition protected, vandal resistant and available watertight.



ELECTROMECHANICAL SWITCHES



R2: Sealed Rotary Switch with Illumination Options



T7: Sealed, Single or Double Pole Toggle Switch



K3P: Sealed, LED Indicator Light Switch

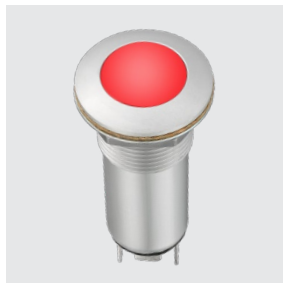


FG: Pushbutton Flip Guard

PUSHBUTTON SWITCHES



LP3S: Illuminated, Shorter Behind Panel



LP5-V: Sealed, Illuminated, Vandal Resistant



LP9: Sealed, Lightpipe, Momentary Action



P3-D: Sealed, Dome Style, Momentary Action

HALL EFFECT CONTROLS



HTWS: Paddle Wheel with Return-to-Center Actuator



HP7C: Momentary Action Pushbutton Switch



HPL: Linear Output Pushbutton Switch



HPW: Return-to-Center, Single Axis Paddle

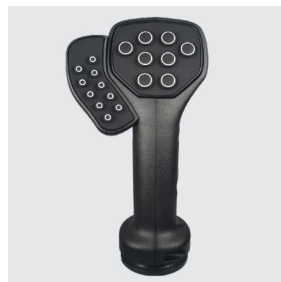
JOYSTICKS & GRIPS



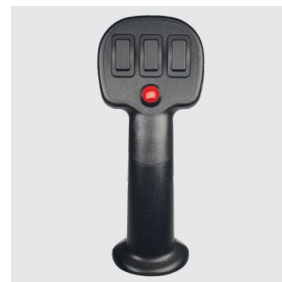
JHT: Miniature Joystick with Pushbutton



JHT Z-Axis: Mini Z-Axis Joystick with Pushbuttons



G3-CK: Universal Grip with Optional Side Keypad



G3-B: Universal Grip



OTTO's precision controls for the defense and aerospace market include grips and thousands of military-qualified switches. Ask about OTTO's custom product design and engineering services and the rigorous testing conducted in our world-class laboratory.



THROTTLE

G2: Throttle Control Grip



COLLECTIVE

G2: Collective Grip



COLLECTIVE

G2: Collective Grip



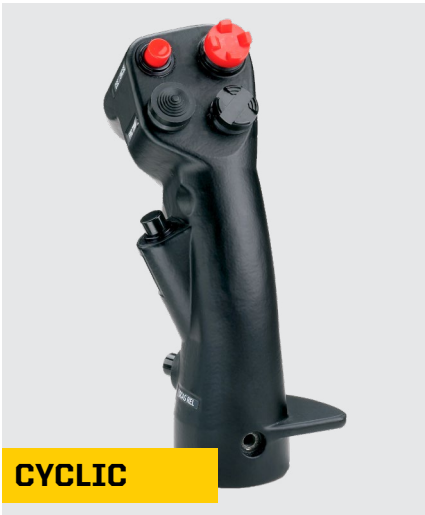
B8

G2: B8 Control Grip



COBRA

G2: Cobra Control Grip



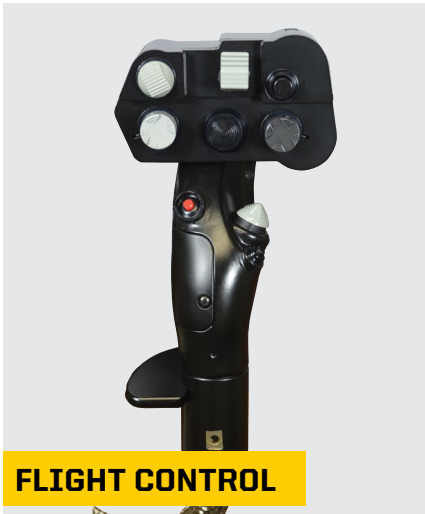
CYCLIC

G2: Cyclic Grip



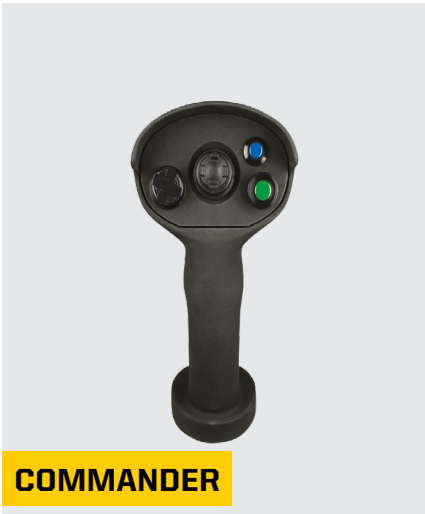
CYCLIC

G2: Customized Cyclic Grip



FLIGHT CONTROL

G2: Flight or Ground Control Grip



COMMANDER

G2: Commander Grip

OTTO's wide range of grips for construction, agriculture, material handling and other commercial industries supports operators how and where they work. Visit www.otto-controls.com and use the Part Builder tool on grip product pages to configure a grip with numerous options, such as faceplate designs, Grip Touch sensing, and mounting and termination styles. Part Builder then generates a part number for ordering ease.



G3-A

G3-A: Smaller grip with up to four faceplate switches and field replaceable options



G3-B

G3-B: Larger grip that fits as many as 10 faceplate switches and field replaceable options



G3-C

G3-C: Highly customizable medium grip offers more switches, Z-axis and advanced functions



G3-CK

G3-CK: Medium grip with lighted or unlighted buttons on its faceplate and optional side keypad



G3-D

G3-D: Compact Control Grip with rocker or pushbutton options on top and Operator Presence on the side



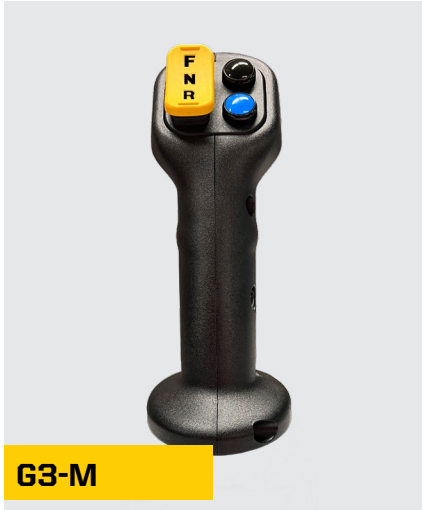
G3-E

G3-E: Compact Control Grip with rocker and five or seven momentary pushbuttons on handle



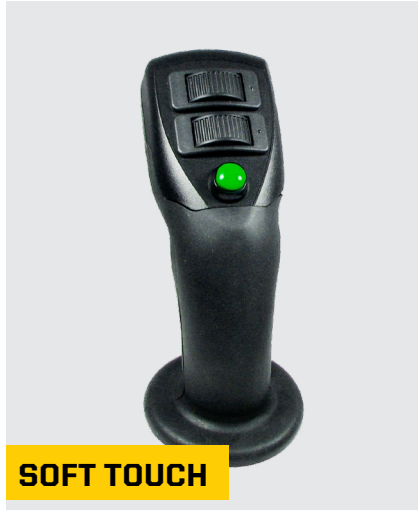
G3 | DUAL GRIP REMOTE

This durable game-style grip with a USB interface has excellent proportional control for remotely operating commercial and defense equipment.



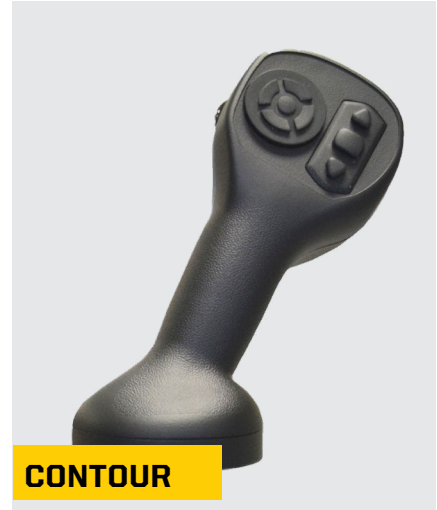
G3-M

G3-M: Highly customizable smaller grip that fits up to four switches on its faceplate and trigger back option



SOFT TOUCH

Soft Touch Grips: Configurable and customizable soft palm grip with choice of switches

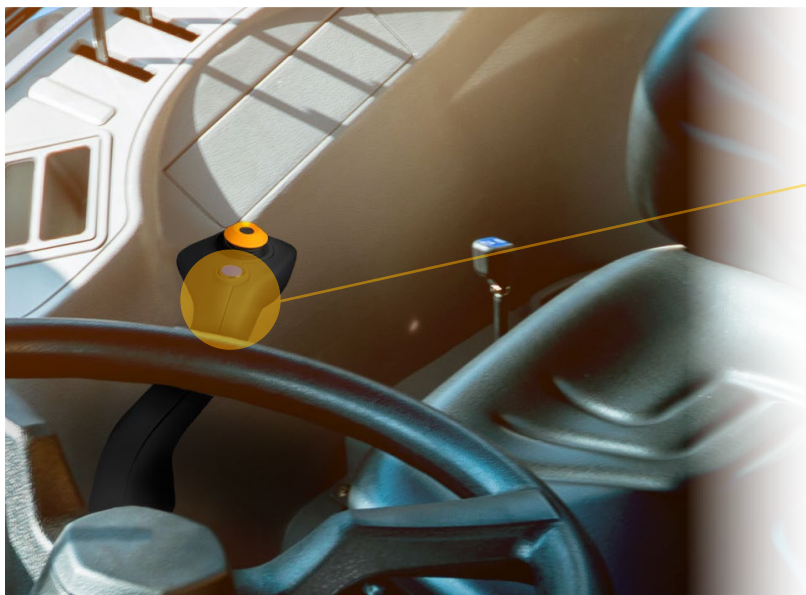


CONTOUR

Contour Grips: Designed for long use with minimal fatigue and custom switch configuration

BUILD A GRIP THAT'S UNIQUELY YOURS

Customization is one of OTTO's specialties. Ask OTTO to develop a grip to fit your requirements. Let us create an exclusively styled grip from the ground up. Mix and match from thousands of switches for the faceplate, side or back of the grip.



OTTO engineers start custom builds by fully understanding how and where operators will use them and then recommend the solution path forward.

JOYSTICKS | STANDARD | MINI | FINGER JOYSTICKS



JOYSTICK BASES | COMMERCIAL MODELS

OTTO's JH, JHL and JHM series joysticks are available standalone or paired with G3 commercial grips to make integrated joystick and grip assemblies. Refer to the G3 Grips section to see grip options.

These joysticks offer a wide range of output configurations, including single and redundant analog, CANopen and CAN J1939, as well as PLd, PWM and USB on certain models. Custom outputs are available.



JH Large Joystick

The JH is OTTO's largest joystick base with the highest static load strength (*300 lbs.*), and it has been tested up to 15 million cycles in all directions.



JHL Medium Joystick

The JHL is the cost-effective, slightly smaller version of the JH with a mechanical life of up to 6 million cycles. HJLG3 joystick/grip assemblies combine the JHL with a G3 grip.



JHM Medium Joystick

The JHM, which operates up to 10 million cycles, has a shorter behind panel depth. Numerous handle styles are standard. Or see the JHM with G3 grips in the HJMG3 series.



JH | LARGE INDUSTRIAL JOYSTICK

The JH Series joystick is designed to emulate a traditional 4-way hydraulic joystick, while utilizing Hall effect technology for increased life and more dependable performance in the field.



JHLN

JHLN: Single axis, friction hold or return-to-center joysticks with multiple outputs/handle options



JHS-F

JHS-F: Single axis, friction hold joystick where the lever does not return-to-center when released



JHS-RC

JHS-RC: Single axis with spring-return-to-center



JHS-F joysticks have outstanding EMI/RFI immunity, and they reliably withstand extreme temperatures, shock and vibration on job sites.



JHL | HALL EFFECT JOYSTICK

The JHL is OTTO's most popular full-size joystick, and it's easy to see why: It's a tough, long-lasting joystick with various output configurations such as CAN and redundant sensors. It comes standard with a threaded shaft or ball handle. Or match it with a G3 Commercial Grip for all-around performance and functionality.



HJLG3-A

HJLG3-A: The JHL joystick base paired with the smaller G3-A Universal Grip



HJLG3-B

HJLG3-B: The JHL joystick base paired with the larger G3-B Universal Grip



HJLG3-C

HJLG3-C: The JHL joystick base paired with the medium G3-C Universal Grip



HJLG3-CK

HJLG3-CK: The JHL joystick base paired with the medium G3-CK Universal Grip



HJLG3-D

HJLG3-D: The JHL joystick base paired with the G3-D Control Grip



HJLG3-M

HJLG3-M: The JHL joystick base paired with the smaller G3-M Universal Grip

JHM | HALL EFFECT JOYSTICK



The JHM is a rugged, full-featured industrial joystick that has two great advantages. First, its shorter depth is sized just right for shallower spaces within panels and armrests. Plus, it offers 19 standard handle options. Choose handles with rockers, buttons, a ball or the G3-D Control Grip. The JHM may also be combined with a G3 Commercial Grip to make an HJMG3 assembly.



HJMG3-A

HJMG3-A: The JHM joystick base paired with the smaller G3-A Universal Grip



HJMG3-B

HJMG3-B: The JHM joystick base paired with the larger G3-B Universal Grip



HJMG3-C

HJMG3-C: The JHM joystick base paired with the medium G3-C Universal Grip



HJMG3-CK

HJMG3-CK: The JHM joystick base paired with the medium G3-CK Universal Grip



HJMG3-D

HJMG3-D: The JHM joystick base paired with the G3-D Control Grip



HJMG3-M

HJMG3-M: The JHM joystick base paired with the smaller G3-M Universal Grip

OR CHOOSE FROM ONE OF 19 JHM HANDLE OPTIONS



Handle 11: No Handle



Handle 12: Standard Blank Handle



Handle 21: Hall Effect Rocker on Handle



Handle 31: Pushbutton Top Handle w/Half Boot



Handle 32: Two Pushbutton Handle



Handle 33: Two Pushbutton Handle with Pushbutton Top



Handle 34: Pushbutton Top Handle, Full Boot



Handle 35: No Pushbuttons, Top Handle, Full Boot



Handle 41: Lockout



Handle 51: G3-D Control Grip with Rocker and Operator Presence



Handle 52: G3-D Control Grip with Rocker on Top



Handle 53: Standard G3-D Control Grip



Handle 54: Standard G3-D Control Grip with Operator Presence



Handle 61: 5-Button Keypad and Rocker for Right Handed Use



Handle 62: 5-Button Keypad and Rocker for Left Handed Use



Handle 63: 7-Button Keypad and Hall Effect Rocker on the Right



Handle 64: 7-Button Keypad and Hall Effect Rocker on the Left



Handle 71: Large Ball



Handle 72: Small Ball

MINI JOYSTICKS | COMMERCIAL MODELS

Our miniature Hall effect joysticks are engineered with a space-saving design and rugged construction. These CANbus-enabled models are ideal for applications where every inch counts and reliability is non-negotiable. Built to integrate seamlessly into armrests or control panels, they deliver smooth, accurate performance for up to 5 million cycles.



JHT: Miniature joystick with sealed electronics to IP6K8S, and the EMI/RFI are per SAE J1113 specs with pushbutton option



JHT Z-Axis: Miniature joystick with Z-axis allowing for 60° degree rotational movement of the knob with pushbutton option

PADDLE JOYSTICKS | COMMERCIAL MODELS

HPW series Hall effect paddle switches with sealed electronics have outstanding EMI/RFI immunity. Their self-centering, single-axis actuator provides a linear change in voltage output in either direction from center.



HPW: Mini, single axis paddle joystick featuring lever style #1



HPW: Single axis paddle joystick featuring lever style #2 or maintained action



HPW: Single axis paddle joystick featuring lever style #3 or maintained action

FINGERTIP JOYSTICKS | COMMERCIAL MODELS

Power and precision at the tip of your finger. Our compact, Hall effect finger joysticks deliver robust control in even the tightest spaces—perfectly suited for mounting on grips, armrests or control panels. With a range of customizable button styles, these versatile joysticks offer intuitive operation and seamless integration in any control system.



HTL2: Single axis, linear Hall effect, tall concave stadium button



HTL4: Dual axis, linear Hall effect, external castle boot



HTLT2: Single axis, Hall effect, external castle boot with pushbutton



HTLT4: Dual axis, Hall effect, tall metal bat handle



Various finger joystick button styles give operators just the right touch for the job at hand.



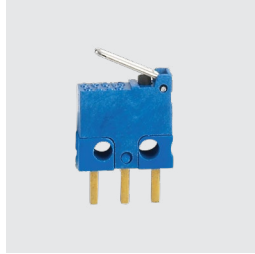
BASIC SWITCHES | COMMERCIAL & MILITARY MODELS

OTTO's vertically integrated U.S. manufacturing facilities build precision into every basic switch for reliable, long-lasting operation. Commercial-grade and military-qualified, snap-action basic switches perform exacting switching operations.

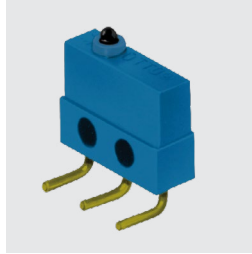
Refer to the specifications to choose models meeting your circuitry and mechanical requirements.



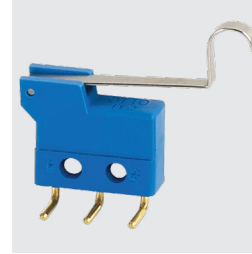
B1: Single Break, Ultra Small Subminiature



B1-5: Single Break, Ultra Small Subminiature with Integral Lever



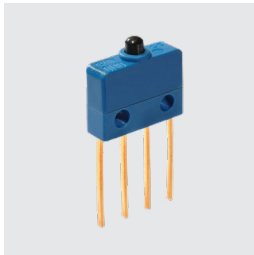
B2: Single Break, Subminiature (MIL-PRF-8805)



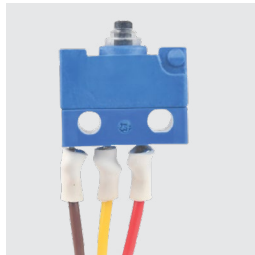
B2-5: Single Break, Subminiature with Integral Lever



B2D: Subminiature with Reduced Dead Break



B3: Double Break, Subminiature (MIL-PRF-8805)



B3S: Double Break, Sealed, Snap Action Subminiature



B3S-5: Double Break, Sealed, Subminiature with Integral Lever



B5: Double Break, Miniature



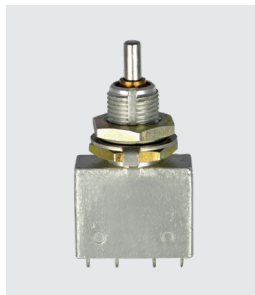
B5-7: Double Break, Double Pole, Miniature

LIMIT SWITCHES | COMMERCIAL & MILITARY MODELS

Our premium limit switches are engineered for precision, reliability and rugged performance in demanding environments. With durable housings and a variety of actuator styles, our limit switches ensure consistent operation under harsh conditions.



P6: Sealed with Roller Plunger (MIL-PRF-8805)



P6-3: Subminiature Sealed, Single Pole



P6-3: Subminiature, Sealed, Double Pole with Roller Lever



P6-4: Sealed, Commercial Grade with Ball Plunger



PUSHBUTTON SWITCHES | COMMERCIAL & MILITARY MODELS

OTTO is known for its pushbuttons that have positive tactile feedback with a snap-action click. These are among the thousands of commercial, military-grade and MIL-Spec pushbutton switches that OTTO manufactures for a wide variety of applications.

Ask OTTO about custom options, ranging from unique legends to complete panel solutions with multiple switches.

Button caps come in various colors. Check with OTTO for color availability by pushbutton series.

● Black | ● Blue | ● Gray | ● Green | ● Orange | ● Purple | ● Red | ● White | ● Yellow

ILLUMINATED PUSHBUTTONS

LP3 Series | Sealed, Momentary Action



LP3: Fully Lit, Exposed Dome



LP3: Fully Lit, Press Fit Mount



LP3S: Shorter, Fully Lit, Front Mount



LP3-A: Fully Lit with Legend



LP3S-V: Low Profile, Ring Lit, Flat

LP5 Series | Alternate Action



LP5: Fully Lit, Exposed Dome



LP5: Fully Lit, Raised Dome



LP5-V: Fully Lit, Vandal Resistant



LP7: Flush Dome, Short Bezel



LP7-D: Square Dome, Short Behind Panel

LP7 | Sealed

LP9 | Sealed, Dome, Momentary Action



LP9: Flush Dome Featuring Legend



LP9: Lightpipe, Low Profile Dome



LP9: Raised Dome with RGB Illumination

LP30M | LED-Illuminated, 30mm



LP30M: Sealed, Concave with Legend



LP30M: Sealed, Low-Profile Dome Button

NON-ILLUMINATED PUSHBUTTONS

HPL



HPL: Thread Rear Mount



HPL: Thread Top Mount

HP7 Series



HP7: Exposed Dome



HP7: Flush Dome



HP7C: Raised Dome

P1 | MIL-Spec, Sealed, Momentary Action



P1: Press Fit Mount, Style A



P1: Threaded with Hex Nut, Style C



P1: Behind Panel Mount, Style F

P2 | 3-Position, Momentary Action



P2: Style 1



P2: Style 6

P3 Series | Sealed, Momentary Action or Push-Pull



P3: High-Force Push-Pull



P3: Threaded with Hex Nut



P3-D: Flush Dome

P4 | Basic Switch Assemblies



P4: 1/4 - 40 THD



P4: Style C

P5 Series | MIL-Grade, Sealed, Alternate Action



P5: Press Mount



P5: Bezel/Threaded Bushing



P5: 5/8" Threaded Bushing



P5-D: Flush Dome



P5-V: Raised Dome, Vandal Resistant

P7 Series | MIL-Spec & Commercial, Subminiature, Sealed, Momentary Action



P7: Press Fit Mount, Case 2, MIL-Grade



P7: 1/4" Threaded Bushings, Case 5 (MIL-PRF-8805/110)



P7: Press Fit Mount, Case 8



P7-D: Raised Square



P7-D: Raised Dome

P8 Series | Subminiature, Sealed, Momentary Action



P8: Bezel Press Fit Bushing, Style A



P8: Bezel 0.625-24 Bushing, Style C



P8: 0.500-32 Small Bushing



P8-A: Vandal Resistant, Flat Button



P8-V: Vandal Resistant, Curved Button

P9 Series | Sealed, Dome Style, Momentary Action



P9: Flush Dome, Snap-In Glossy Case



P9: Flush Dome, Snap-In Case, Case 9



P9M: Raised Dome, Latching Button

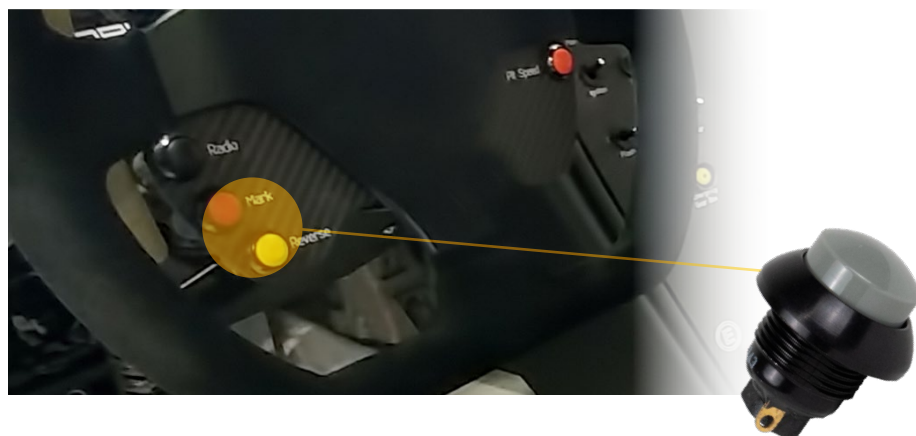


PE: Sealed/ Unsealed (MIL-PRF-8805/96)



PE2: Splashproof (MIL-PRF-8805/99)

PE | MIL-Spec, Momentary Action



P7-D pushbuttons have tactile feedback and different bezel styles for intuitive use.

ROCKER SWITCHES | COMMERCIAL MODELS

Snap-in rockers fit industry-standard panel openings for easy drop-in installation and replacement. Various styles of sealed illuminated and non-illuminated rockers mount on armrests, panels and grips. OTTO rockers withstand shock and vibration, and some are ignition protected for marine applications.



K1: Sealed with or without Illumination



K1S: Sealed, Short Behind Panel, Triple Throw, Redundant



K2: Sealed, Illuminated, Single or Double Throw without Illumination



K3: Sealed with or without Illumination and Legend Option



K4: Sealed, Built-in Toggle, Snap-Action, Lighting Options



K5: Sealed, Illuminated with Legend Options, Single Pole Triple Throw



HFNR: Hall Effect, Maintained Action, LED Backlighting Options



HPL-R: Pushbutton Rocker Assembly, Momentary Action



U2: Hall Effect, Return-to-Center, Momentary action

THUMBWHEELS | COMMERCIAL MODELS

Thumbwheel controls with a low-profile design easily integrate into grips and space-constrained armrests and panels. These Hall effect, single-axis switches deliver smooth, proportional output control.



HTW: Knurled Wheel with Spring Return-to-Center Actuator



HTWF: Paddle Wheel with Maintained Position, Friction-Hold



HTWM: Miniature Paddle, Return-to-Center Actuator



HTWS: Subminiature Paddle, Return-to-Center Actuator

TOGGLE SWITCHES | COMMERCIAL & MILITARY MODELS

Combining classic design with dependable functionality, OTTO toggle switches offer a reliable solution for controlling circuits in a wide range of applications. With a firm, tactile feel and robust construction, these switches are ideal for use in defense, aerospace, industrial and commercial equipment.



T1: Sealed with B2 or B3 Basic Switches (MIL-PRF-83731)



T1: Unsealed with B2 or B3 Basic Switches



T3: Commercial and MIL-Spec Miniature



T6: Magnetic Hold



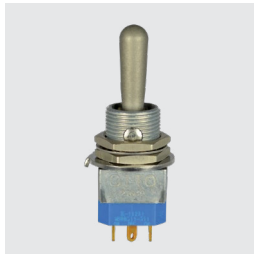
T7: Sealed, Lower Cost, Single or Double Pole



T71: Sealed, Narrow, Single Pole



T9: Sealed, Commercial and MIL-Spec (MIL-DTL-3950)



TE: Commercial and Military, Non-Teasible (MIL-DTL-88340)



IWTS: T1 Toggle with Integrated Wire Termination System



TG: Toggle Guard

MISC. SWITCH | COMMERCIAL MODELS



SL: Slide Switch in Commercial and Military Grades



R2: Sealed Rotary Switch with or without Illumination



CS: Capacitive Touch Switch, Concave or Raised Style

Rockers, such as this custom, Hall effect U2 switch, simplify quick back-and-forth motions.





Multi-switch controls modules bring intuitive, advanced capabilities to the cab. The CAN Keypad and CAN Rocker are CANbus-enabled controllers that can be daisy-chained together and to other CAN devices, including OTTO joysticks, grips and foot pedals, on the same network. One- to five-position TC switch modules drop into grips or other controls for versatile operation.



CAN Keypad

The CAN Keypad's six buttons and its center encoder with pushbutton are software controllable. When ordered as a base module, the CAN Keypad connects multiple CAN Rocker expansion modules. The rugged controller is sealed watertight to IP6K8S.



CAN Rocker

Each button on the CAN Rocker features two RGB LEDs, which denote operator functions, and two- or three-position, momentary or maintained action. The controller withstands temperature extremes and tough conditions. Custom button legends are an option on the CAN Rocker and CAN Keypad.



TC Switch

The TC is a self-contained, sealed switch with up to five positions, with or without legends or backlighting. It's a standard option on the tall-handled JHLN joystick model, as shown here, or order it separately for top or rear mounting.

TRANSDUCER SWITCHES | COMMERCIAL & MILITARY MODELS

Tested to military standards, the J2 transducers are top performers in aerospace, defense and off-highway applications. With compact designs and robust construction, our transducer switches ensure high performance, durability and seamless integration into complex systems. Choose from full bridge, half bridge and isolated circuit types and between various pushbutton options.



J2-S1: Strain Gauge Transducer



J2-S2: Strain Gauge Transducer



J2-S3: Strain Gauge Transducer



J2-S4: Full Bridge Transducer



J2-S5: Full Bridge with Pushbutton



J4: Hall effect Transducer

Add a single- or two-step trigger to military and commercial grips.



TRIGGER SWITCHES | COMMERCIAL & MILITARY MODELS

Ergonomically and durably engineered, OTTO trigger switches are ideal for industrial equipment and to add to flight or control grips. With customizable actuation force, one- or two-step actuation and compact designs, our switches ensure user comfort while maintaining reliable performance in high-use environments.



U2-016: MIL-PRF-8805/111-01



U2-037: Two Step, Sealed



U2-082: MIL-PRF-8805/111-03



U2-605: 2-Step Trigger for Sealed Grips

TRIM SWITCHES | COMMERCIAL & MILITARY MODELS

Attain precise, low-profile control in aviation, marine and industrial applications where space and accuracy matter. Designed for seamless integration into control grips, panels or joysticks, OTTO trim switches provide smooth, tactile feedback and reliable operation under demanding conditions. With options for multi-directional input and rugged construction, our trim switches enhance user control while standing up to continuous use in critical environments.



SPT: Split Trim with Two Single-Pole, Double-Throw Toggles



TK: 4-Way Mini Trim with Tactile Response and Pushbutton Option



T1: 2-Way Mini Trim, Commercial/MIL-Grade



T1-T: Latching, Single-Pole, Double-Throw Mini Trim



T2: 2-Way Plus Center Pushbutton Large Trim, Commercial/MIL-Grade



T4: 4-Way Large Trim with Tactile Response, Commercial/MIL-Grade



T4-T: 4-Way Momentary Toggle Action Mini Trim with Tactile Response



T5: 4-Way Mini Trim with Center Pushbutton Option



T8: 8-Way, Single Pole Mini Trim, Commercial/MIL-Grade

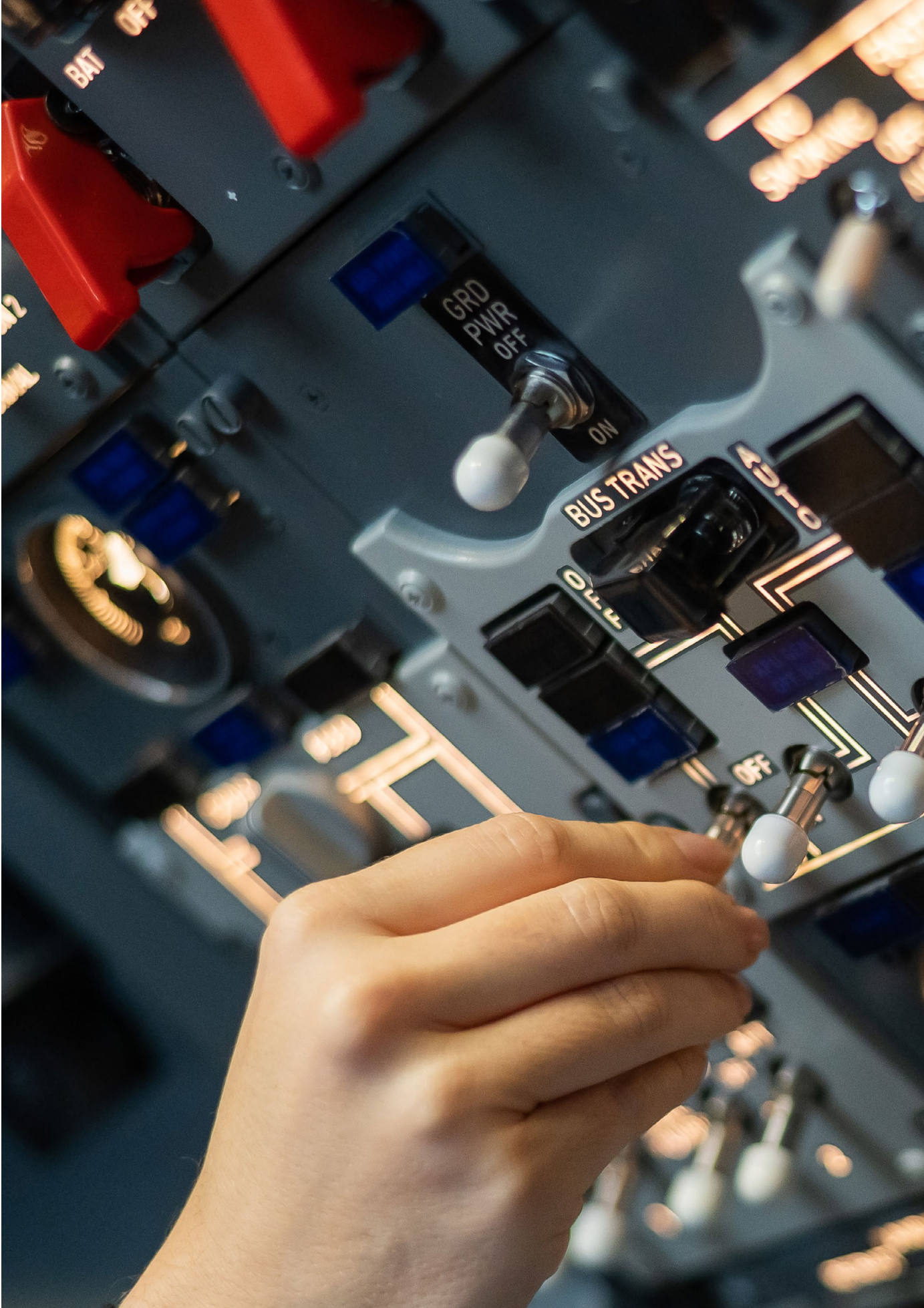


T8-T: 8-Way Tactile Mini Trim with Toggle Action, Commercial/MIL-Grade



Operate confidently with the positive click action on tactile mini trims.





SUPPORTING COMPONENTS

Find the hardware and components you need for installing OTTO solutions or gaining added functionality.



CONNECTORS

Connectors: Ask about OTTO's rocker and toggle switch connectors to ease the assembly process.



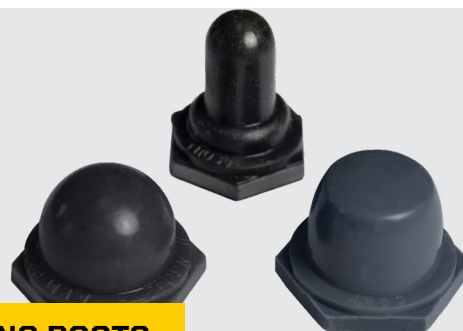
FLIP GUARDS

Pushbutton Flip Guards: The spring-loaded cover with momentary or maintained action locks in either the open or closed position to protect against accidental activation.



PANEL PLUGS

Panel Plugs: Available for rockers and rotary switches and come in a one-piece molded style. An assembled plug is available for K1/K2/K3/K4/K5 series rockers and R2 switches.



SEALING BOOTS

Sealing Boots: Boots waterproof pushbutton and toggle switches that are exposed to the elements. Choose from many styles for defense and commercial use.



SHROUDS & PANEL SEALS

Shrouds & Panel Seals: Add shrouds to pushbuttons to prevent accidental activation. Watertight panel seals, washers, gaskets and seals are also available.



TOGGLE GUARDS

Toggle Guards: Protect toggles in defense or commercial applications with spring-loaded covers. Depending on selected model, actuating the guard may change toggle position.



CUSTOM SOLUTIONS

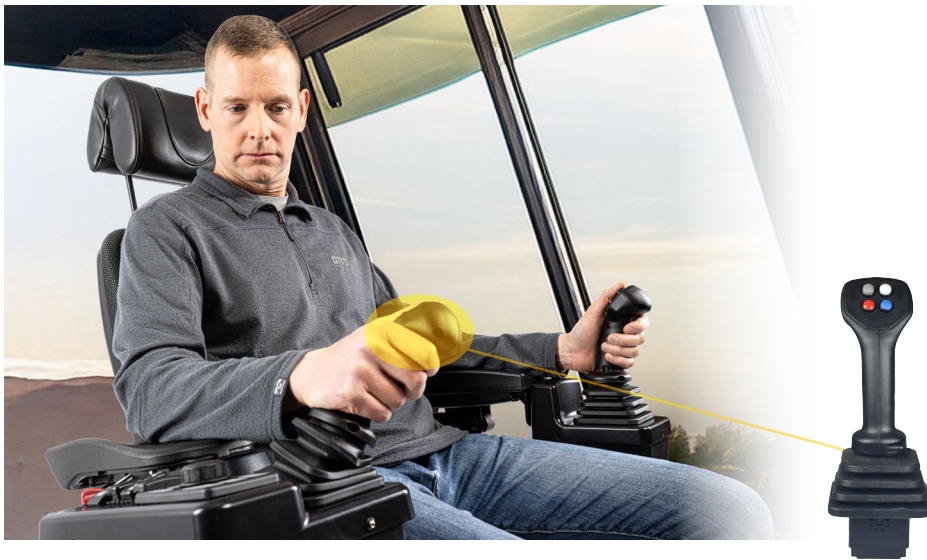
Let OTTO be your source for customized solutions. OTTO's thousands of standard products, or the custom controls shown here, may be the starting point for your design. Or talk to us about building an entirely new concept.



This heavy-duty, push-pull park brake was customized specifically for off-highway equipment.

Add a split trim, which has two switches that can operate independently or simultaneously, to flight controls or yokes.





Equip custom OTTOfit Series armrests for commercial vehicle operator seats with a range of switches and controls such as the HJLG3-C joystick/grip assembly.

VALUE-ADD AND CUSTOM CAPABILITIES | MISC. PRODUCTS

OTTO's custom solutions range from complete interfaces—such as armrest solutions and sophisticated panels—to individual controls components. Our capabilities include designing, producing and assembling full systems, adding cable assemblies and specialized electronic circuitry, and developing unique product attributes that bring value to our customers.



OTTOfit: Semi-custom armrest solutions enable the seamless integration of your preferred controls.



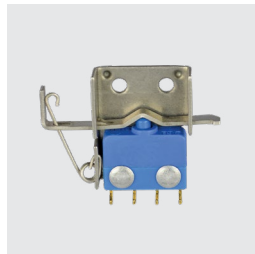
OTTOfit PRO: These standalone, customizable Operator Control Modules combine multiple functions into one assembly.



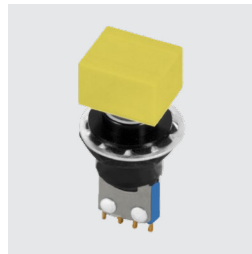
OTTOfit PRO+: Fully custom armrest with custom grip solutions for commercial vehicle cabs fulfill unique HMI specifications.



Mini Toggle w/ Rocker Button: Mini Toggle with Tactile Rocker Button



Door Interlock Switch: B3 Basic Switch with Defeat Function



Custom Actuator w/ Basic Switch: For Defense Applications



Longer Custom Pushbutton: Longer to Rise Above in Panels



Flight Grip Rocker Switch: Compact Lightweight Rocker

PRECISION THAT EMPOWERS

Every interaction with our controls could be a critical moment. Backed by decades of proven performance in demanding markets, our operator controls solutions deliver design confidence for vehicle and equipment manufacturers, as well as functional certainty for operators when it matters most.

Within our vertically integrated U.S. facilities, OTTO Controls ensures reliability by meticulously managing every step. Our engineering and quality experts, comprehensive lab testing and production are all onsite.

Customizable grips, joysticks, switches and other solutions that OTTO manufactures serve customers in construction, agriculture, defense, aerospace, material handling, mining, marine, medical and related markets around the world.



LET'S TALK ABOUT WHAT WE CAN BUILD FOR YOU.

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