



Modernize Your Machine Controls with HMI Systems CAN Rockers and Keypads

From fire trucks and utility fleets to off-highway and marine equipment, today's machines are more intelligent, connected and software-driven than ever before. Yet many still rely on decades-old hardwired rocker panels that add wiring complexity and limit how operators interact with their equipment.

Wesgarde is highlighting CAN-based rockers, keypads and displays from HMI Systems that help OEMs modernize operator interfaces, reduce wiring and enhance the operator experience in demanding environments. By shifting from point-to-point wiring to networked CAN architectures, these solutions enable flexible, software-defined controls while maintaining rugged, tactile interfaces.

Why OEMs Are Moving Beyond Hardwired Rockers

Traditional electromechanical switches are wired point-to-point, so every added function brings more copper, more harness complexity and more potential failure points. On feature-rich vehicles and equipment, control harnesses can grow to dozens or even hundreds of conductors, increasing cost, weight and installation time.

By contrast, CAN-based controls:

- Treat switches, keypads and displays as intelligent nodes on a shared bus
- Often support a full control bank with just four conductors (power, ground, CAN High, CAN Low)
- Enable software-defined behavior instead of rewiring for every change
- Improve diagnostics and serviceability over the life of the machine

CAN Rockers and Keypads: Rugged Controls with Digital Intelligence

HMI Systems CAN rockers maintain the familiar look and feel of traditional rockers while operating as addressable CAN devices. OEMs can reduce wiring, gain programmable LED feedback and change functions in software without redesigning the panel, all while preserving operator muscle memory in fire, utility, construction and municipal vehicles.

Key advantages of CAN rockers include:

- Familiar ergonomics that support fast, glance-free operation
- Reduced point-to-point wiring compared to traditional rockers
- Illuminated, programmable indicators for clear status feedback
- Software-configurable functions for easier updates

Fixed CAN keypads consolidate multiple functions into sealed, compact control surfaces with clear legends and programmable behavior. They provide:



- High function density in limited panel space
- Multi-color LED feedback to indicate modes, status and alarms
- Rugged, sealed construction for harsh-duty environments
- Consistent, clearly labeled controls for operators

For configurable or option-rich equipment, modular CAN keypads add physical flexibility with interchangeable buttons or legends. This approach helps OEMs:

- Support multiple configurations on a common platform
- Adapt layouts and labeling without replacing the entire keypad
- Maintain common wiring and diagnostic strategies across variants
- Hybrid Architectures: Using the Right Interface in the Right Place

Many OEMs get the best results by combining CAN rockers, keypads and graphical displays into a hybrid HMI architecture. Critical functions stay on tactile rockers, dense groups of controls move to keypads and GUI displays provide rich status and diagnostics where operators benefit most.

A hybrid approach helps:

- Improve safety and operator confidence with tactile access to key functions
- Maximize function density where panel space is limited
- Deliver deeper visibility into system performance and faults
- Balance cost, complexity and user experience across the machine

Engineered to Deliver with HMI Systems and Wesgarde

By offering HMI Systems CAN-based rockers and keypads, Wesgarde helps OEMs reduce wiring, streamline installation and deliver more intuitive, modern operator interfaces on mobile and industrial equipment. Backed by deep expertise in power components and engineered solutions across transportation, industrial automation, marine electronics, food equipment, construction, agriculture and alternative energy, Wesgarde provides the technical support OEMs need to specify the right HMI solution for each application—truly engineered to deliver.