

HMI Business Center

We develop systems that connect our products and technologies to create new value.

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General Manager,
HMI Business Center



Our center is evolving through merging existing technologies with new innovations and collaborating with other companies to create next-generation HMI products and services that connect people and vehicles. This enables a new future of mobility where anyone can safely and confidently master the functions of their car.

Steering column switches

Even as autonomous driving advances, situations requiring manual operation by drivers will persist. Therefore, we believe the steering column area—which enables hands-on operation—will remain a key focus area. We aim to expand sales through a dual-pronged strategy: products that enhance added value by expanding steering column functionality, and products that drive cost reductions by advancing standardization of components.

Shift-by-wire shifter

From the perspective of operability and cabin space, we predict toggle-type and steering column-type shifters will become mainstream. To accommodate various vehicle types, we will

promote standardization and commonality. Furthermore, to address the need for space in the center console to accommodate Qi (wireless charging) and cup holders, we developed the world's smallest, ultra-thin shift-by-wire shifter. This achieves both design appeal and vehicle mountability while enabling space preservation in the center console.

Hidden Light Effect (transparent decorative panel switches)

While switches around the instrument panel are increasingly being integrated into the display's touch panel, there is a trend toward reevaluating physical switches (direct operation). The Hidden Light Effect creates new value for these switches. It appears only when needed, combining high design quality with operability enabled by haptic technology. We will expand panel and mounting position variations to enable adoption across various vehicle grades.

Business opportunities

Steering column area

- Demand for in-hand switch operation

Shift-by-wire shifter

- Know-how to provide various operating modes

Hidden Light Effect

- Re-evaluation of physical switches (direct operation)

Competitors

Steering column area

- Panasonic Automotive
- Toyodenso
- Kostal
- Valeo

Shift-by-wire shifter

- Kostal
- Marquardt
- GHSP
- SL Corporation
- Atsumitec

Hidden Light Effect

- Panasonic Automotive

Strengths

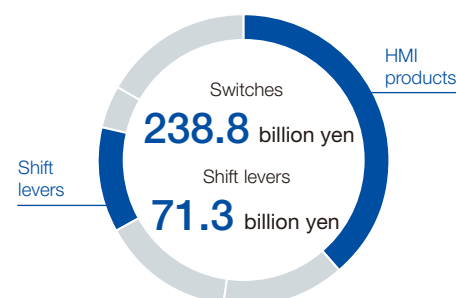
- Ergonomics achieving ease of use and clarity
- Design capabilities and decorative technologies enhancing sensory quality
- Sensing technology utilizing in-house semiconductors

Risks

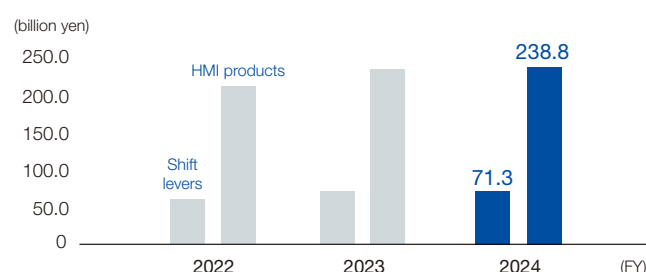
- Reduction in switches due to touch panel or voice operation
- Productization meeting the era's demand for software-first updates and customization

Main products Consolidated sales for FY 2024

- Switches
- Shift levers
- Various sensors
- Outer mirrors
- Ornaments



Net sales



Growth Strategies in the Mid-Term Management Plan "TRV 2030"

We are advancing new product development to consistently deliver new value and services from input to output.

Steering column switch

- A dual-pronged strategy targeting expanded sales: products that enhance added value and products that advance standardization of components to achieve cost reductions

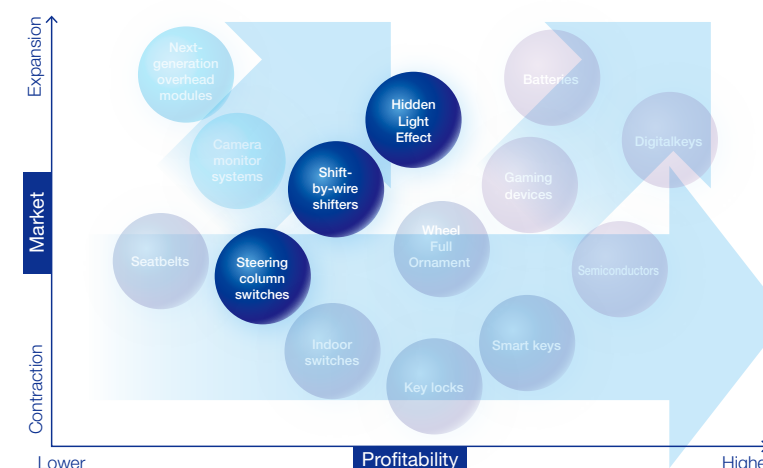
Shift-by-wire shifter

- Promote standardization and popularization primarily for toggle-type and steering column-type shifters, aiming for the world's top market share
- Develop the world's smallest ultra-thin shift-by-wire shifter, achieving both design appeal and vehicle compatibility

Hidden Light Effect

- Creating new value for switches around the instrument panel through transparent decoration technology
- Expanding panel and mounting position variations to enable adoption across various vehicle grades

Positioning of growth strategies



For existing technologies and products, we will continue to refine our long-cultivated operational expertise and commitment to quality, enhancing reliability and usability.

Furthermore, in developing new technologies and products, we will actively incorporate advanced technologies such as AI, sensing, and UX (user experience) design to shape the next generation of HMI experiences.

Progress Toward Goal Achievement

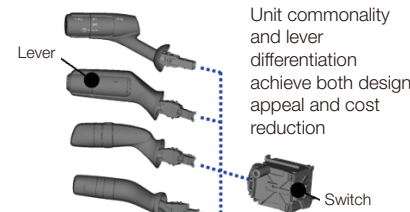
Steering column switches

Steering module development

Function-integrated modules adapted to changing mobility needs contribute to safety, simplicity, and a spacious field of view



Combination switch standardization technology



Shift-by-wire shifter

Achieving development efficiency and low cost through standardized and shared design



Compact/Thin Design

Contributing to a comfortable cabin space through high-design and functional lighting



Hidden Light Effect

Vivid and beautiful symbol illumination

The unique aperture method enables lighting unaffected by the color or pattern of the decorative layer



Rich decorative variations

Selectable materials (color, hardness, texture)

