General Features

- Audio side
  - Vol Up/Down, Seek, mode & mute
  - Seesaw type
- Cruise side
  - Cruise Up/Down, On/Off, Cancel
  - Seesaw & Push type
- Reddish orange illumination
- Customized design function
- Tumbler type
- Generic & Bluetooth Hands Free (Separated)
- Blue Tooth : Connect & control by Audio UNIT

Reference

- Hyundai, Kia, Nissan
Power Window Switch

Global Creative Partner

General Features
- High and Low current
- CAN/LIN communication
- Auto down only or Auto up/down
- Night symbol illumination
- Window lock/unlock
- Auto door unlock upon car crash
- Mirror position memory option
- Keyless entry interlocking function
- Tactile feeling (soft feeling/low operation noise)

Specifications
- Auto door lock at min. 40 Km/h speed
- Auto reverse: Upon reverse gear operations, outside mirror 5° auto down
- Max. 10A~20A for high current type
- Ingress Protection type (IP5 for Dust & IP4 Liquid).
- Compact Size with PCB installed (40mm height) for low current type

Reference
- Hyundai, Kia, GM, Ssangyong, Fiat

DAESUNG
General Features

- Detection of gear position
- Two types: Contact (direct signal transfer, signal combination, voltage divided type) and Non-contact type
- Consists of cover, moving block, contactor, spring, base plate and o-ring
- Ultra sonic welding
- Sealed type installed in the transmission
- Direct signal
- Detection for P-R-N-D-3-2-L (Contact type)
- Detection for P-R-N-D (Non-contact type)

Specifications

- Linear hall sensor to increase reliability and durability (Non-contact type)

Reference

- Hyundai, Kia, Ssangyong, Greely
**General Features**

- Cost reduction by integration of lever, position switch and control unit (module packaging)
- Development for commercial vehicle with more than 10 gears (Level 1, 2Up & Down, M/A, DM, D, N, R, RM)
- More stabilized network system
- High durability switch module

**Specifications**

- Efficiency compare to conventional GSM
  - Material cost reduction by 5%
  - Physical size reduction by 10%
  - Durability 50% higher

**Core Technology**

- Non-contact sensing technology – AMR sensor, Hall sensor
- CAN/LIN network technology

**Reference**

- TATA Daewoo, Hyundai(Commercial Vehicle)
Lumino Encoder Switch

Global Creative Partner

General Features
- Merging of multiple switch functions (multimedia, HVAC, etc.) into one single switch
- Encoder type rotary switch
- 8 way joy-stick
- Control of navigation, call, radio etc
- Programmable illumination feedback optimized for each menu

Specifications
- Operating voltage range 9 ~ 35v
- Operating current (DC 12V) : 1,300 (normal detent feelings), 100 (stand-by)
- Current limit : 1,450 +/- 2%
- DC motor stall torque 30 (at 9V)
- Interface : B-CAN
- Operating temperature : -40~85
- Encoder type : Optical

Core Tech
- Optical design & simulation
- Ergonomics
- Application technology of non-contact sensors (AMR sensor, optical sensor)
- Joystick mechanism
Global Creative Partner

Lumino Haptic Series Switch

General Features
We provide next generation Human Machine Interface Technology, a complete integration of Luminous Haptic (LH), sensory Ergonomics and Vehicle communication technology. It integrates all the front cluster LCDs of a car.

LH Console Switch
- Rotary haptic switch
- 8 directional sliding switch
- Control of navigation, call, radio, haptic feeling etc

LH Steering Wheel
- Control all electronic parts in vehicle as multi media, HVAC, lighting & etc
- Force feedback (haptic effect) with luminous lighting

LH Moustic Controller
- Haptic Scroll wheel
- Select/Menu/Back button is integrated
- IR LED proximity sensing
- IR LED wipe pas sensing

LH Touch Screen
- Replace of IP switches (HVAC, Clock, Calendar)
- Car Infotainment System

Reference
- Kia

DAESUNG
Global Creative Partner

Combination Switch

General Features

- High Current/Low Current/Communication (LIN/CAN) type
- Connector In-molded type
- Single stalk, dual stalk, one-body type
- Light side, wiper side
- Steering column integrated type

Reference

- Hyundai, Kia, Ssangyong, GM, Chrysler
Global Creative Partner

Steering Roll Connector (SRC)

General Features

- Electric device located between the steering wheel & M/F switch
- Steering Angular Sensor can be mounted underneath SRC
- Device is not influenced by the number of rotation of the steering wheel
- Electrically connected to the air bag, horn, steering wheel remote switch
- U-Turn type
- 3-point mold-lock assembly mechanism
- Tensional Rib's structure to minimize the fatigue and noise with S/Wheel

Specifications

- 7~16 CH available
- Compact size (Ø96.4)

Reference

- Hyundai, Kia, Ssangyong, GM, Chrysler
General Features
• ESingle type
• Power: DC 12V
• Night illumination: Chip LED
• Tact switch
• Operation method: Push-Return, Push-hold
• Operation stroke: 1.2 ± 0.25 mm
• Based on the position of the switches, these switches can fall into three sub-divisions

Center Part
• Hazard stop & start button, AOS display, PRAB switch, Passenger Air Bag off Switch, LPG switch, sport mode, rode mode

Console Part
• ABS, Heated Seat SW, Glove Box, Release SW

Lower Part
• Trunk Lid Switch, Head Lamp leveling SW, Transfer case Switch, Engine Hood Release Switch

Reference
• Hyundai, Kia, Nissan, GM, Ssangyong, SAIC