



aerospace
 climate control
 electromechanical
 filtration
 fluid & gas handling
 hydraulics
 pneumatics
 process control
 sealing & shielding



Mobile Electronic Solutions

Controllers, Displays, Instrument Clusters,
 Operator Input Devices & Sensor Products



ENGINEERING YOUR SUCCESS.



Electronic Controls Division

Parker Hannifin's Electronic Controls Division (ECD) provides products and solutions for virtually all electrical and electronic systems for mobile vehicles. Parker's ECD serves a diverse customer base in construction machinery, bus and RV, forestry machines, material handling, agriculture equipment and specialty trucks. The Electronic Controls Division provides a full spectrum of system solutions and products comprised of control modules, displays, sensors, instrument clusters and

joysticks. With six manufacturing and engineering locations around the world, ECD offers a complete line of custom designed products as well as standard components to fulfill virtually any mobile OEMs needs. As the Electronic Controls Division not only engineers, but also manufacturers most of our products, ECD is very well suited to provide complete systems solutions. With Parker Hannifin already a world leader in hydraulic, pneumatic, and electromechanical motion control technologies, the

addition of ECDs capabilities in mobile electronics means Parker is well positioned to provide a complete solution for mobile applications. Providing full systems solutions and products for the mobile equipment and truck and bus markets, including:

- Programmable Controllers
- Displays
- Instrument Clusters
- Operator Input Devices
- Sensors



Product Scope and Depth

Allows full systems capabilities.

Parker's Electronic Controls Division offers an extensive breadth and depth of products focused on the Mobile Machinery, Truck, Bus, and RV markets. With our global engineering and manufacturing resources, ECD not only has the ability to design and manufacture products for specific,

high volume OEMs, but also offers an extensive line of standard and catalog products. This intimate knowledge of both the design and manufacture of electronic products, makes us ideally suited to provide full systems that meet virtually any mobile equipment manufacturer's needs.



Custom Products

Full Design Capability

- Mechanical design
- PCB design
- Firmware
- PC software
- Injection molded housings
- Electrical modeling

Design Verification Testing

- **Environmental**
 - Temperature
 - Vibration
 - Water Ingression
 - Salt spray
- **Electrical**
 - Electromagnetic compatibility
 - Electrostatic discharge
 - Electrical transients

Manufacturing

- SMT lines
- Electromechanical assembly
- Automated visual inspection
- ISO 9001:2000
- ISO/TS-16949:2002

Example Products

- Diesel engine controllers
- Full color TFT displays
- Programmable controllers
- Rotary position sensors
- Tip/tilt sensors
- Joysticks
- Forestry controllers
- Seeding systems
- Instrument clusters with color touchscreen displays

Standard Products

Displays

- 3.5" TFT color displays
- 5.7" TFT color touchscreen displays
- 7.0" TFT color touchscreen displays

Programmable Controllers

- **IQAN controller family**
 - CAN bus based
 - User programmed (IQAN function block programming tools)
- **VMM controller family**
 - CAN bus based
 - User programmed (VMMS ladder logic programming tools)

Operator Input Devices

- **Joysticks**
 - 2 axis CAN bus based
 - 2 axis analog
 - Multiple handle options
 - 1 axis analog
- **Operator Controls**
 - Throttle speed control
 - Drive speed control
 - Creep speed control

Sensors

- Rotary position
- Tip/tilt
- Ferrous proximity
- Liquid level
- Shaft speed sensing
- Doppler effect ground speed
- Temperature
- Pressure

Systems

Electronic Controls Division's capabilities, and our design and manufacturing expertise, gives us an in-depth understanding of mobile electronics. This makes ECD ideally suited to offer full mobile electronic systems for virtually any application.

Example Systems

- **Full cab system**
 - Instrument cluster
 - Logic controllers
 - Sensors
- **Door assist**
 - Logic controllers
 - DC motor control
 - Sensors
- **Bus multiplexing**
 - CAN bus logic controllers
 - Instrument cluster
 - CAN gateways
 - Sensors
- **Hydrostatic drive**
 - CAN bus controllers
 - Sensors
 - Joysticks
- **Fan drives, electric and hydraulic**
 - CAN bus controllers
 - Sensors

Engineering Your Success

With intelligent and innovative solutions.



Whether for off-highway equipment or over the road truck and bus applications, Parker's Electronic Controls Division offers full system solutions and products to fit your needs. With worldwide engineering and manufacturing capabilities, the Electronic Controls Division has the experience, skills, and capabilities to provide solutions for virtually any mobile electronic application.

If you would like to discuss your mobile electronics applications, and how Parker's Electronic Controls Division can offer you a competitive advantage, please feel free to contact us.



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