Offering the best options in the industry, Enovation Controls brings the technological advancements of three powerhouses: Murphy, EControls and Zero Off.

With these three preeminent brands behind it, Enovation Controls has experts throughout the country and the world creating new technologies to make your work and play more enjoyable. From products that can withstand heavy-duty work on emergency vehicles to those that make your recreational toys more fun on the weekends, we have a solution for all of your needs.

For more than 75 years, people and companies around the world have depended on Murphy. Its product line includes engine instruments that monitor critical functions. Murphy has a history of reliability, with products designed to meet the highest durability standards. Customer needs drive our research, development and forward-thinking innovation. To meet market changes, Murphy constantly creates new solutions, improves products and maximizes manufacturing efficiency.

EControls products are backed by years of industry-leading expertise. Since 1994, our products have delivered innovation and customer satisfaction to the engine and vehicle industries. We offer a variety of engine control and fuel management systems that help OEM customers meet stringent requirements while maximizing engine power and efficiency.

Zero Off, a GPS speed control based on satellites and engine management systems, has been tested and developed since early 2005, not only with some of the best skiers in the world, but also with engineers who develop the engine management systems for the boats. Zero Off has the same concept of pull for all events in the professional water skiing and wakeboarding sports and has built-in timing that does not require magnets on the course. This easy-to-use technology has made Zero Off the industry standard.
Building strong partnerships with OEMS is a priority.

Solutions created for your vehicle.

State-of-the-art design, manufacturing and programming.
We offer a wide range of advanced manufacturing and engineering capabilities from hardware and software design to product testing, in-house LCD bonding, harness engineering and more. Let us provide a complete turnkey solution to meet your needs.

In-House Engineering

Whether it’s software or hardware development, our dedicated engineering team has the expertise to complete your project. We provide engineering and design support to provide the right solutions for vehicle technological needs. Our engineers are skilled in electronic hardware design, embedded software, wire harness design and more.

In-House Manufacturing

We take pride in our world-class manufacturing which allows us to perform specialized manufacturing processes and provide customers with more reliable products. Our facilities feature focused in-house cells dedicated to specific production needs. As we expand our offerings, we have created future cells designated only for production of our electronic displays that are operated by specially trained personnel. LCD bonding is performed in-house and allows for complete bonding of the LCD to the glass in order to provide long-term durability without yellowing, delamination or degradation.

Custom Solutions

Our teams provide quick delivery of standard or custom projects in a single one-stop solution for vehicle technology markets. We offer a project-focused organization backed by vertically integrated manufacturing capabilities. Our engineers work side by side with manufacturing to keep your project running smoothly.

Quality and Technical Support

We are constantly looking for ways to improve communication between the integral parts of the manufacturing process to provide better teamwork and faster response to changes. That’s why we have implemented a Global Operating System focused around Lean Six Sigma to identify and remove variables in our manufacturing and business processes. By pinpointing areas for improvement, we are able to provide our customers with faster delivery time and higher quality products. To better serve our customers, we also offer 24-hour customer service support and an in-house technical service department to answer all your questions.
Recreational Marine Instrumentation

GPS Receiver

Auxiliary Displays

PowerCore™ Intelligent Xpansion Module

HV700 Series PowerView™ Full-Color Display

For more information about these products, see pages 10 to 13.
Recreational Vehicle Instrumentation

Engine Control Module ECM

HV450 Series PowerView™ Full-Color Display

HV480 Series PowerView™ Full-Color Display

HV300 Series PowerView™ Monochrome Display

Other trademarks and brands belong to their respective owners.
Recreational Vehicle Instrumentation

GPS Receiver
Auxiliary Displays
PowerCore™ Intelligent Xpansion Module
HV700 Series PowerView™ Full-Color Display

For more information about these products, see pages 10 to 13.
Recreational Vehicle Instrumentation

Engine Control Module ECM

HV450 Series PowerView™ Full-Color Display

HV480 Series PowerView™ Full-Color Display

HV300 Series PowerView™ Monochrome Display

Other trademarks and brands belong to their respective owners.
Integration is key when working in today’s high-tech markets. The ability to provide complete solutions from displays to harnesses to power distribution and on makes your system run smoother and creates a more enjoyable experience by end-users. Our displays come in a variety of sizes and models to ensure you get exactly what you need for your vehicle’s application whether you are riding the waves, working with heavy-duty equipment or finding your way home.

Displays

**PV350**
This small, user-friendly display utilizes push buttons to switch through screens and choose options. The buttons are designed to easily be used with gloves for those working on a rig or riding a recreational vehicle. The display features a 4.3-inch monochrome display with buttons below the screen.

**HV450**
The HelmView 450 is specifically designed to meet the engine monitoring needs of the marine industry. Its durable design and easy-to-use interface offer a complete view of a vessel’s engines. This 4.3-inch, full-color multifunctional display allows you to monitor multiple engines, transmissions, fuel usage and more using only one device – greatly reducing operating costs. The display is available in a touch screen or with buttons.

**HV480/TV480**
The HelmView 480 and TrailView 480 are rugged displays built on the same platform. Each features a 4.3-inch color display with five push buttons below the screen. The HelmView is ideal for marine situations while the TrailView has been designed for the snowmobile market. The buttons are easy for gloved hands to control in the snow.

**HV700**
The HelmView 700’s easy-to-use interface and durable design offer a complete view of your boat’s engines. This multifunctional display allows monitoring of multiple engines, transmissions, fuel usage and more using only one device – greatly reducing operating costs. The 7-inch display is available in portrait and landscape models as well as in a touch screen or with buttons. Choose the number of buttons needed for your application. The HV700 can support between one and 14 buttons.

**PVCAN Gages**
The PowerView CAN Gages are easy-to-read intelligent gauges that broadcast over SAE J1939 communications. It is designed to be wired directly to the J1939 CAN bus without the need of another device driving it. They are available for standard 2 1/16-inch and 3 3/8-inch hole sizes.

**Auxiliary Displays**
Zero Off offers a variety of units that can be used for specific customers’ needs. Available in 3.5-inch and 5-inch sizes, these units feature closed loop control of boat speed by employing GPS. Utilized for wakeboard and skiing events, the gauges require no additional calibration.
PowerVision Software

XM500 • IXT-12/24

Intelligent Xpansion

Engine Control Module

GPS Sensor/Receiver

PowerVision Configuration Studio®

Other trademarks and brands belong to their respective owners.
Enovation Controls makes sure all the pieces of your system work harmoniously together. This integration is an important part of the services we offer. We can create a solution for your vehicle through the vast number of options that we carry. Adding any of these pieces as well as a display can offer you a complete look at your system so you are able to use it to its highest level.

Power Distribution

Intelligent Xpansion
The Intelligent Xpansion™ Power Distribution Module (PDM) expands CAN bus networks and replaces existing fuse and relay boxes with more reliable, solid-state switches that can directly drive lights, cooling fans, wiper motors and directional DC motors. This reduces wiring length as well as costs by remotely locating the PDM near signals and loads.

The I/O is multiplexed using a CAN bus network, which allows engineers to greatly simplify harness design for ease of installation and improved reliability.

Cruise Control

Zero Off
Zero Off’s Cruise system uses input from satellites and the engine management system to provide an accurate and consistent speed control and timing. It eliminates the need for timing boxes, slalom switches or magnets. ZeroOff is based solely on the speed across the surface of the water so there is no requirement for skier weight, crew weight or any kind of wind adjustment.

GPS Control

Sensor/Receiver
The sensor/receiver is an integral part in Enovation Controls’ global positioning system. This small, highly accurate GPS receiver and sensor pairs with the cruise system for speed control as well as being used for mapping on other vehicles.

ECM Engine Control Module

EControls
EControls’ full-authority engine control modules combines sensing, control, diagnostic and I/O in one piece. The modules can be optimized to specific customer applications, and the ECM’s comprehensive diagnostics suite simplifies any troubleshooting that may arise.

Software

PowerVision Configuration Studio®
This powerful software development tool provides OEMs with complete customization. Change the look and feel of equipment screens, customize parameters, edit troubleshooting information and upload company branding on the HelmView or TrailView displays.
OUR COMMITMENT TO YOU

Our company is more than just a supplier of products. We work closely with our customers to design and deliver innovative and reliable products for specific applications. Our goal is not to meet, but exceed customer expectations in order to become the preferred partner.

IN-HOUSE MANUFACTURING

We take pride in our world-class manufacturing, which allows us to perform specialized manufacturing processes and provide customers with more reliable products. We have integrated a standard operating system, which utilizes intelligent approaches like lean manufacturing and Six Sigma, for maximum productivity.

CUSTOMER-FOCUSED SUPPORT

We understand the importance of creating sustainable partnerships with our customers. To accomplish that, we provide support before, during and after the initial sale. From engineering support to troubleshooting assistance, we are with you every step of the way.

OUR SERVICES INCLUDE:

• Project Management
• Design and Engineering
• Programming (Controller & HMI)
• 24-Hour Technical Support
• Startup, Training and Troubleshooting Assistance
• Global Field Service
Enovation Controls, LLC is a global provider of innovative, state-of-the-art products and services for comprehensive engine-driven equipment management and control solutions. Enovation Controls is the company formed from the merger of FW Murphy and EControls in 2009. The company combines FW Murphy’s full line of engine instrumentation products with EControl’s extensive engine control development expertise to provide customers with a complete solution approach for engine control, protection and monitoring. Enovation Controls’ headquarters is located in Tulsa, Oklahoma. Its compete portfolio of brands include: Murphy, EControls, Computronic Controls and Zero Off.
In order to bring you the highest quality, full-featured products, we reserve the right to change our specifications and designs at any time.

Specifications and performance data subject to change without notice. Certified specifications and performance data available upon request.

All trademarks and service marks used in this document are the property of their respective owners.