

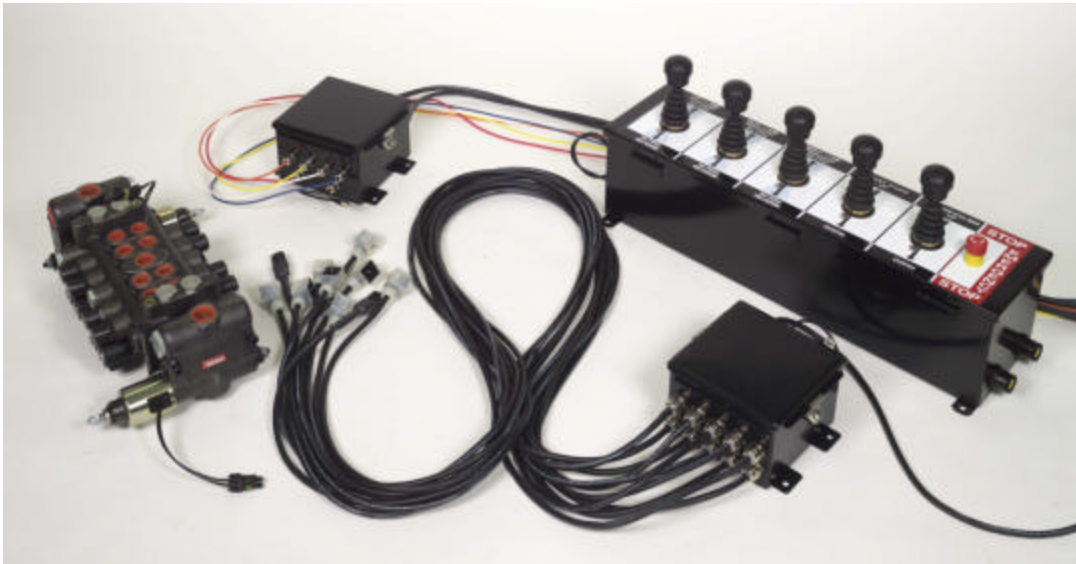
## CUSTOM ELECTRONIC PACKAGES

Brand now offers one-source custom control packages, engineered to meet your specific requirements. We can be your single source solution for hydraulic and electronic control needs. Eliminate the complications caused by multiple suppliers of hydraulics & electronics. Please feel free to contact our engineering staff to discuss your application and get a quote.

### ELECTRONIC PACKAGING CAPABILITIES:

- Handheld pendants or mounted control packages for most all environments.
- Custom electronics and circuit boards to meet customers requirements.
- Small, medium and large volumes.
- Wiring harnesses.
  - Multiple types of connectors to match environment.
  - Many different types of wire and cable to match application.
- Safety-interlock logic.
  - Interfaces between on board truck / vehicle electronics.
- Proportional and bang-bang valving available to mate with package.
- Custom machining of enclosures.
- Engineered specifically for easy installation.
- Modifications to our standard products to meet customer needs.
- Custom nameplates with customers company name and logo.

### *Custom Control Package for a Roller Floor*



Brand Hydraulics provided this truck mounted control package pictured above to a customer that supplies cargo-handling vehicles to the military. It consists of a joystick enclosure, power distribution box, safety interlock logic control, many assorted hydraulic valves, custom cables and switches. The joystick box provides a combination of proportional and “bang-bang” signals to the hydraulic valves. It also has an emergency stop button that shuts down the entire system including the truck engine. The safety interlock control interfaces with the on board electronics (located on the truck engine) and transmission to provide a number of required safety features. This entire package meets or exceeds NEMA 4 / IP65 ratings.

## *Control Package for a Hydraulic Winch*



This package was designed when an OEM requested a proportional pendant-control package that would allow them to control their winch on the front of their utility truck. The package was mated with the Brand 36EFC valve to give proportional and directional hydraulic control all in one valve. The customer stated from the start that they wanted a package they could take right out-of-the-box and easily install onto the trucks as they come down the assembly line. The package also needed to be able to stand up to the elements, be durable for this type of mobile equipment and be removable from the truck when not in use. Brand met or exceeded all of these requirements.

## *Control Package for a Salt / Sand Spreader Unit*



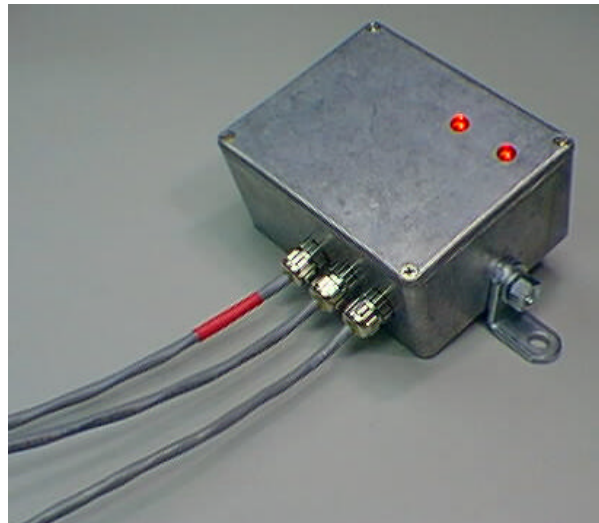
The unit above was specifically designed to run all of the hydraulic components (on the customers spreader unit) from one central location. This consisted of an electronic directional valve for all bang-bang operations and two proportional valves to control the bed floor chain and spinner disks.

## *Control Package for a Beach Cleaner*



A leading manufacturer of beach cleaning equipment came to Brand requesting a custom control package to use on their new beach cleaners. Up to this point they have used manual controls, which requires the operator to get out of the tractor cab and walk back to the cleaner to make adjustments. Brand designed and manufactured a pendant control that can run all functions from the driver's seat of the tractor cab. This consists of an electronic proportional flow control valve and a 4-section electrical directional control valve. The package also incorporates several keyed connectors for easy connecting and disconnecting, which makes changing tractors quick and simple.

## *EC0003 Controller Packaged for a Mobile Application*



This is an example of taking one of our standard products and making it fit the customer's application. The customer wanted to use our EC0003 Interface Control in a mobile application. The EC0003 controller accepts a 4-20mA input signal and converts it into a pulse width modulation output. We placed the EC0003 controller inside a weatherproof enclosure and used weatherproof cable connectors to route the cables out. Custom cable lengths were brought out for each function and LEDs were placed on the lid to indicate power and the presence of input signal.