AStuff Ranger

Overview

The Polaris Ranger is AStuff's off road platform of choice because of its potential for low-cost integration for our customers. It provides a safe, reliable and robust solution for enabling the development and deployment of automated driving applications. The AStuff Ranger not only provides the same cost effective solutions as to comparable automated NEV's, it's rugged frame and suspension and gas engine allows it to go into environments that would be unsuitable for its electric counterparts.

Key Features

Major features on the AStuff Ranger are:

- Mode status indication
- Visually-audible advanced fault detection interface
- Joystick control interface

- Speed and steering controller available
- ROS node available
- Full DBC file available

Feedback and Control

AStuff's Ranger installed with the latest firmware has the following capabilities:

Feedback Capability

- Throttle
- Vehicle speed
- Steering angle
- Shift status
- Shift button press status
- Brake light status
- Current gear

Control Capability

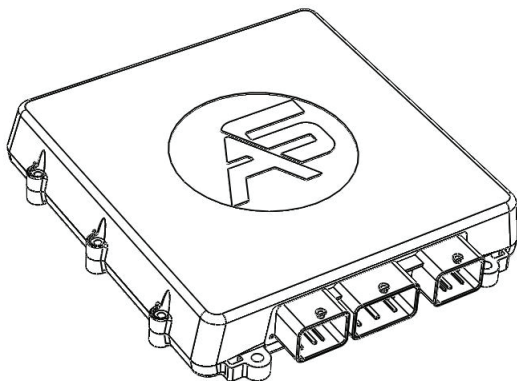- Accelerator
- Brake
- Steering
- Shifting

Safety first

Safety is a top priority for AStuff. Our Polaris Ranger automated research and development platform has been designed to allow operators to easily regain control of the vehicle at any time, as well as alert operators of numerous faults.

While in autonomous mode, operators can at any time regain manual control of the vehicle by:
- pressing the emergency stop button.
- actuating the brake pedal.
- actuating the accelerator.
- turning the steering wheel.

This PACMod 3.0 system has been designed to detect certain faults in the vehicle control modules. The current fault detections on the latest firmware release for the AStuff Ranger are below:
- Braking
- Acceleration
- Shifting
- Steering

The AStuff PACMod

What is the PACMod 3.0 system?

The AStuff Platform Actuation and Control Module (PACMod) 3.0 system allows for drive by-wire control and can be installed into virtually any vehicle. At a minimum PACMod will always provide control of acceleration, braking, steering, shifting, and turn signals. It is highly customizable to fit into any research and development platform.

About AutonomouStuff

AutonomouStuff is the leader in supplying components, engineering services and software that enable autonomy. We take advantage of today's most innovative technologies to help ensure your success. Contact us today to take your project to the next level.

Tel: 309 291-0966

Email: Support@AutonomouStuff.com

Web: www.AutonomouStuff.com