Overview

The *elektroshok* system relies on data gathered from two accelerometers and a contactless magnetic position sensor. Utilizing an onboard microprocessor, the data is interpreted and passed into control algorithms. These algorithms determine optimal settings for the fork’s compression and rebound dampers. A graphical display allows the rider to tune shock properties and riding modes.

Features

- Real Time Rebound and Compression Damping Adjustments
- User Selectable Riding Modes
- Enhanced Impact Detection Algorithm
- Incline Activated Suspension Lockout
- Automatic Lockout Disengagement
- OLED Display with 5 Button Joystick
- GUI with Customizable Settings
- Optimal Air Pressure Calibration

Future Development

- Dual Suspension Implementation
- Mechanical Design Integration
  - PWM Fluid Valve Control
  - Air Pressure Position Transducer
- Control Algorithm Refinement
- Data Logging Functionality