Spitronics – Introduction – Guide

1. Overview

Spitronics is a modular standalone engine management and vehicle control system designed for a wide range of automotive applications.

The system is used to control:
• Engine operation (fuel and ignition)
• Transmission systems
• Throttle-by-wire (TxW)
• Auxiliary vehicle functions

Spitronics forms part of the EeziRider Engine Management product range.

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2. System Concept

Spitronics is built on a modular and firmware-driven platform.

A common hardware base is used across multiple applications, with functionality defined by firmware and system configuration.

This allows:
• One platform to support multiple applications
• Reduced hardware variation
• Consistent user experience
• Easier upgrades and maintenance

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3. Product Range

Spitronics products are grouped into functional categories:
• ECU systems
• TCU systems
• Control modules (TxW, boost control, cam control, etc.)
• Interface and support modules

Each product is designed with specific input and output configurations to suit its intended application.

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4. How the System Works

A Spitronics system operates by processing input signals and controlling outputs.

Sensors → ECU → Outputs

Typical Inputs
• Crank and cam position sensors
• Throttle position
• MAP and temperature sensors

Typical Outputs
• Injectors
• Ignition coils
• Solenoids and actuators

The ECU processes these signals and controls engine and vehicle functions accordingly.

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5. Software Ecosystem

Spitronics uses dedicated tuning software platforms depending on the system:
• Hyperspace (open systems)
• Cosmos (application-based systems)

These platforms provide:
• System configuration
• Monitoring and diagnostics
• Tuning capabilities

👉 Software must match the ECU and firmware type

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6. Flexibility and Upgrades

Spitronics systems are designed for flexibility and scalability.
• Different hardware configurations support different applications
• Firmware defines system functionality
• Newer systems may replace older systems

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7. Support Model

Spitronics products are designed as DIY systems supported through structured documentation and guided setup procedures.

Support is primarily provided through:
• Product manuals and setup guides
• Software documentation
• Troubleshooting guides

👉 This approach allows the system to remain cost-effective and scalable.

Additional services such as installation, tuning, and diagnostics are provided by:
• Independent installers and tuners
• Approved dealers (where applicable)

👉 The level of support required depends on the system type and application.

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8. Important Notes

⚠ Spitronics products are specialised performance systems

⚠ Correct installation and setup are essential

⚠ Incorrect configuration may result in engine damage

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9. Where to Start

To begin using your system:
👉 Go to: **Getting Started**
