

# **Spitronics – ECU – Minimum Requirements – Guide**

## **1. Overview**

This guide outlines the minimum requirements needed to install and operate a Spitronics ECU system.

Ensure all required components, tools, and basic knowledge are available before starting installation.

👉 This prevents installation issues, incorrect setup, and possible damage to the ECU or engine.

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## **2. Required Components**

The following components are required for basic system operation:

### **Core System**

- Spitronics ECU (or controller)
- Matching wiring harness
- Startup (base) map

### **Sensors**

- MAP sensor
- Throttle Position Sensor (TPS)
- Water temperature sensor
- Air temperature sensor

👉 Additional sensors may be required depending on application

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## **3. Required Equipment**

### **Tuning Equipment**

- Laptop (Windows 8 or later)
- Correct tuning software installed
- USB tuning cable

### **Basic Tools**

- Basic hand tools
  - Wiring tools (crimping, stripping, etc.)
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## **4. Required Knowledge**

The installer should have:

- Basic wiring knowledge
- Understanding of engine operation
- Ability to follow setup procedures

👉 Incorrect installation may lead to system damage or engine failure

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## **5. Recommended Equipment**

The following is not required, but strongly recommended:

- Multimeter
  - Timing light
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## **6. Recommended for Tuning**

For proper engine tuning:

- Wideband O2 sensor
  - Knock sensing device
  - Dyno (preferred) or safe open-road conditions
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## **7. System Compatibility Check**

Before installation, confirm:

- Correct ECU for application
  - Correct firmware type (Open or Locked)
  - Correct software platform (Hyperspace or Cosmos)
  - Base map matches engine configuration
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## **8. Pre-Installation Checks**

Before connecting the ECU:

- Verify wiring layout
  - Check power and grounding points
  - Confirm all sensors are correctly installed
  - Ensure unused sensors are disabled or not configured
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## **9. Notes / Warnings**

⚠ Incorrect wiring may damage the ECU

⚠ Incorrect sensor setup may prevent starting or cause engine damage

⚠ Do not assume base maps are correct for your engine

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## **10. Reference Links**

📖 Start Here → Getting Started with Spitronics

**i Next Step:**

→ Support → Product Manuals → First Start and Basic Setup – Guide

**i Troubleshooting:**

→ Support → Troubleshooting Guides