

## RECOIL P610-PRO

# RECOIL P610-PRO Digital Signal Processor User Manual

Model: P610-PRO

## INTRODUCTION

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The RECOIL P610-PRO Digital Signal Processor is designed to enhance your car audio experience by providing advanced signal processing capabilities. This device offers extensive connectivity with multiple RCA and high-level inputs, optical SPDIF input, and numerous RCA outputs for flexible system integration. It also features built-in Bluetooth for wireless audio streaming and a USB interface for precise tuning and configuration. This manual provides essential information for the proper installation, operation, and maintenance of your P610-PRO DSP.

## KEY FEATURES

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- **Advanced Connectivity:** 6 RCA inputs, 6 high-level inputs, 1 optical SPDIF input, and 10 RCA outputs.
- **Bluetooth Streaming:** Integrated Bluetooth for wireless audio playback from compatible devices.
- **Professional Signal Processing:** Digital Signal Processor with 3.5-volt pre-amp output for superior audio quality.
- **Durable Design:** Sleek black brushed aluminum housing with heat-dissipating fins for optimal performance and longevity.
- **USB Interface:** PC USB connection port for firmware updates and system configuration.

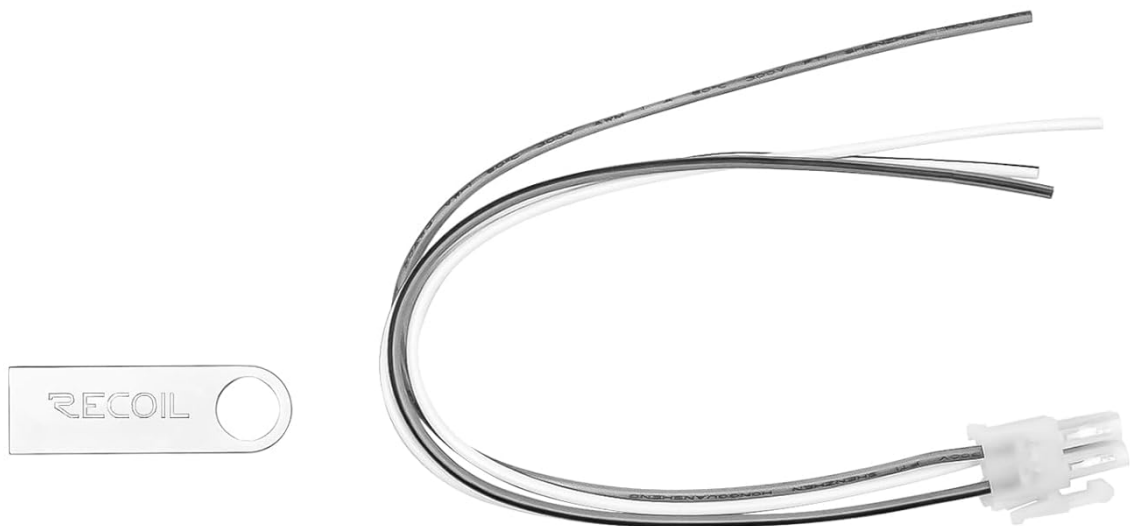
## PACKAGE CONTENTS

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Please verify that all items are present in the package before proceeding with installation.

- RECOIL P610-PRO Digital Signal Processor Unit
- Wiring Harness
- USB Cable (for PC connection)
- User Manual (this document)
- Mounting Hardware (screws, etc.)

## Accessories



**Figure 1: Included Accessories.** This image displays the wiring harness and a USB drive, which are part of the accessories included with the RECOIL P610-PRO Digital Signal Processor.

## SETUP AND INSTALLATION

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### 1. Safety Precautions

- Disconnect the vehicle's negative battery terminal before installation.
- Ensure proper grounding to prevent electrical issues.
- Use appropriate gauge wiring for power and ground connections.
- Avoid installing the unit in areas exposed to excessive heat, moisture, or direct sunlight.

### 2. Mounting the DSP

Choose a secure, well-ventilated location for mounting the P610-PRO. The unit features heat-dissipating fins, so ensure adequate airflow. Use the provided mounting hardware to secure the unit firmly.

# Dimensions



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**Figure 2: Unit Dimensions and Port Layout.** This image illustrates the physical dimensions of the RECOIL P610-PRO unit and the layout of its input and output ports, including the PC USB connection.

### 3. Wiring Connections

Refer to the diagram below for proper wiring connections.

## Inputs & Outputs

- Inputs: 6 X RCA, 6 X high level, 1 X optical SPDIF
- Outputs: 10 X RCA



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**Figure 3: Input and Output Connections.** This image details the various input and output ports on the RECOIL P610-PRO, including 6 RCA inputs, 6 high-level inputs, 1 optical SPDIF input, and 10 RCA outputs, along with the PC USB port.

- **Power (B+):** Connect to the vehicle's positive battery terminal (12V). Use an inline fuse.
- **Ground (GND):** Connect to a clean, unpainted metal surface on the vehicle chassis.
- **Remote (REM):** Connect to the remote turn-on output of your head unit or ignition switched 12V source.
- **RCA Inputs:** Connect your head unit's RCA outputs to the corresponding RCA inputs on the P610-PRO.
- **High-Level Inputs:** If your head unit does not have RCA outputs, use the high-level inputs.
- **Optical SPDIF Input:** For digital audio sources.
- **RCA Outputs:** Connect these to your amplifiers. The P610-PRO offers 10 RCA outputs for multi-channel systems.

## OPERATING INSTRUCTIONS

### 1. Initial Power-Up and Configuration

After all connections are made, reconnect the vehicle's negative battery terminal. The unit should power on with your head unit.

## 2. Software Tuning

The P610-PRO requires a PC connection for detailed tuning and configuration.

1. Download the official RECOIL P610-PRO tuning software from the manufacturer's website.
2. Connect the DSP to your PC using a USB cable.
3. Launch the software. You will be able to adjust various parameters such as equalization, crossover points, time alignment, and gain for each output channel.
4. Save your configurations to the DSP.

### Amazing Tuning Tools

- Windows PC software and App tuning



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**P610-PRO**

**Figure 4: Tuning Software Interface.** This image shows the graphical user interface of the RECOIL P610-PRO tuning software running on a laptop, demonstrating the extensive control over audio parameters.

## 3. Bluetooth Audio Streaming

The P610-PRO supports wireless audio streaming from compatible Bluetooth devices.

1. Ensure the DSP is powered on.
2. On your mobile device, enable Bluetooth and search for available devices.
3. Select "RECOIL P610-PRO" from the list to pair.

4. Once paired, you can stream audio directly to the DSP.

## Advanced Digital Signal Processor

- 3.5 Volt pre-amp output signal
- Built-in Bluetooth® Audio Streaming



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**Figure 5: Advanced Digital Signal Processor.** This image highlights the RECOIL P610-PRO unit, emphasizing its advanced digital signal processing capabilities and built-in Bluetooth audio streaming feature.

## MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure that the heat-dissipating fins are free from dust and obstructions to maintain optimal cooling.
- **Connections:** Periodically check all wiring connections to ensure they are secure and free from corrosion.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No Power	Blown fuse Incorrect power/ground wiring Remote turn-on not connected	Check and replace fuse. Verify power, ground, and remote connections. Ensure remote wire receives 12V when head unit is on.
No Audio Output	Incorrect input/output connections DSP not configured via software Amplifiers not powered on	Check all RCA and high-level connections. Connect to PC and verify output settings, gain levels, and crossovers. Ensure amplifiers are receiving remote turn-on signal and power.
Distorted Sound	Gain levels set too high Improper equalization settings Poor ground connection	Reduce gain levels in the DSP software. Adjust EQ settings to remove peaks. Verify ground connection is clean and secure.
Bluetooth Pairing Issues	Device too far DSP not in pairing mode Interference	Move device closer to the DSP. Ensure DSP is powered on and Bluetooth is active. Try re-pairing after restarting both devices.

## SPECIFICATIONS

Parameter	Value
Brand	RECOIL
Model Number	P610-PRO
Item Dimensions (L x W x H)	18 x 12 x 3 Centimeters
Item Weight	700 g
Material	Metal (Brushed Aluminum Housing)
Voltage	12 Volts
Minimum Supply Voltage	12 Volts
Maximum Supply Voltage	14.4 Volts
Output Power	400 Watts
Number of Channels	4
Operating Temperature	60°C
Supply Current	40 Amps
Specification Met	Cea-2006
Mounting Type	Surface Mount

Parameter	Value
Inputs	6 RCA, 6 High-Level, 1 Optical SPDIF
Outputs	10 RCA
Pre-amp Output Signal	3.5 Volts
Connectivity	Bluetooth, PC USB

## WARRANTY AND SUPPORT

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For warranty information and technical support, please refer to the warranty card included with your product or visit the official RECOIL website. Keep your purchase receipt as proof of purchase for any warranty claims.

Manufacturer: Mogato

Packer/Importer: Vivero, Surat